making games

DESIGN | BUSINESS | ART | TECHNOLOGY

MAKING OF

MASTER OF

ORION

CONQUER THE STARS

WIE WARGAMING DEN KLASSIKER WIEDERBELEBTE

BUSINESS CASE STUDY
DETAILS ZU RECHTSFORMEN UND
FINANZIERUNGSMÖGLICHKEITEN

BUSINESS MODEL CASE STUDY
WIE INNOGAMES DER UMSCHWUNG
VOM BROWSER AUF MOBILE GELANG

GAME DESIGN BEST PRACTICE
TIPPS UND TRICKS, WIE MAN DAS
PERFEKTE KOOP-SPIEL ENTWICKELT

SOMMERLOCH? NICHT IN DIESEM JAHR!

Die Sommermonate sind aus Sicht des Konsumenten traditionell eher eine Saure-Gurken-Zeit, da die Hersteller – aus nachvollziehbaren Gründen – nur wenige Spiele veröffentlichen und sich ihr Pulver lieber für den Herbst und den weihnachtlichen Winter aufheben. Doch im Jahr 2016 änderte eine kleine App alles, denn am 13. Juli veröffentlichte Niantic »Pokémon Go« in Deutschland und es brach ein für viele sicher unerwarteter Hype aus. Innerhalb weniger Tage starteten Millionen von Smartphone-Besitzern die Jagd nach den kleinen Comic-Monstern, egal ob jung oder alt. Das Handyspiel nutzt dafür Google Maps und die Telefonkamera, damit die Nutzer in der realen Welt umherziehen, während auf der virtuellen Abbildung der Umgebung die Pokémon erscheinen. Nicht nur Serverprobleme waren die Folge des Ansturms von zeitweise allein 21 Millionen Spielern in den USA. Auch die nichtspielende Gesellschaft stellte sich darauf ein: Restaurants und Bars gewährten Rabatte für Pokémon-Go-Spieler, um sie anzulocken. Manch einer, extreme Enthusiasten sozusagen, kündigte seine Arbeit, um sich voll und ganz auf die Jagd zu konzentrieren. Das israelische Militär verbot seinen Soldaten, auf den Basen zu spielen. Diplomaten befürchteten, über die App und die offensichtlichen Orte, die man darin ansteuert, angreifbar zu werden. Ärzte dagegen lobten die Entwickler dafür, einen Weg gefunden zu haben, dass die Bevölkerung mehr an die frische Luft geht. Und sogar in Deutschland gab es kuriose Ideen, etwa, dass die Münchner Verkehrsbetriebe eine eigene Straßenbahn für Pokémon-Trainer anbieten, damit sie in der Stadt umherfahren können.

Eine Legende erstrahlt in neuem Glanz

Was sich nun erst einmal nach einer grandiosen Erfolgsgeschichte anhört, könnte für die Branche auch Gefahren bergen. Aus eigener Erfahrung können wir berichten, dass neben dem abendlichen Pokémon-Spaziergang nur wenig Zeit für »traditionelle« Spiele bleibt. Nun ist die Frage, wie lange der Hype um Niantics App anhält. Doch es wird allemal spannend zu sehen, ob dieser später im Jahr die Verkäufe von »Call of Duty«, »Watch Dogs 2« und anderen Blockbustern beeinflusst. Oder, ob die Begeisterung bis dahin nur noch zum Grundrauschen verkommt, denn hier und da liest man bereits nach ein paar Wochen von Abnutzungserscheinungen. Genau für diese Pokémon-Verweigerer wartet im Moment ein anderes Spiel, das bei seiner Ankündigung den stets ersehnten Hype auslöste: Master of Orion. 20 Jahre lang herrschte Stille um die legendäre Strategiereihe, doch so langsam nähern sich die Entwicklungsarbeiten dem Ende. Das haben wir zusammen mit Publisher Wargaming und Entwickler NGD Studios zum Anlass genommen, diese Ausgabe dem Making of von Master of Orion zu widmen. Somit erhalten Sie Einblick, wie die Macher den Klassiker in die Moderne gebracht haben, welche Probleme es dabei gab und warum manche Spielmechanik am Ende sogar umgekrempelt werden musste. Außerdem erzählt das Originalteam in einer spannenden Retrospektive, wie irgendwann im Jahr 1992 der Grundstein für Master of Orion gelegt wurde.

Viel Spaß mit der aktuellen Ausgabe!

das Team von Making Games
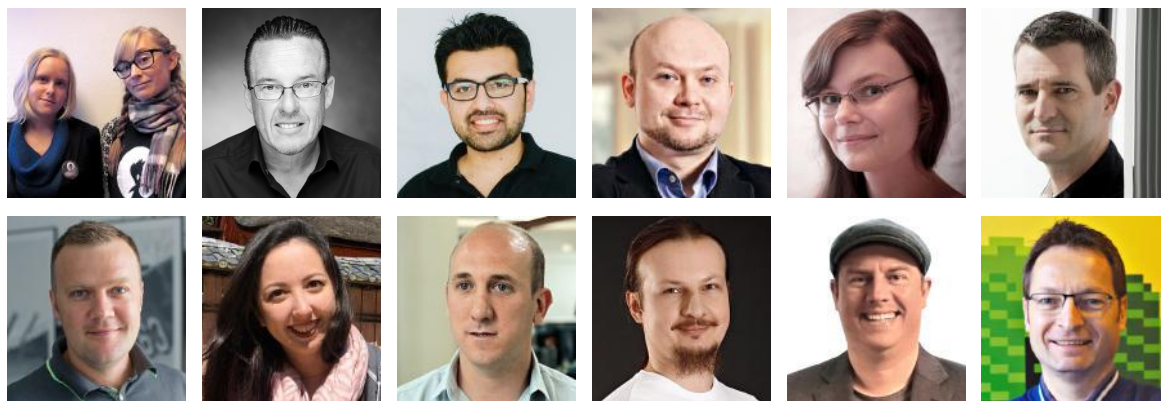
Dirk Gooding ist Chefredakteur vom Making Games Magazin.

Sebastian Weber ist Managing Editor vom Making Games Magazin.

»Es wird spannend zu sehen, ob Pokémon Go die Verkäufe von Call of Duty und anderen Blockbustern beeinflusst.«
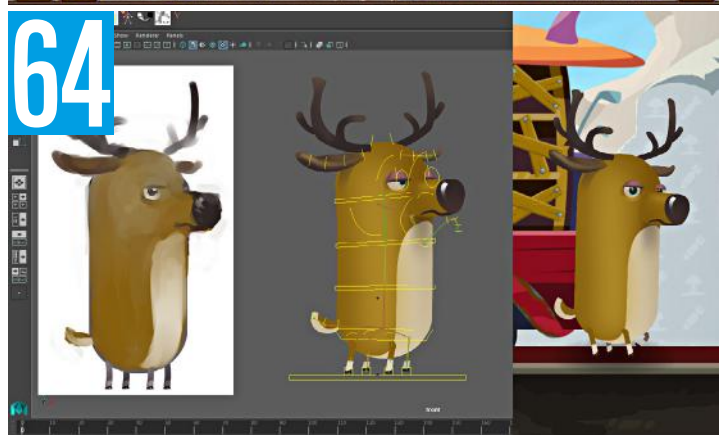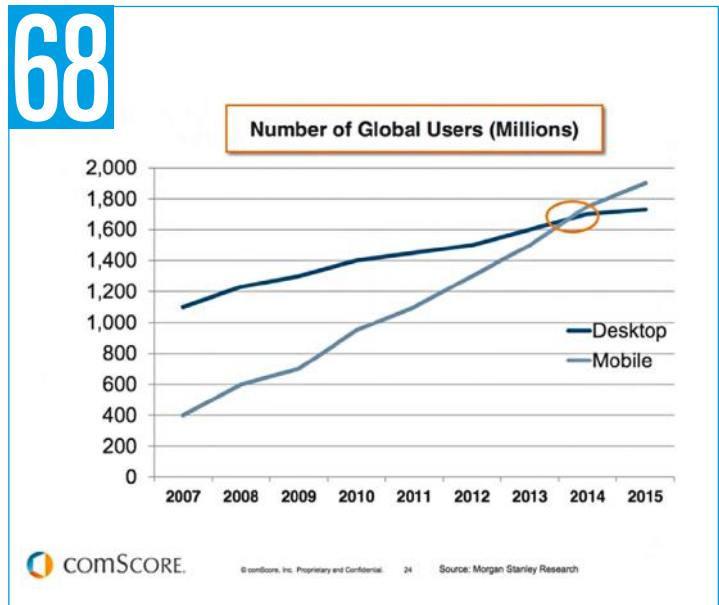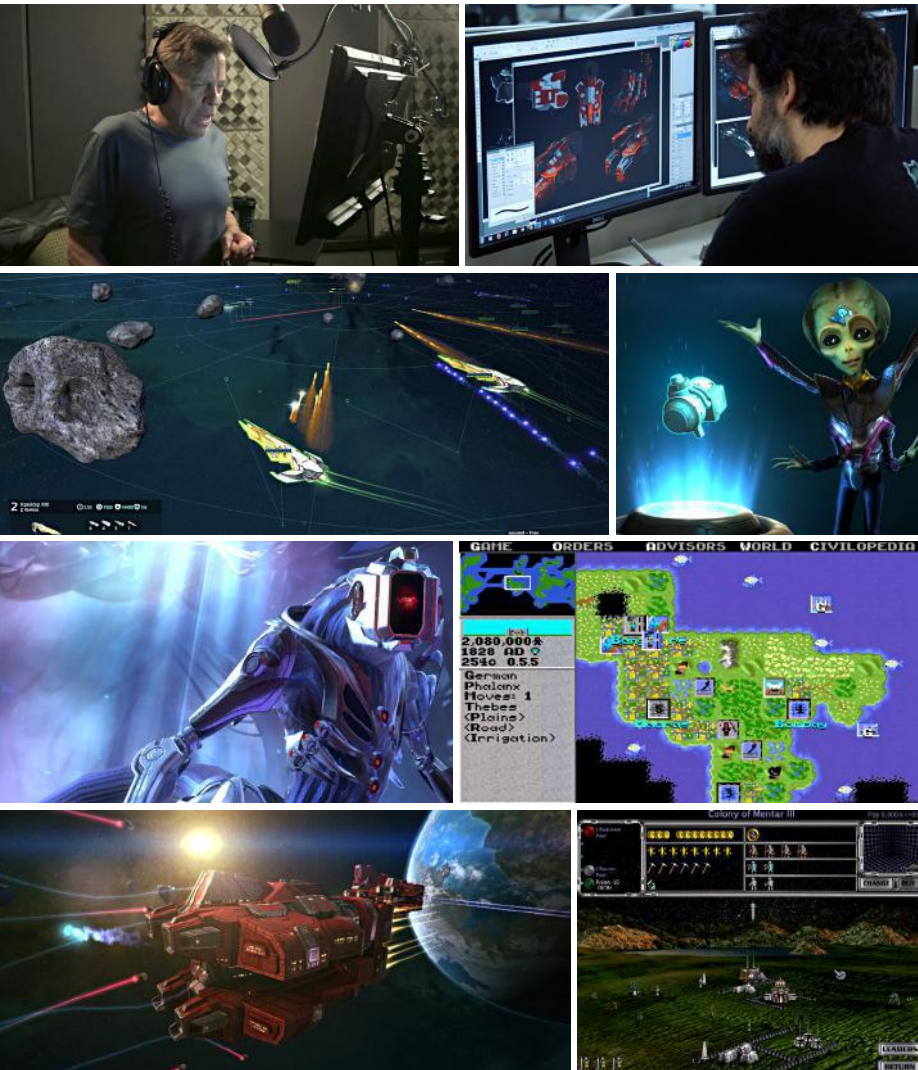
INHALT
05/2016

44

68

Number of Global Users (Millions)

54

64

80

TITELTHEMA
Making of Master of Orion

48

59

Deutscher Gesamtmarkt für digitale Spiele wächst um 4,5% (inkl. Hardware)

BIU
VERÖFFENTLICHT JAHRESREPORT 2016

Mitte Juli hat der Bundesverband Interaktive Unterhaltungssoftware, kurz BIU, seinen traditionellen Jahresreport für die deutsche Spieleindustrie veröffentlicht. Während es gute Nachrichten darin gab, etwa, dass der Umsatz mit Videospielen und Hardware im Jahr 2015 um 4,5 Prozent auf rund 2,81 Milliarden Euro stieg, gab es auch viele eher schlechtere Erkenntnisse. So kommt der BIU zum Beispiel zum Schluss, dass Deutschland als Entwicklungsstandort international kaum relevant ist, obwohl der Markt zu einem der wichtigsten gehört. In der Liste der Top-Standorte rangieren Länder wie die USA oder Kanada natürlich auf den ersten beiden Plätzen, doch auch Polen, Schweden oder gar die Schweiz siedeln sich noch vor Deutschland an. Auch das Wachstum der Zahl der in der Games-Branche beschäftigten Mitarbeiter stieg lediglich um 1 Prozent.

Und obwohl es durchaus einige, wenn auch wenige international konkurrenzfähige Titel in Deutschland entwickelt wurden, etwa Anno 2205, schaffte es im Beobachtungszeitraum kein Spiel mehr als 100.000 Exemplare im Heimatland abzusetzen. Der Marktanteil an deutschen Produktionen schrumpfte von 7 auf 6,5 Prozent. Ebenso sank die Menge der klassisch verkauften Spiele von 1,25 Milliarden auf 1,20 Milliarden, während der Anteil von Mikrotransaktionen (In-App-Käufe, DLCs etc.), Abonnements und Hardware stieg. Hybrid Toys, wie etwa bei Skylanders verwendet, konnten ihren Umsatzanteil von 47 Millionen auf 72 Millionen Euro steigern.

Die vermutlich wichtigste Forderung des BIU ist daher eine intelligentere Förderung der Unternehmen und Projekte und somit der Branche und dem Standort Deutschland, wo viele Nachbarländer einen deutlichen Schritt voraus sind. Sogenannte Blockbuster-Spiele kosten heutzutage schnell dreistellige Millionenbeträge und sind mit großen Hollywood-Produktionen gleichzusetzen. Ein Budget, das in Deutschland in den meisten Fällen nicht aufgebracht werden kann. Andere Länder, wie etwa im skandinavischen Raum oder Großbritannien, fördern solche Produktionen heute intensiv, während deutsche Entwicklerstudios oft das Nachsehen haben und zum Beispiel Filmprojekten in der Regel deutlich höhere Summen zugesprochen werden. Den kompletten Report mit allen Details finden Sie unter folgendem Link: www.makinggames.biz/biu-report-2016   **Sebastian Weber**

GAMING-AID UND REBUY VERTEILEN
100.000 SACHSPENDEN AN FLÜCHTLINGE

Mitte Juli konnten der Verein Gaming-Aid und der Online-Gebrauchthandel reBuy ihre gemeinsame Spendenaktion für Flüchtlinge erfolgreich beenden. Rund 100.000 Sachspenden gingen dabei an Bedürftige, etwa Kleidung, Spielzeug oder Schlafsäcke. Seit August 2015 wurden die Hilfsgüter gesammelt, die am Ende von über 10.000 Spendern beigesteuert wurden und welche wiederum 150 ehrenamtliche Helfer sortierten und verteilten. Flüchtlingsheime und Erstaufnahmelager in insgesamt zehn deutschen Städten und deren Umland wurden beliefert, darunter Hamburg, Düsseldorf oder München. Unterstützung kam zudem unter anderem von den Branchenverbänden BIU und Game. reBuy hatte unter dem Motto »Wir müssen helfen« im Sommer 2015 zu Sachspenden aufgerufen. Parallel startete Gaming-Aid unter dem Hashtag #GamingAid4Refugees einen ähnlichen Aufruf, sodass eine Kooperation schnell beschlossene Sache war. An der Aktion beteiligten sich zusammen mit Gaming-Aid und reBuy die Hermes Logistik Group, die Flüchtlingshilfe Schwerin und zahlreiche Speditionen, darunter der Transportservice Brauer aus Schwerin. Eine Hamburger Unternehmensgruppe stellte zudem eine kostenlose Lagerfläche zur Verfügung.

WWW.makinggames.biz
■ aktuelle News und Gerüchte

NEUE TERMINE FÜR »BIU ACADEMY«-WEBINARE STEHEN FEST

Die Webinar-Reihe »BIU Academy«, die der Bundesverband Interaktive Unterhaltungssoftware in Kooperation mit Making Games im Januar 2016 gestartet hat, widmet sich als nächstes dem Thema Monetarisierung.

BIU Academy« in Kooperation mit Making Games ist eine Webinar-Reihe für Entwickler, Gründer und Interessierte; eine Weiterbildungsmaßnahme ohne Reisekosten zu allen Themen rund um Spieleentwicklung und -vermarktung, zum Beispiel Business Modelle, Design, Management, Legal, Marketing und viele mehr.

- **Länge**: 60 Minuten
- **Monatlich; Dienstags** um 17:00 Uhr
- **Preis**: 19,00 EUR
  (für Mitglieder des BIU-Netzwerks kostenfrei)
- **Aktuelle Informationen unter**:
  www.biu-online.de
  Facebook: BIUeV
  Twitter: BIU_eV

Die neunte Webinar-Veranstaltung widmet sich dem Thema **»Monetarisierung von Free2Play-Spielen«**. Das Webinar findet am **Dienstag, 06.09.2016 um 17:00 Uhr** statt.

In dem Webinar von Christopher Hecht, das von Stephan Reichart moderiert wird, geht es um die Monetarisierung von Free2Play-Spielen: Wo befindet sich das Geschäftsmodell gegenwärtig? Warum ist der Ruf so schlecht? Welche Möglichkeiten bieten sich für Entwickler? Welche Methoden haben sich wie verändert? Wie sieht eine moderne F2P-Monetarisierung aus?

Christopher Hecht ist ein Freier Game Designer und Experte für Monetarisierung, mit der Erfahrung von über 15 Spielproduktionen und vier leitenden Positionen als Lead Designer und Creative Director für nationale und internationale Firmen. Als freiberuflicher Berater unterstützt er mit seinem Wissen Spieleproduktionen und optimiert die monetäre Verwertung. Darüber hinaus engagiert er sich seit vielen Jahren in der Erwachsenenbildung als Fachbereichsleiter und Dozent im Bereich Game Development. Wenn man sich für seine Dienste interessiert, erreicht man ihn am leichtesten über seine Homepage: www.gamedesigngeek.de.
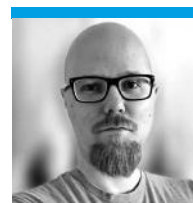
Christopher Hecht
ist Freier Game Designer
bei Game Design Geek.

Matthew Handrahan
ist European Deputy Editor
bei GamesIndustry.biz.

Stephan Winter
ist Gründer und CEO
von Limbic Entertainment.
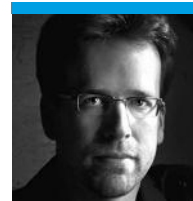
Falko Löffler
ist freier Autor.

Stephan Reichart
ist Geschäftsführer
von Aruba Events.

Dieter Schoeller
ist Geschäftsführer
von Headup Games.

▦ Termine 2016

Termin	Thema	Referent
06. September	**Monetarisierung von Free2Play-Spielen**	**Christopher Hecht** (Freier Game Designer bei Game Design Geek)
04. Oktober	**International PR & Media**	**Matthew Handrahan** (European Deputy Editor bei GamesIndustry.biz)
24. Oktober	**Studio-Gründung**	**Stephan Winter** (Gründer und CEO von Limbic Entertainment)
08. November	**Interactive Storytelling**	**Falko Löffler** (freier Autor)
29. November	**Unternehmensentwicklung**	**Stephan Reichart** (Geschäftsführer von Aruba Events)
13. Dezember	**Indie-Games Publishing**	**Dieter Schoeller** (Geschäftsführer von Headup Games)

Änderungen vorbehalten

FOKUS GAME
IST VOLDEMORT WIEDER DA?

Stefan Marcinek über das Schreckgespenst Killerspiele-Debatte und wieso die eigene Verantwortung viel entscheidender ist.

Stefan Marcinek
ist Vorstandsvorsitzender des GAME Bundesverband der deutschen Games-Branche e.V.

Stefan Marcinek, Jahrgang 1977, war Mitgründer der Kalypso Media Group, organisiert die GermanDevDays und ist seit April 2016 Vorstandsvorsitzender des GAME Bundesverbands.

Nach der fürchterlichen Amoktat in München schreibt die SZ, dass wir bei der Diskussion über Killerspiele (Ja, ich habe Voldemorts Namen gesagt) wieder in den Nuller-Jahren angekommen sind. Nach der Tat verging keine halbe Minute, da wurde schon nach den Ursachen gesucht und viel darüber spekuliert. Zuerst von den Fernsehsendern, wobei sich hier weder die privaten noch die öffentlich-rechtlichen mit Ruhm bekleckert haben, und dann von Politikern. Reflexartig waren mehrere Töne dazu zu hören: Unter anderem waren auch die Killerspiele wieder ein Thema, vorgetragen von unserem innigen Innenminister. Auf der einen Seite kann man ihm schwerlich einen großen Vorwurf machen. Es ist sein Job, direkt nach solch einer Tat als erstes über Konsequenzen zu sprechen – überlegt oder nicht. Auf der anderen Seite würde ich mir wünschen, dass er zuerst innehalten würde, ein kurzes Statement á la »Wir werden alle Optionen prüfen, möchten hier aber keine voreiligen Schlüsse ziehen« abgeben würde, um sich dann später detailreicher zu äußern.

Aber auf der anderen Seite geht es in der Politik wohl eher um Zeit. Die scheinen einige Politiker mehr zu haben – unsere Bundeskanzlerin lässt sich extrem selten blicken und schickt grundsätzlich immer Herrn Seibert vor (was ich für ein Unding halte) – andere wollen lieber die Ersten mit einer Stellungnahme sein. Da kommt auch schon mal der Herr Kauder um die Ecke. Aber den versteht sowieso niemand, da er ja seine eigene Sprache spricht: »Kauderwelsch«.

Natürlich kommt dann auch die reflexartige Forderung nach schärferen Gesetzen und härteren Strafen. Davon abgesehen, dass ich denke, dass wir hier rechtlich gut aufgestellt sind, sind härtere Strafen auch immer so eine Sache. Fragen wir doch mal die Amerikaner. Härter als die Todesstrafe wird bei denen schwer. Volker Pispers nannte dieses Verhalten einmal »Intellektuelle Hilflosigkeit in die Zeitung gekackt«. Das trifft es wohl ganz gut.

Verantwortung fängt bei der eigenen Nasenspitze an

Wenn wir ehrlich sind, dann geht es nicht um Killerspiele. Zumindest hoffe ich das. Trotzdem sollte man nicht alles hinnehmen. Aber wir können uns wahrlich nicht beschweren, dass wir in Deutschland keinen guten und funktionierenden Jugendschutz hätten. Es geht vielmehr um Verantwortung. Diese fängt bei der Erziehung im Elternhaus an. Leider geben die meisten Eltern hier schon in der ersten Runde auf und schieben die Verantwortung in die Schule ab. Manchmal ist das auch nicht verkehrt, da man einige Kinder so lange von den eigenen Eltern fernhalten sollte wie möglich. Allerdings sind auch viele Lehrkörper damit überfordert. Kein Wunder bei 30 und mehr Schülern pro Klasse und teilweise nicht vorhandenem Fachwissen über Medienkompetenz. Hier tut sich einiges, allerdings ist man hier auch schon spät dran.

Verantwortung endet aber nicht bei den Eltern oder in der Schule. Verantwortung geht weiter. Wenn ich mir in einem Chat – egal ob im Internet, in einem Gamechat oder in Teamspeak – denke »Mhm, irgendetwas stimmt nicht«, dann wäre es verantwortlich, hier zu reagieren. Und nur, weil Spiele und das Internet teilweise eine große weite Welt der Anonymität sind, muss ich ja nicht gleich meinen gesunden – wenn auch vielleicht etwas abgestumpften – Menschenverstand komplett ausschalten.

Wir Gamer reden ja gerne davon, dass wir eine große Community sind. Das sind wir auch. Und in einer Gesellschaft, egal ob da draußen in der realen oder in der virtuellen Welt, sollte man auf einander Acht geben. Das kann man nicht verlangen, aber man kann darauf hinarbeiten. Verantwortung fängt bei der eigenen Nasenspitze an. Völlig egal wie der Zinken aussieht …

Stefan Marcinek

Nach dem Amoklauf in München am 22. Juli forderte Bundesinnenminister Thomas De Maizière in einem Statement eine Diskussion über gewalttätige Spiele, was viele Medien im Tenor der früheren Killerspiele-Debatte dankend aufnahmen.

AERIA GAMES FUSIONIERT MIT GAMIGO

Ende Mai hat der Berliner Free2Play-Publisher Aeria Games eine Fusion mit dem Hamburger Publisher gamigo bekannt gegeben. Der bisherige Eigner ProSiebenSat.1 bleibt allerdings mit 33 Prozent der Firmenanteile als Minderheitsgesellschafter am zusammengeführten Publisher beteiligt. Die Vereinbarung wurde zunächst unter Vorbehalt bekannt gegeben, kurze Zeit später stimmten die zuständigen Kartellbehörden dem Vorhaben zu. Somit hat Aeria Games erneut einen neuen Eigner. Die 2006 in den USA gegründete Firma, die 2008 ihr Büro in Berlin eröffnete, hatte ProSiebenSat.1 im Jahr 2014 für rund 40 Millionen Dollar von Axel Springer übernommen. Mit gamigo wiederum war Aeria Games bereits seit 2013 verbandelt, denn seinerzeit erwarben die Hamburger die nordamerikanische Lizenz für das Spiel Last Chaos von Aeria Games. Der durch die Fusion neu entstandene Publisher hat Niederlassungen in Berlin, Darmstadt, Hamburg, Münster, Seoul, Chicago und San Francisco.

Vier Fragen an …

Remco Westermann ist CEO der gamigo AG.

Making Games Wie kam die Fusion mit Aeria Games zustande?
Remco Westermann Die Fusion mit Aeria war sowohl für ProSiebenSat.1 wie für gamigo ein logischer nächster Schritt. Beide Firmen haben in den letzten Jahren diverse Unternehmen im Bereich Gaming erworben und sehen die Vorteile von einem größeren Konzern. Mit der Fusion ist einer der größten Publisher von Free2Play- und MMO-Spielen in Nordamerika und Europa entstanden, mit einem sehr breiten Spieleportfolio sowie führenden Portalen und mit Zugriff auf über 100 Millionen Nutzerkonten.

Making Games Welche Zielsetzung hat die Fusion?
Remco Westermann Die Zielsetzung ist klar: Weiteres Wachstum als führendes Plattform-Unternehmen im Bereich Gaming und zwar durch die weitere Marktkonsolidierung, durch organisches Wachstum als führende Publishing-Plattform sowie durch das Anbieten von B2B-Services, unter anderem in den Bereichen Lead-Generation, Payment und »Software as a Service«. Ein wichtiger Bestandteil des Erfolgs der Zusammenschlüsse sind gute Mitarbeiter, die am freien Markt sehr schwer zu finden sind. Die Aufgaben sind über mehrere Standorte verteilt, wobei auf Synergien und die Standorte geschaut wird, z.B. im Bereich Technik und Support.

Making Games Welche Auswirkungen hatte die Fusion direkt?
Remco Westermann Leider mussten wir uns von rund 100 Mitarbeitern trennen. Hiermit steht jetzt aber ein sehr wettbewerbsfähiges Unternehmen auf dem Games-Markt, das weiter profitabel wachsen kann. Die gemeinsame Firma verfügt über ein Portfolio von über 25 starken MMO-Spielen, mehr als 500 Casual Games und eine starke Launchpipeline mit unter anderem Zoo Zap, Diddle Mouse, Otherland, Twin Saga und Bless.

Making Games Wie sieht die Zukunft der beiden Standorte aus?
Remco Westermann Das Unternehmen arbeitet von verschiedenen Standorten aus. Hamburg und Berlin sind beides substantielle Standorte, die wir auch weiter fortführen werden, ebenso wie die kleineren Büros. Dank moderner Kommunikationsmittel sowie des ständigen Austauschs sehen wir keine Veranlassung, diese zusammenzuführen. An jedem Standort haben wir qualifizierte Mitarbeiter, die wir nicht verlieren wollen. Die gamigo-Gruppe ist jetzt stark aufgestellt, profitabel und wächst. Mit unserer starken Plattform, unseren Portalen, unserer Kundenbasis und unserer Vermarktungskompetenz im Bereich TV und Internet sind wir im kompetitiven Spiele-Markt gut aufgestellt, um Online- und Mobile-Spiele zu betreiben und zu launchen.

Eventkalender

www.makinggames.biz
Online-Eventkalender mit Suchfunktion und Veranstaltungsinfos

SEPTEMBER 2016

Brasil Game Show
Ort	São Paulo, Expo Center Norte
Termin	01. bis 05. September 2016
Thema	Messe
Kosten	19 bis 100 Euro
Homepage	www.brasilgameshow.com.br

IFA
Ort	Berlin, Messe Berlin
Termin	02. bis 07. September 2016
Thema	Messe
Kosten	9 bis 72 Euro
Homepage	www.ifa-berlin.de

Tokyo Game Show
Ort	Tokyo, Makuhari Messe
Termin	17. bis 20. September 2016
Thema	Messe
Kosten	793 bis 7.048 Euro
Homepage	expo.nikkeibp.co.jp/tgs/2015/exhibition/english

OKTOBER 2016

Medientage München
Ort	München, ICM/Messe München
Termin	25. bis 27. Oktober 2016
Thema	Konferenz/Messe
Kosten	260 bis 750 Euro
Homepage	www.medientage.de

Game Connection Europe
Ort	Paris, Paris Expo
Termin	26. bis 28. Oktober 2016
Thema	Messe
Kosten	120 bis 9.000 Euro
Homepage	www.game-connection.com

animago Award & Conference
Ort	München, Gasteig
Termin	27. bis 28. Oktober 2016
Thema	Konferenz
Kosten	48 bis 78 Euro
Homepage	www.animago.com

NOVEMBER 2016

Making Games Talents Hamburg
Ort	Hamburg, HAW Hamburg
Termin	05. November 2016
Thema	Konferenz
Kosten	29 Euro
Homepage	www.makinggames.biz/talents

DEZEMBER 2016

Deutscher Entwicklerpreis
Ort	Köln, Palladium
Termin	07. Dezember 2016
Thema	Preisverleihung
Kosten	tba
Homepage	www.deutscherentwicklerpreis.de

Passiert auf makinggames.biz

Electronic Arts gibt Rechte für Battlefield-Fernsehserie an Paramount

Nachdem Electronic Arts die Rechte für eine Fernsehserie zu Mirror's Edge Ende Mai bereits an die Produktionsfirma Endemol Shine gegeben hatte, hat der Publisher Mitte Juli Paramount Pictures mit einer Battlefield-Umsetzung beauftragt. Paramount möchte nun zusammen mit der Produktionsfirma Anonymous Content (unter anderem bekannt durch »Mr. Robot«, »True Detective« oder den Film »The Revenant«) an einem Konzept arbeiten. Ebenfalls involviert ist Oscar-Gewinner Michael Sugar. Ob oder wann entsprechende TV-Umsetzungen allerdings erscheinen, ist bislang noch unklar. Bereits im Jahr 2012 hatte Electronic Arts zum Beispiel Fox auf seine Reihe Battlefield: Bad Company angesetzt, doch seitdem blieb es ruhig um das Projekt. Battlefield-Entwickler Dice soll in die Konzeptionsphase involviert werden, da Paramount und Anonymous Content – die zum ersten Mal an einer Videospieleumsetzung arbeiten – sich zum Ziel gesetzt haben, nah an der Vorlage zu bleiben. So hoffen alle Parteien, den bisher über 60 Millionen Spielern der Reihe das bieten zu können, was sie von der Marke Battlefield erwarten würden.

Vivendi setzt neuen CEO bei Gameloft ein

Mitte Juni war es soweit und die seit Anfang des Jahres voranschreitende Übernahme von Gameloft durch Vivendi wurde abgeschlossen, trotz der Gegenwehr des Managements. Zuerst erhöhte Vivendi die Menge seiner Anteile an Gameloft auf 95,94 Prozent des Firmenkapitals beziehungsweise 95,77 Prozent der Stimmrechte. Danach verkündete Vivendi auf einer Investorenkonferenz fünf neue Mitglieder des Gameloft-Aufsichtsrats aus seinen Reihen, von denen Stéphane Roussel (COO von Vivendi) seit Ende Juni gleichzeitig die Position des CEO von Gameloft bekleidet. Firmengründer und bisheriger Geschäftsführer Michel Guillemot unterrichtete seine rund 5.500 Mitarbeiter kurz zuvor in einer E-Mail darüber, dass er zu diesem Zeitpunkt von seinen Ämtern zurücktreten und aus der Firma ausscheiden werde.

Sein Bruder Yves Guillemot, CEO und Gründer von Ubisoft (wovon Michel ebenfalls Mitgründer ist), hat weiterhin mit Vivendi zu kämpfen. Mitte Juli gab der Konzern bekannt, inzwischen 20 Prozent der Stimmanteile des Publishers zu halten. An einer Übernahme sei Vivendi allerdings nicht interessiert.

Sega übernimmt französischen Entwickler Amplitude Studios

Anfang Juli hat Publisher Sega den französischen Entwickler Amplitude Studios übernommen, der sich bisher mit der Endless-Reihe (Endless Space, Endless Legends und Dungeon of the Endless) einen Namen gemacht hat und auf kombiniert 2,4 Millionen verkaufte Exemplare zurückblicken kann. Sega möchte mit dem Schritt sein PC-Portfolio erweitern und die Entwicklungskapazitäten im Westen erhöhen – immerhin fügt sich Amplitude Studios neben Relic und Creative Assembly gut in das aktuelle Programm des japanischen Konzerns ein. Amplitude Studios wiederum begründete den Schritt damit, sich fortan wieder voll auf die Arbeiten an seinen Spielen konzentrieren zu können. Das Entwicklerstudio, das 2011 von ehemaligen Ubisoft-Mitarbeitern gegründet wurde, war bisher unabhängig und musste sich daher selbstständig um Marketing, PR und ähnliches kümmern. Diese Aufgabenbereiche geben die Entwickler nun gerne an den neuen Mutterkonzern ab. Zudem glauben beide Unternehmen, dass ihre Ziele gut zueinander passen.

Electronic Arts startet Indie-Programm EA Originals

Auf der E3 2015 kündigte Electronic Arts das Jump 'n' Run Unravel an, das im Februar 2016 erschien. Entwickelt wurde das Spiel seinerzeit vom schwedischen Indie-Studio Coldwood Interactive und genau das diente EA nun als Vorlage, auf der E3 2016 sein Indie-Programm EA Originals zu starten. Unter dessen Flagge entsteht gerade bei dem ebenfalls sehr kleinen Studio Zoink in Göteborg der Exploration-Titel Fe. Die Zielsetzung des Originals-Programms dreht sich im Wesentlichen um drei Punkte: EA möchte seinen Spielern innovative und außergewöhnliche Projekte zugänglich machen, möchte kleine und unabhängige Entwickler bei den Arbeiten an ihren Titeln unterstützten, aber ebenso bei Marketing bis hin zur Veröffentlichung und zu guter Letzt diesen Indies mit der Finanzierung ihrer Spiele eine gewisse Sicherheit geben, während die Gewinne später bei den Entwicklern landen. Die Studios für EA Originals werden dabei von EA gezielt ausgewählt. Wie viele hier pro Jahr geplant sind und wie ein Bewerbungsprozess für das Programm eventuell aussieht, darüber hat der Publisher bisher keine Informationen bekannt gegeben.

Pokémon Go beherrscht den Mobile-Markt

Am 06. Juli veröffentlichte Entwickler Niantic sein Free2Play-Mobile-Game Pokémon Go in Neuseeland und in den USA, am 13. Juli folgte die Version für Europa, leicht verzögert die für Japan. Und vermutlich waren Niantic sowie Lizenzgeber The Pokémon Company (zu deren Eigentümern Nintendo gehört) von dem enormen Ansturm auf das Spiel überrascht: Innerhalb von etwa fünf Tagen war Pokémon Go auf etwa 11 Prozent aller Android-Geräte der USA installiert worden und es übertraf die täglichen aktiven Nutzer von unter anderem Twitter. Auch eigentlich extrem erfolgreiche andere Titel wie Candy Crush Saga oder Clash of Clans wurden in ihre Schranken gewiesen und hatten in weniger als einer Woche weniger Nutzer als die Pokémon-Jagd. Doch nicht nur die Nutzerzahlen verblüfften, sondern auch die mit der App verbrachte Zeit. Während soziale Netzwerke wie Snapchat, Twitter oder Facebook auf eine tägliche Nutzungsdauer von rund 18 bis 22 Minuten kamen, pendelte sich Niantics Spiel bei rund 33 Minuten ein, wie eine Analyse von SensorTower herausfand. All das wiederum führte dazu, dass Nintendo seinen Firmenwert enorm erhöhte und binnen weniger Tage mit etwa 36 Milliarden Dollar bewertet wurde – wodurch Konkurrent Sony überholt wurde. Allerdings bleibt abzuwarten, wie lange der Hype um Pokémon Go anhält.

Unity ändert sein Preismodell

Ende Mai hatte Unity auf seiner Konferenz Unite Europe das neue Abomodell für seine Engine vorgestellt. Mitte Juni folgte die Anpassung, da sich treue Kunden über die Preisgestaltung beschwert hätten. An den verschiedenen Paketen Personal, Plus und Pro ändert sich grundsätzlich nichts. Personal bleibt kostenlos (bis zu einem Umsatz von 100.000 Dollar), allerdings bietet Unity nun gewisse Anpassungsmöglichkeiten für den erzwungenen Splash-Screen. Plus kostet weiterhin 35 Dollar pro Monat (mit einem verpflichtenden Abo für 12 Monate) während die Umsatzgrenze auf 200.000 Dollar angehoben wurde. Dafür darf der Splash-Screen abgeschaltet werden. Negativer könnte aufgefasst werden, dass die Plus-Mitgliedschaft aus dem »Pay To Own«-Programm genommen wurde, über das man eine Version erwerben kann. Diese Option gibt es nun nur noch für Unity-Pro-Nutzer.

Ubisoft schließt Studio in Casablanca

Mitte Juni hat der französische Publisher Ubisoft sein Entwicklerstudio in Casablanca nach 18 Jahren Betrieb geschlossen. Das Team hatte zuvor vor allem an Mobile-Spielen gearbeitet, aber auch an Titeln wie Rayman Legends, Child of Light oder Valiant Hearts mitgewirkt. Den 48 betroffenen Mitarbeitern möchte Ubisoft anbieten, in andere Konzern-Studios zu wechseln oder sie nach der endgültigen Schließung des Standorts bestmöglich unterstützen, etwas anderes zu finden. Analysten vermuteten, dass das Studio in Casablanca einer Umstrukturierung zum Opfer fiel, die Ubisoft aufgrund von Vivendis Aktienkäufen und der Angst einer »feindlichen Übernahme« angestoßen haben könnte. Den Experten zufolge könnte ein entschlackter und dadurch lukrativerer Geschäftsbetrieb potenzielle neue Investoren sichern.

Links

Fünf Fehler, die Anfänger in der Unity Engine vermeiden sollten.
www.makinggames.biz/unity-mistakes

Rückblick auf das Ghostbusters-Spiel, das beinahe nie entstanden wäre.
www.makinggames.biz/ghostbusters

50 typische Fehler von Kameraperspektiven in Spielen.
www.makinggames.biz/camera-tutorial

Call of Duty: Roman Wars - das Call of Duty, das nie erschien.
www.makinggames.biz/cod-roman-wars

BRANCHEN-GEZWITSCHER
@MAKINGGAMES_DE/INTERESTING-PEOPLE

@PHRENOPOLIS
An unfortunate consequence of writing comedy professionally is how often you're asked to explain why things are funnier one way than another.
Dave Grossman, Game Designer (u.a. Monkey Island)

@GRUMPYGAMER
My twitter stream is filled with heartbreaking stories of a mass shooting mixed with excited people at E3 waiting for the next big shooter.
Ron Gilbert, Erfinder von Monkey Island

@DANIELVAVRA
13 years ago I wanted to make game based on Zombie Survival Guide book. »No one is interested in zombies.« producers told me. Yeah. Sure :)
Daniel Vávra, Creative Director von Kingdom Come: Deliverance

@GEORGEB3DR
Remember when the Internet was for porn? Now it's for outrage and angry drive-by tweets.
George Broussard, Erfinder von Duke Nukem

@LOCUST9
Debating use of Snapchat but fear my old person brain might self-destruct protectively.
David Goldfarb, Game Director von Payday 2

@TIMOFLEGEND
I'm really enjoying re-reading Harry Potter with my kid, but man, JK Rowling sure seems to hate fat people. What did we ever to do her?
Tim Schafer, Gründer von Double Fine Productions

@THEREALCLIFFYB
While it ain't perfect, it's a step in the right direction - ordering Game Developer Barbies for all our nieces.
Cliff Bleszinski, CEO von Boss Key Productions

@BENJAMINCOUSINS
So Nintendo are on mobile and MS are releasing every first-party Xbox One game on PC. So much for the ›consoles are fine‹ narrative.
Ben Cousins, Mitgründer und CEO von The Outsiders

@NOTCH
Sometimes without really being aware of it, I will pretend to be insightful and self-aware just to get likes on twitter. And retweets.
Markus »Notch« Persson, Erfinder von Minecraft

JOIN THE CONVERSATION

TOOLS

Keine guten Werkzeuge – keine guten Spiele! Experten aus der Branche sagen ihre Meinung zu aktuellen Programm-Updates sowie neuen Tools und verraten ihre persönlichen Software-Geheimtipps.

JUSTINMIND WWW.JUSTINMIND.COM

Gerald Köhler
ist Geschäftsführer
von Bright Future.

Bei meiner Suche nach einem guten Tool zur Erstellung eines Click-Through-Prototypen (ohne Grafiker-Unterstützung) habe ich ein gutes Dutzend Anwendungen verglichen, am Ende hat JustinMind in der Version 7.2.2 das Rennen gemacht. Große Vorteile sind eine geringe Einarbeitungszeit, eine hohe Stabilität (bislang nicht einen Fehler gefunden) und eine ordentliche Zahl an vorgefertigten UI-Elementen. Besonders schön sind die extrem einfache Möglichkeit, Screens zu verbinden, eine Übersichtskarte über das gesamte Projekt auf Knopfdruck, ein problemloser HTML-Export mit Kommentaren und nicht zuletzt die Möglichkeit, das Ergebnis auch direkt auf dem Smartphone auszuprobieren. Nach drei Tagen hatte ich eine erste Version mit allen Bildschirmen eines Mobile-Spiels fertig und konnte die ersten Tester beim Durchklicken beobachten. Man kann 30 Tage gratis testen, also quasi erst mal 10 Spiele machen und sich dann entscheiden.
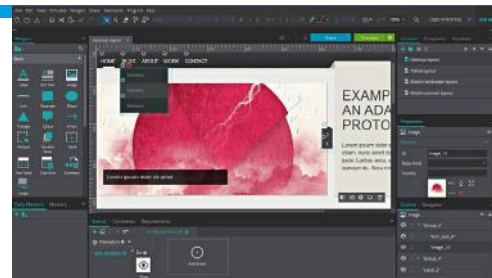
JustinMind erlaubt es, schon nach kurzer Einarbeitungszeit Prototypen zu bauen und bietet dabei eine hohe Stabilität.

SKETCH 3 WWW.SKETCHAPP.COM

Sketch 3 is a vector design tool entirely focused on user interface design.

Marc Sodermanns
ist Technical UI Designer
bei Blue Byte.

Sketch 3 is a perfect tool for iOS, Android and Web design. It is a vector design tool entirely focused on user interface design. It's easy to pick up and simple to use for anyone with little to no training. Just like native OS X apps, you have a familiar user interface with a Toolbar, Navigator and Inspector. It's perfect for designing for multiple devices, and it is very easy delivering assets. Sketch 3 uses a single unit, styles only relevant to UI design. It comes with a built-in iPhone previewing tool called Mirror. With Sketch 3's Artboards, you can design multiple screens in a very efficient way. It comes preloaded with a number of user interface templates for iOS 9, Material Design and Responsive Web. Sketch 3 can be downloaded via the homepage and costs 99 Dollars (or roughly 110 Euros). It's only Mac compatible.

FRANZ HTTP://MEETFRANZ.COM/

Gunnar Lott
ist Geschäftsführer
von Visibility Communications.

Franz ist ein simpler Messenger-Aggregator für Mac, es vereint acht beliebte Messenger in einer App. Das ist technisch ein bisschen arg simpel gelöst, im Wesentlichen öffnet Franz einen Webview pro Messenger. Man kann per Tab durchschalten, bei einlaufenden Nachrichten meldet sich das Programm mit einem Ton. Bei mir hebt Franz Slack, Skype, den Facebook-Messenger und WhatsApp auf, was mich davor bewahrt, drei Clients laufen zu haben – vor allem Skype ist ja kein Spaß in Sachen Ressourcenverbrauch. Videotelefonie kann Franz allerdings nicht, dafür muss man den jeweiligen Client starten. Kein Allheilmittel, aber für eine kostenlose App sehr nützlich.
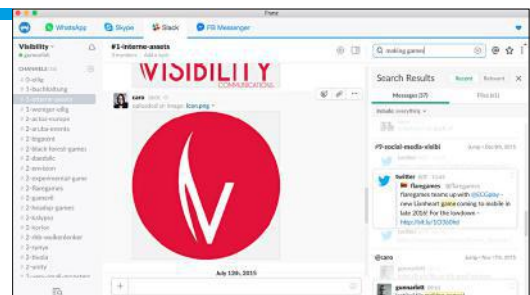
Franz ist ein simples aber praktisches Tool, das viele beliebte Messenger-Apps auf einer Bedienoberfläche bündelt.

DATA**FLOW**

PC Games und PC Games Hardware befragen regelmäßig Heftkäufer und Website-Besucher zu aktuellen Games-Themen. Eine kleine Auswahl finden Sie auf dieser Seite.

Sind Sie im Besitz eines 4K-Fernsehers oder -Monitors?

Ja. **22%**

Nein. **48%**

Den müsste ich mir noch kaufen. **16%**

4K-Auflösungen sind mir noch egal. **14%**

Quelle: Umfrage auf pcgames.de, 3.855 Teilnehmer
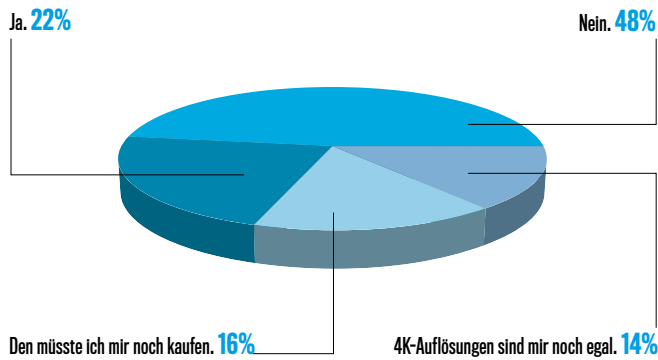
Wie viel geben Sie für ein Headset oder einen Kopfhörer aus?

Headset: 150 bis 250 Euro. **7%**

Headset: 70 bis 100 Euro. **12%**

Headset: 50 bis 70 Euro. **11%**

Kopfhörer: Über 500 Euro. **3%**

Headset: 100 bis 150 Euro. **11%**

Headset: Unter 50 Euro. **15%**

Kopfhörer: Unter 50 Euro. **4%**

Kopfhörer: 200 bis 350 Euro. **10%**

Headset: Über 250 Euro. **2%**

Kopfhörer: 50 bis 100 Euro. **6%**

Kopfhörer: 100 bis 200 Euro. **17%**

Kopfhörer: 350 bis 500 Euro. **2%**

Quelle: Umfrage im PC Games Hardware Extreme Forum, 690 Teilnehmer

Welches Budget haben Sie sich für den Steam Summer Sale 2016 vorgenommen?

15 bis 30 Euro. **23%**

Ich habe mir kein Budget gesetzt. **34%**

30 bis 50 Euro. **20%**

Bis 15 Euro. **12%**

Mehr als 50 Euro. **11%**

Quelle: Umfrage auf pcgames.de, 2.060 Teilnehmer
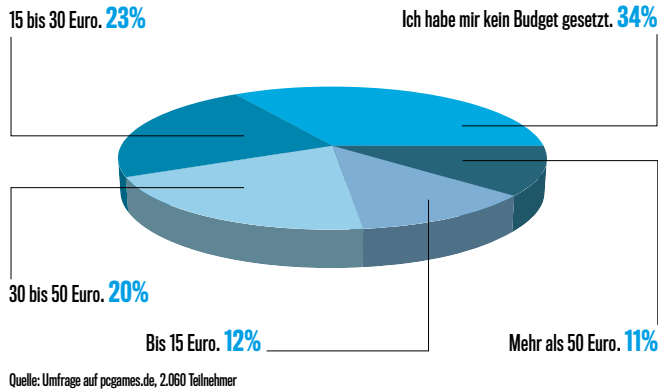
Welchen Preis würden Sie für eine 4K-Version der PS4 bezahlen?

Ich plane keinen Kauf der 4K-Version. **30%**

Für eine 4K-Version würde ich auch mehr Geld ausgeben. **3%**

Zwischen 300 und 400 Euro. **26%**

Das hängt von der Ausstattung ab. **16%**

Weniger als 300 Euro. **15%**

Zwischen 400 und 500 Euro. **10%**

Quelle: Umfrage auf pcgames.de, 3.855 Teilnehmer
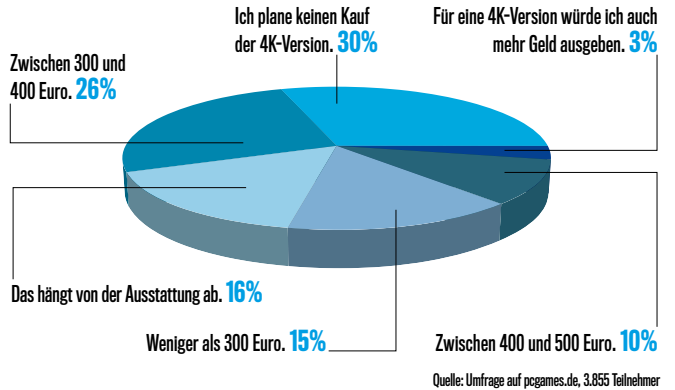
Wieviel Geld geben Sie für eine Grafikkarte aus?

Quelle: Umfrage im PC Games Hardware Extreme Forum, 1.939 Teilnehmer

Bis 50 Euro	51 bis 75 Euro	76 bis 100 Euro	101 bis 150 Euro	151 bis 200 Euro	201 bis 250 Euro	251 bis 300 Euro	301 bis 350 Euro	351 bis 400 Euro	401 bis 500 Euro	501 bis 600 Euro	601 bis 700 Euro	Mehr als 700 Euro
0,3%	0,3%	0,4%	2,0%	4,0%	12,0%	11,0%	19,0%	13,0%	9,0%	7,0%	8,0%	14,0%
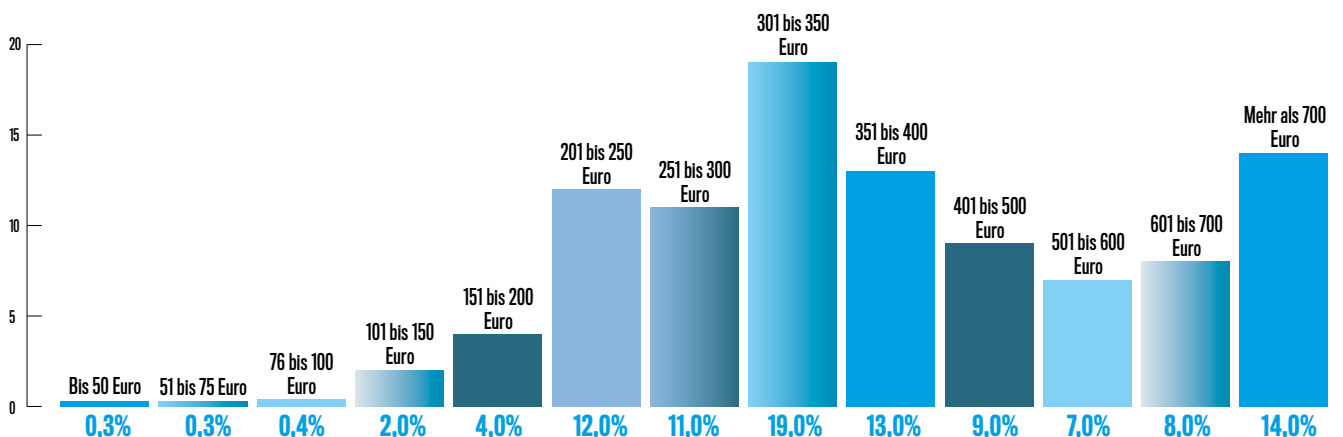
MASTER OF ORION
REVIVING THE LEGEND

Master of Orion 3 was released in 2003 and about 13 years later, Wargaming wants to revive the legendary strategy game. Here the team explains, how they carefully changed features of the game to make both hardcore players happy as well as beginners.

Andrés Chilkowski
is Co-Founder,
CEO and Studio Director
of NGD Studios.

Andrés is one of the first game developers in the Argentine industry. In 1995, he worked on the first commercial game made in Argentina: »Regnum«, a Sci-Fi RTS. In 2002 he founded NGD Studios, and led the development of »Champions of Regnum«, a 3D MMORPG, first of its kind in Latin America. He is the Game Director for »Master of Orion«, where he's responsible for creating and sustaining a vision for the comeback of this legendary game during the development of the project.

Bringing »Master of Orion« back to life after over 20 years hibernating in the darkest reaches of space was no easy task. Wargaming and NGD Studios took up the mantle and have been hard at work for the past couple of years. With the game nearing release, members of the crew thought it was a great time to reflect on where they've been and the different aspects of Master of Orion.

Building on Old Foundations

Bringing a game like Master of Orion back is a big undertaking, and we feel a great deal of responsibility, because it's such a legendary title. It's remembered as one of the best gaming experiences for many. We're putting all our passion and all our effort into making this game the most amazing experience it could be.

In re-envisioning the game, we wanted to capture the essence of the original Master of Orion, but in a modern context. It's larger than life; it's an amazing experience for every player. We think it appeals to many different types of players, because we offer something for everyone. That's why we went multi-platform, because we want more people to enjoy the game. Even if your friend has a Mac, you are going to be able to play with them, or if another friend has Linux, they're also going to be able to play with you.

Javier Otaegui
is CTO and
Development Director
at NGD Studios.

Javier started making games when he was 15 years old. He founded Sabarasa in 1996, one of the first game studios in Latin America, where he created several games including »Mazes of Fate«, »Horizon Riders and Art of Ink«. He joined NGD Studios in 2013 as CTO. He is the Development Director of Master of Orion where he is in charge of coordinating the development of the game and the programming team.

First, combat was turn-based, but quickly turned out to take too long per encounter. In the end, the team decided to go for tactical real-time combat.

Making a multiplayer 4X game is no easy task. These types of games have a long development cycle, and usually require a great deal of commitment from fellow players in order to have a complete experience. And we're not just talking about the single player experience. We're designing multiplayer with this in mind, because we want everybody to enjoy it. We're providing different modes, where you can enjoy small skirmishes or the whole experience, if you manage to get your friends to play with you for eight hours.

That's what we wanted, but how that plays out is a different matter altogether. That's why we made the decision to do an Early Access program for Master of Orion. We wanted people's feedback as soon as possible. We wanted the fans to tell us what they thought about our game and to work with them in order to improve it – to make this the best Master of Orion there ever was.

Battling the Ghost in the Machine

What you're going to love most about the AI is getting to know their personalities, getting to know how they play, and getting to know how to beat them. It's not fun for a player, when you always know what your opponent is going to do and how they're going to react. We didn't want the player to feel cheated; we didn't want our AI to cheat, but we wanted it to be interesting and to make decisions that would seem natural to a player. What gives real life to the AI is, as said, their personalities, because it means you can play it over and over, and every game will be different. You make a move in the game and you expect something to happen, but you don't know how this race will react to that. Also there is a dynamic that runs between races so you don't know what that race will do against other races. When you throw that all into the mix, we can guarantee you that every playthrough is going to be a different experience. It's extremely important to not just have a competitive AI, but an AI that would surprise you, an AI that would tell a story that will stay with you.

Building on this is the combat. In the beginning, we started with the »Master of Orion II«-style combat: two battles with the square grid, which were turn-based. We wanted it to work. It did work, we had a complete game around

it. But we realized that having a battle in that style can last from 5 to 15 minutes every time you encounter an enemy ship. It totally killed the pace! Each turn can take 10 to 30 seconds, and every battle ended up being around 15 minutes. We made a test, a really fast test to change the entire game from turn-based to real-time. The first time we showed it everyone, it felt like »this is a path we should follow«. After some iterations, we reached the point in which we felt tactical battles were where Master of Orion had to go.
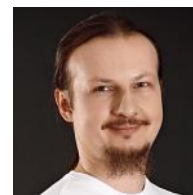
Real-time Warfare

People reacted quite differently to the introduction of tactical battles. There's a great sense of nostalgia surrounding the original Master of Orion games. And with nostalgia, we tend to gloss over the blemishes of the past. The battle system was something that really needed to be brought to the 21st century. There was a lot of hostility surrounding the change. If we look back at the old version of Master of Orion, we see that everything went fine until you finished the game. At the end of the game, there was a maddening, long and tormenting »moving« by squares. And of course it would be ridiculous to introduce a flat, step-by-step battle in a modern 3D game, where space is given a three-dimensional form. This would deprive the game of its epic nature and beauty, and split the player's feeling into »Here I am, a galactic emperor, controlling the power of my empire« and »Here I have to monitor my every ship, tell it where to go, at what angle to turn, how far to go, how many times to shoot etc.«

There's not much we can do for the people who still aren't fond of tactical battles, but we believe the change we made was for the best, and adds another layer of action and pacing to the game. Tactical battles allow players to regulate speed, allowing them to pause the game, and that was the best solution for making combat as smooth as possible. It made it possible for us to reach a balance between how battles look, how they are controlled and the epic perception of a battle.

Victory at any Cost

So Master of Orion is one of the most important games in the history of strategy games. It

Alex Zezulin
is Senior R&D Manager
at Wargaming.

Alex Zezulin works at Wargaming's headquarters in Cyprus, in the Research and Development Department. Here, the team comes up with new games for Wargaming and helps to improve existing products and services. Alex is directly responsible for providing leadership for a group of creative minds and visionaries, who generate crazy ideas for games, test if they are interesting and up-to-date, using a variety of scientific methods, and submit them as formal documents to take their project off the ground. In Master of Orion, Alex performed several duties. At the beginning of the project, he was in charge of communication between the NGD team in Argentina and Wargaming visionaries, and personally with Viktor Kislyi, who actively participated in the design of the game. Later, Alex was involved in guiding the project regarding game design, and helped verify/greenlight the stages of development.

Leandro Sena
is Lead Game Designer
at NGD Studios.

Leandro started his career in the games industry at NGD Studios in 2008, where he was picked from within Champions of Regnum's community to lead the QA team. Thanks to his deep understanding of the game's systems, he quickly became a game designer and later the producer of the aforementioned MMORPG. Master of Orion became his first project as a Lead Designer, where he led a talented group of designers in order to reimaging and bring new life into one of the most iconic strategy games in history.

Andrés Anezin
is Art Director
at NGD Studios.

In his 10 years in the games industry, Andrés led the art vision of several videogames, trained staff and helped developing updated pipelines to achieve better quality standards. At the production of Master of Orion, he was responsible for the re-imagined art, produced key art for the different parts of the game from characters and cinematics to interfaces and ensured the quality and the vision of the final product working alongside the areas of game design and programming.
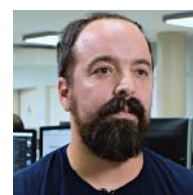
Jerónimo Saez
is Lead UX Designer
at NGD Studios.

Jerónimo is a professional graphic designer, who's been working on User Interfaces for AAA games for the last 8 years. He worked on big franchises such as »FIFA«, »Need for Speed« and »Command & Conquer«. He is now responsible for the User Interface and Experience of the legend Master Of Orion, bringing this beloved game's UI to the current standards and modern gamer needs.
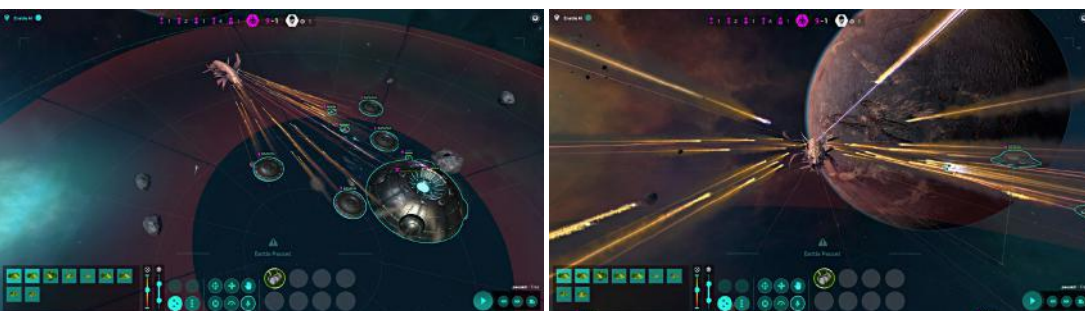
The galaxy in Master of Orion is in some way realistic, generated by specific tools. In addition, the team used reference pictures from NASA, from the Hubble telescope and from illustrations.

established the basis of all the 4X games that proceeded it. For us, making Master of Orion is the opportunity of a lifetime. The game has different victory conditions:

- You can win the game by excellence, being the best race in the galaxy.
- You can have the best technology.
- You can beat your enemies in terms of your economy.
- You can crush them with your armada.

These diverse conditions let the player experience the game in many different ways, so there's a great deal of replay value. There are very different strategies that players can come up with to dominate the galaxy.

These conditions had to be tied in with one thing, though: simplicity. One of the things we wanted to achieve with Master of Orion was to keep the game simple. This implies, you're able to win it in an accessible way. And that was something its predecessors did in a very interesting way. There was a diplomatic victory, which was the pacifist way to win the game, and there was a conquest victory, which was the warlike way to win the game.

We believe that, although those two victory conditions can be enough and are very interesting, there are other resources involved in the game, other currencies involved in the game, which also generate a new way of playing. We wanted to give the players more ways to express themselves in-game, distinctive methods, in which they can achieve a victory condition. This is something like a victory that is related to their resources, such as a technological victory. There is also an economic victory, which is related to the quantity of credits that a civilization can produce, which is, in turn, related to the moral of that empire.

And of course, we created another type of victory, which is the excellence victory. This is a victory that happens when the games are time-limited. When this limit is achieved, the player requires the best score between all other victory conditions.

Galaxy Generator

The galaxy of Master of Orion is, in some way, realistic. However, in the context of the game, realism must be put aside in order to give a great experience to the player. So, we proposed

A lot of the animators in the team have experience working on movies and CGI, which helped a lot, e.g. for the battles in the game (the screenshots show a battle scene very much zoomed in).

a Galaxy Generator that will provide us with tools to generate multiple galaxies in several ways, all of them being possible within the realm of Science Fiction.

The action in Master of Orion occurs in a whole galaxy. There are lots of stars, planets and places to explore, and it has to make sense. We created the galaxy based on a shape blueprint, and then spread as many stars as we could over that shape, populating it with variety. This »galactic seed« is our randomizer, and there are a lot of rules interacting with each other that make the system very complex. The player can play in a big galaxy, a small galaxy, one that is made just for two players, and one that is made for eight. These are generated in a variety of shapes and sizes. The spiral galaxy is split into different arms, and each arm is like a continent, with a vast »star ocean« separating it. And you can't cross this ocean until a specific technology has been researched. The players have their own space to work until they reach a certain point, then they all clash together in the center. The circular galaxy is completely interconnected, there is no barrier between the players, but it covers the same space, making for a faster, more explosive type of game.

In Master of Orion, a player can find, from the beginning of the game, multiple options to configure the galaxy and shape their own experience. From the size of the galaxy to the form to the number of players they are going to compete with – even the age of the galaxy – which will change the planet composition on each star.

The galaxy's age completely changes the galaxy's makeup. That's because the age of the galaxy defines the quantity of planets and which types of resources they hold. So choosing a young galaxy is going to generate very hot stars, which will probably have a high mineral composition but that will be less likely to generate planets that are good for supporting life.

The first »X«

The player can find what everyone expects to find in space: planets, asteroids and all the other obvious things in any game of this genre. In Master of Orion, however, you can discover the stranger side of the galaxy and Sci-Fi – just like the original. Space monsters, other alien races – these independent civilizations are planets that chose not to become starfarers because they don't have the technology or because their leaders didn't want to. And these planets are an interesting part of the economy, and in the title's development both in the middle and in the end game.

The player starts in one star system and doesn't know the map of the galaxy, and each star is interconnected
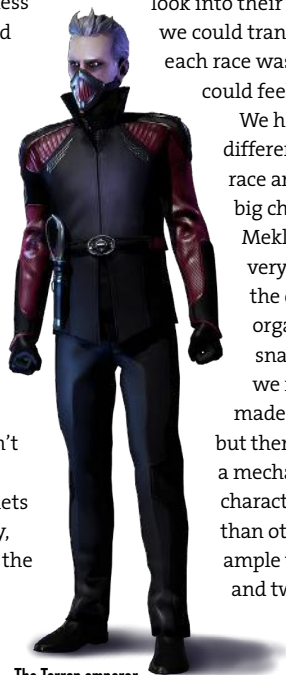
The Terran emperor.

to each other by Star Lanes. Star Lanes are good for adding world control. It's a place you can defend, it's a place you know the other players have to go through to get to your planets. You can build defenses on them to defend the whole star system instead of just one of the planets in it. Or create a barrier to prevent another civilization from getting across a certain region of the galaxy.

The Star Lanes bring something very interesting to the game from a strategic point of view. For example, the territorial control and the possibility of generating choke points in shipping lanes, meeting points where conflict is more frequent.

It gives the player a clearer idea of imperial growth, but mainly, at a gameplay level, it gives us the chance to have a kind of »terrain« in a place where terrain does not exist. Territoriality in these games is very important, it gives a feeling of, not only progress, but of ownership.

Diplomatic Relations

We had to create a whole animation team from scratch. Luckily, there's a big animation community in the country (Argentina) and people have a lot of experience working on movies and CGI. This meant, we could build a great animation team, which shows in the quality of our work, like the diplomacy scenes.

The diplomacy in Master of Orion is one of the best and most important things in the game, so we wanted to sell the idea that the character is alive. We have different stances for each character, so you know visually if he's hostile, friendly, cautious; we always thought that was better than having just a slider in the UI tell you that.

The decision to turn diplomacy into a more important part of the game, presented us with a challenge of not only designing the emperors, but also their surroundings. That made us look into their culture, their architecture, so we could transmit the experience of what each race was like to the player, so they could feel a part of it.

We had ten different races. We had different characters for the same race and, for instance, that was a big challenge with the Meklar. The Meklar had a voice that sounded very much like a tiny robot, but the character design was really organic. You have this feel of a snake, a mechanical snake. What we needed was balance. We made the movements serpentine, but then added a few more layers of a mechanical movement, too. Some character designs were more difficult than others. When you have, for example the Klackon, you have six feet and two hands to work with.

For the game's development, we brainstormed a huge

Every race in the game has a specific look as well as certain stances so that the player can easily differentiate them and their current attitude towards the player.

variety of styles. We began creating concepts from a cartoonish style, very much like updating the original game, up to more realistic aesthetics. We kept picking the best of each world in those styles to obtain what we thought would be best for the project, what the fans wanted to see from us. It was transmitting that feeling of them playing Master of Orion for the first time, but with it being a completely up-to-date game, a game of this time – a AAA game.

Each race in Master of Orion has different attributes, or perks, as we call them. When you're playing the Meklar, for example, you have all these production boosts. Those allow you to produce faster, so you can grow your armada and your colonies quicker. Other races like the Psilon always have a technological advantage, because they research faster, but there's also the challenge of being an aggressive Psilon, or trying to pursue different victory conditions with the different races and different traits. To add to this, you can create your own custom race to tailor your experience and set your own goals.

Finding a style for each race in Master of Orion consisted of taking each race in the game and highlighting the most important characteristics of each race. We faced the challenge of making each race unique, but at the same time they had to be consistent. One had to be able to differentiate them by color and shape, be it their characters or their ships.

In the case of the Darlok, they were one of the races that underwent the biggest changes. Their design was quite difficult to update. It was very much based on the designs of the 1980s and we believed, with them being such a technological race, we had to transmit how we see technology nowadays.

Terran

The Terran was a unique race designed exclusively for the Master of Orion: Collector's Edition, which allowed the team to bring their own spin on the human race. The brutal Terran is a distorted and disturbed reflection of a society, which has been drenched in blood and soaked in war. Where they may have once had roots in Humanity's history, the link has been irrevocably severed and replaced by hatred. The Terrans look out across the galaxy and see dangerous lawlessness, a vice which will ruin the universe beyond repair – unless the Terrans can bring the rest of the galaxy to heel.

The Terrans are ruled over by a Khan who must wrest control of the khanate through bloody coups and revolutions. They seek to assert the unrelenting power and control over the deviants, which inhabit the galaxy at any cost. Those, who oppose the rule of the Khan must either meet the Terrans on the battleground for their independence, or perish in the wake of the Terrans' path to domination.

Alkari

The noble Alkari are natural leaders and aviators, who seek to strike fear into the hearts of

their enemies when their ships cross the sky. They are a race of gifted combat specialists and born avian pilots, who bring glory to their people through rich military traditions, a devout spiritual faith, and an unshakable code of honor in war. Centuries have tempered their affinity for aggression into hyper-focused military procedures, making them a deadly threat to those, who stand in the way of their ambitious goals.

The Alkari Flock worships their gods without question, trusting the morals of the pantheon to guide them to greatness. Likewise, they place their faith in their leader, the Skylord. The power structure of the Alkari values honor, respect, and trust. To this day, the Alkari are a dictatorship-style government, who call themselves the Flock, ruled over by their highly respected Skylord.

Bulrathi

The Bulrathi are unmatched in brawn and brute force, unafraid to unleash their impressive arsenal to attack their enemies. They follow their conscience into war and will not compromise their uniquely moral core, when faced with challenges on the battlefield. The Bulrathi are peerless in hand-to-hand and ground combat, as their naturally impressive statures lend well to the lifestyle of foot soldiers. They defy expectations others place upon them, for they rely on raw strength but also care deeply about the integrity of their planets and consider themselves defenders of the defenseless.

The Bulrathi Emperor is both noble protector and ruthless destroyer, a contradiction which is familiar to the Bulrathi. He leads the Empire with an iron fist and a tight grip, a dictatorship built on the respect of brute force and military experience. The aggressions of the Bulrathi are balanced by their passionate belief in preserving planets, a belief stemming from the near destruction (and last minute salvation) of their home world. They forge a path forward, at best, protectors of the defenseless and at worst, radical agents of planetary protection.

Darlok

Shrouded in mystery and myth, the Darlok race emerges from the shadows to extend their insidious control over the galaxy. Infamous shape-shifters, the Darlok rely on their exceptional spy networks to give them a diplomatic, economic, and military advantage over their unsuspecting neighbors in the universe. They are hell-bent on stealing, sabotaging, and manipulating their way into power for the main reason that they simply do not trust anyone else.

The Hindmost of the Darlok Cabal rules from the shadows and outskirts of society. The Darlok heavily rely on espionage efforts in order to confidently make their way through a galaxy which despises and fears them. They are paranoid, xenophobic, and skittish, often turning the whispered rumors of their madness into reality when under pressure. The Cabal hoards their secrets and stolen assets, waiting for the

The Alkari today and back in Master of Orion 2.

The Bulrathi today and back in Master of Orion 2.

The Darlok today and back in Master of Orion 2.

The Human today and back in Master of Orion 2.

right time to strike out at the galaxy, which has pushed them repeatedly to fringes of space.

Human

Charismatic and likable, the Human race has overcome ages of internal divisions in order to present a unified and smiling face to the rest of the galaxy. While Humanity enjoys friendly relations with the other races of the galaxy, the Humans make bitter enemies when crossed. They pride themselves on their diplomacy and honor, yet keep one hand coolly on their weapons. Humans are emotional beings, who are willing to fight to the death for what they believe in.

Humanity has come far from the days, when they were fighting for scraps on the damaged shell of Sol. Ravaged by war and ecological disasters, there was once a time when Humanity looked as if it would perish before they broke free of their star system. Yet, Humanity rose to the challenge under their new democracy and President, coming together to save themselves in the final seconds of opportunity. Their planet has healed, their weapons have advanced, and now the Humans have set their eyes on the skies for expansion.

Klackon

Virtually free of all rebellion and resistance to social order, the Klackon live in perfect harmony. Born knowing their societal roles, they work for the good of the community rather than serving personal or individual interests. The Hive is the only identity the Klackon need. The concerns of inferior races are insignificant to the Klackon race, as they lack the ability to empathize with the plight of those, who do not assimilate to their way of life.

The Klackon Queen is a representative of the race on the galactic stage, but her will is that of the Hive's. The Klackon are bound by duty, tradition, and evolution. Each Klackon knows that they are but a small cog in the larger machine, ready and willing to die for the Hive at any moment. The primary intergalactic agenda of the Hive is to protect their own at any cost. The Queen herself is just a pawn of the Klackon evolutionary drive to take care of their own by expanding into new territories.

Meklar

The Meklar are hyper-logical machines, which are all agents of a single cybernetic entity and consciousness. The centralized Meklar consciousness offers a level of mechanical efficiency unparalleled in the universe, which is able to quickly prioritize pursuits that are beneficial to the Combine. The Meklar are built and plugged in immediately, operational at full capacity from the first moment that power flows through them. They lack sympathy or true understanding for organic lifeforms, and see them as inferior beings incapable of learning.

As inorganic computers, the Meklar agenda is unclear to most of the galaxy. Led by the ancient Overseer, the Meklar Combine is logical to the point of coldness in their deal-ings with the other races of the galaxy. They remain a mysterious entity in the intergalactic community, responding to all communication with terse and technical responses. For now, they seem content to pursue objectives, which function to advance their own knowledge of the universe and physical capabilities.

Mrrshan

The Mrrshan are the elegant, rebellious, and independent descendants of legendary hunters. Their culture is so beautiful, it is almost intoxicating, with art, architecture, and personal style that makes them iconic in the landscape of the galaxy. To be deceived by their beauty would be a foolish mistake, as they remain some of the greatest gunners and warriors in modern combat. The Mrrshan are confident to the point of vanity, quick to pull the trigger and strike first at the slightest threat.

While the Mrrshan Pride is a feudal government ruled by an Empress, they are anything but oppressive in their ruling party and leadership. The Empress herself leads the people into battle during times of war, just as she guides the members of her Royal Court in times of peace. The Mrrshan find themselves inspired by the beauty of the galaxy and the unlimited freedom of space travel. Too adventurous to be kept contained, they take flight to find some stretch of freedom that feels like home.

Psilon

Reclusive geniuses with slight stature and timid mannerisms, the Psilon are brilliant researches, who devote their lives to science. They prefer peace, as the concept of war terrifies them, but will confidently stride into battle, once their technology has given them an undeniable upper hand. Haunted by the paranoid fear that others are trying to steal their scientific breakthroughs, they retreat into their controlled regions of space and quietly build up their arsenals.

The Psilon Quanta, ruled by the Controller, are largely non-confrontational and rarely contest the authority of their leader. They lack internal conflict and devote the entirety of their life to their research, often collapsing from forgetting to eat or sleep. They Psilon would be content to stay on their planets uninterrupted to research the universe's secrets. As the other races creep into the Psilon's peripheral vision, the Quanta must prepare themselves to focus on issues larger than their own scientific work, if they want to survive.

Sakkra

The Sakkra are savage warriors, who are compelled by their biological desires to dominate all potential threats and to conquer new lands to support their booming population. Sakkra populations are violent and constantly expanding to the seams of whichever planet they are controlling, forcing their hand in adopting
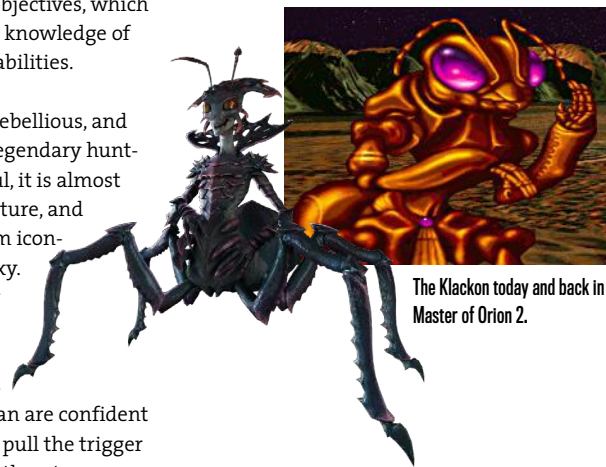
The Klackon today and back in Master of Orion 2.

The Meklar today and back in Master of Orion 2.

The Mrrshan today and back in Master of Orion 2.

The Psilon today and back in Master of Orion 2.

expansionist philosophies for their empire. They are a physically imposing race, who can only survive within their own society by showing great strength, cleverness, and bravery.

The Sakkra Brood is a constantly shifting sea of various tribes, but above them all reigns the Hierarch. As the Brood expands past the limitations of the home world, their lawless and brutal ways spill out into the galaxy. Internal warfare culls their still impressive population growth rate and teaches them the ways of combat in an intimate manner that few militaries can imitate. The Hierarch must guide this brawling Brood into the galaxy and focus their energies into expanding their empire, rather than tearing themselves apart.

Silicoid

The mysterious Silicoid are an inorganic race of mineral-based lifeforms, devoid of emotion, sentimentality, or feeling. They make the other races of the galaxy uneasy with their ambitions of planetary conquest in order to feed their hunger for minerals and pollution. Removed

The Sakkra today and back in Master of Orion 2.

from the biological limitations and needs, which slow the other races, the Silicoid creep along the edges of space, hungry for the rich mineral crusts of new horizons to satisfy them.

Born from a single sacred mineral basin, the rock structures grown in this specific location gain the spark of life needed to bring their inorganic bodies to a state of awareness and consciousness. The Silicoid are born of minerals and are driven by a single need: to consume the minerals of planets. They strip the planets they conquer of their nutrients without regard for other life. Their obsession is the only recognizable motivation on the intergalactic stage, making them a danger to most organic life in the universe.

Building a Universe

Building the universe of Master of Orion was an extremely fun task. We didn't want the game to look like a board game; we wanted to give the player an immersive experience, and that's why we used reference pictures from NASA, from the

Graphical Evolution of Master of Orion

Race Selection	Galaxy Map	Research Screen	Diplomacy Screen

Master of Orion

Master of Orion 2

Master of Orion 3

Master of Orion (2016)

Hubble telescope, from illustrations. We really wanted to make the players feel like they are inside a universe full of color, where there are millions of things to discover. We want them to find something unique every time they arrive on a planet, to create a fun experience.

User Interface Experience

The challenge for us was to make sure that all the tools for the hardcore players were there to use, without overwhelming the new users that are coming to play our game. It's pretty hard to find the balance between the hardcore player and the casual player, because the hardcore player needs a lot of information, and those usually don't fit the actual space on the screen. We were also trying to reduce the spreadsheet syndrome that the other games had, so we even ended up including more information than the old games.

The Colony screen was the hardest to design for. We had a lot of back and forth with it, trying things out, trying to make it feel good

and trying to make it work as expected, while trying to stay true to the style and tone of Master of Orion.

However, some of our first efforts with sliders were kind of fun, but not usable. It was not clear for the user what they were supposed to be doing. After that we tried to introduce another method: the little »race avatars« that convey your resources and what each unit is developing. We put up a grid that represented the planet's surface, and each grid could have either production or food or both, but that ended up being too complex and not very clear, and was not easy to use either. Finally, we ended up with a »Master of Orion 2«-style of UI, with three sliders for food, production and research. That ended up being our best and most simple solution.

Andres Anezin, Andres Chilkowski, Javier Otaegui, Jeronimo Saez, Leandro Sena, Alex Zezulin

The Silicoid today and back in Master of Orion 2.
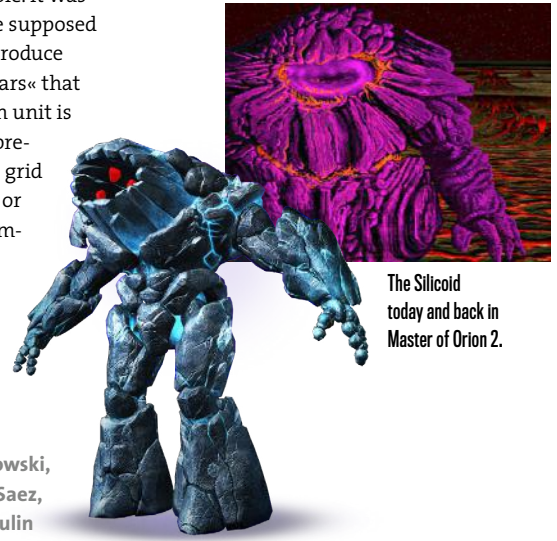
The game not only evolved in terms of gameplay, but of course in terms of visuals, too. Here you can see, how the looks of different aspects changed from Master of Orion to Master of Orion 2 up to Wargaming's Master of Orion.

Combat   **Colony Screen**   **Shipyard Screen**   **GNN/Events Screen**

THE HISTORY OF
MASTER OF ORION

The story of how Master of Orion first arrived at MicroProse and how its journey would define 4X gaming for years.

Jeff Johannigman
was Producer for the original Master of Orion and is Advisor at NGD Studios.

Jeff started his career at college in 1982, where he wrote a game called »Rabbotz!« on his 16K Atari 800. His career later took him to Electronic Arts, Epyx, and Origin Systems, moving from Programmer and Designer to Producer. Later he joined Microprose as Producer.
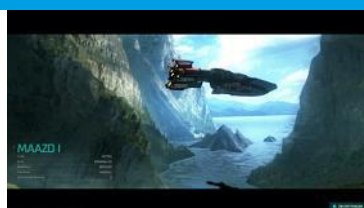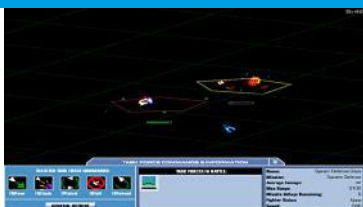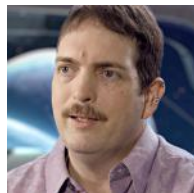
Jeff Dee
was Lead Artist for the original Master of Orion and is Advisor at NGD Studios.

Before joiningMicroProse for Master of Orion, Jeff had been the Art Director on »Ultima VII« from Origin Systems/Electronic Arts.

David Govett
was Composer for the original Master of Orion and is Advisor at NGD Studios.

The original Composer for Master of Orion, David also worked on »Wing Commander 1 & 2« and »Ultima Underworld«.

One day, around 24 years ago, an unsolicited submission from an unknown author arrived at the MicroProse offices. Though no one knew it yet, this game, once called »Star Lords«, would later be known as »Master or Orion«, a title that laid the blueprint of eXpand, eXplore, eXploit, and eXterminate: 4X gameplay.

Star Lords was initially being developed by Simtex, a game development studio created by Steve Barcia. Incidentally, Star Lords was also the name for another, earlier strategy game, which was eventually named »Lords of the Black Sun«. When Simtex approached MicroProse, two other major publishers were already competing for the rights to publish the game. It was up to Jeff Johannigman, who was a producer at MicroProse and in charge of external development, to convince Simtex that they were the right publisher for the project.

Starting out on a Small Budget

Jeff started his career at college in 1982, where he wrote a game called »Rabbotz!« on his 16K Atari 800. The game caught the attention of Atari, who later published it, launching his career as a game creator. After graduation, Jeff began working as a full-time game programmer for Broderbund Software.

His career later took him to Electronic Arts, Epyx, and Origin Systems, moving from programmer and designer to producer. During this time, Jeff refined his strategy chops on titles such as »Demon Stalkers«, »Worlds of Ultima: The Savage Empire«, »Ultima: Runes of Virtue«, »The Ancient Art of War in the Skies«, and »This Means War«.

With the game under the MicroProse banner, Jeff took the reins of Master of Orion. Testing, marketing, sales, PR, and contract additional development talent all fell to Jeff, who now worked on behalf of Simtex. However, despite shooting for the stars with Master of Orion, the project budget brought the team back to earth. Close to bankruptcy at the time, MicroProse had just 50,000 Dollars to fund the game – a paltry amount when compared to the multimillion budgets of today's AAA titles. To really make the whole process as stressful as possible, the team had only four months to completely redo all the art and game audio, as well as redesign the interface.

While refining on Master of Orion, Jeff kept his mind on three principles from his days working at EA: great games need to be »simple, hot, and deep«. Simple: easy to dive into and have fun within just a few minutes. Hot: dramatic, exciting, and unpredictable. Deep: enough challenge, depth, and complexity to make the game replayable for a long time.

Another piece of advice that shaped Jeff's role was from game design legend Dan Bunten, who told him, »What makes a game great is not what you put in. It's what you keep out.« Many strategy games, especially 4X-style games, can be overly complex, whereas Master of Orion was meticulous in not adding unnecessary complexity, but keeping in just enough to make the game fun and challenging.

> »We had to convince Simtex that our MicroProse players were the audience to target, and that we'd promote it as Civilization in Space. Once that got our players' attention, the rest was history.«
>
> Jeff Johannigman,
> Producer of Master of Orion.

Some screenshots from Master of Orion 2 showing the galaxy map, colonies as well as the new game screen.

Defining the Art of Master of Orion

While Master of Orion had solid gameplay, the graphics, sound, and interface were primitive. As soon as the ink was dry on the contract, Jeff reached out to one of the most talented artists he knew, Jeff Dee. Dee had previously worked with Jeff at Origin Systems, and came along to take charge of the game's graphic design. He'd worked as Art Director on »Ultima VII« from Origin Systems/Electronic Arts, and left there to do artwork as a contractor on »Ultima Underworlds«. He also worked as an artist on »Blake Stone« from Apogee, »Master of Magic« from MicroProse, and »1830« from Avalon Hill, bringing the right kind of flavor to the project.

Master of Orion's art direction drew on popular Sci-Fi films and TV series. Particularly, »hard Sci-Fi« because of the game's somewhat serious tone. A strong comic book influence also shaped its alien characters, which was a combination of the comic background that Dee and Bill Willingham (a colleague of Dee's) brought to the table. Apart from a 3D sequence in the opening credits (crude by today's standards, but pretty advanced for its time), all of the original Master of Orion graphics were done by hand using a mouse and EA's »Deluxe Paint« software. That was both time consuming and restrictive; the ships in original Master of Orion's space combat did not animate or rotate, and there is only one camera view. That was about all that was possible in those days with simple sprite-type graphics.

As a science fiction fan, but also a game artist, Dee wanted to preserve the recognizable, anthropomorphic archetypes we associate with earthly creatures, while also making characters a little more scientifically plausible. On the visual design there were basic concepts in place; Steve Barcia had a catoid race, a beariod race, and the mechanical race in mind, and he had names of them and things that were already set. What was lacking, was more thought being put into exactly how that would play

> ### »A definite Game of the Year candidate as well as Exhibit A in many divorce cases.«
> Alan Emrich,
> Editor for Computer Gaming World on Master of Orion.

out. Dee talked with Bill Willingham, agreeing that they did not just want »it's a cat, but it's upright like a person«.

In reworking the graphics, the greatest impact he had was in the look of the alien races. The main inspiration for the approach taken with the Mrrshan was the Kzinti from Larry Niven's novel »Ringworld«. The Kzinti are clearly cat-like, with all that implies, but not Earth-cats by any means. So, the team tweaked the look of the aliens to give them a Sci-Fi spin; unusual eyes, strangely jointed limbs, weird ears – anything to make it clear they fit animal archetypes, while also conveying these were alien creatures and not Earth animals, who evolved into people.

The ships that Dee designed for Master of Orion were there for the purpose of allowing players to do their customization. Each ship had its own types of engines and weapons and armor, and more. And they came in different standard sizes, so Dee's job was to come up with several overall styles of ships and then fill out the ships within a general style. There are ships that are spheres with engines attached them and there are ships that are more wedge-shaped.

What may seem a little strange is that the original drawings of the alien races were done with pen and ink on paper, and then had to be »faxed« to Dee's computer over the phone lines in order to get them into the game. The team even »borrowed« an unused cover painting from one of the »MegaTraveller« games to use as the cover for Master of Orion.

Setting the Tone

With the Art Team in place, Jeff reached out to David Govett and Team Fat to score the game. Govett was, at the time, composing for Team Fat with George Sanger (The Fatman), Joe McDermott and Kevin Phelan. So, Govett moved his equipment into the Simtex office to work on location, which made collaboration extremely easy and allowed everyone to really

Jeff Johannigman

While working at MicroProse, Jeff became the producer for Master of Orion after they secured the option to publish the game.

What's your race of choice?

Jeff Johannigman I love the Sakkra. That's partially, because they were named after another reptilian race from another game I was the producer on, »Worlds of Ultima: The Savage Empire«. But mostly because they are just big, dumb, lovable brutes.

What's your total hours spent playing Master of Orion?

Jeff Johannigman I lost count of how many hours I spent playing the original Master of Orion twenty years ago, but I can say I have spent over 200 hours playtesting this one (not counting the pre-Steam builds). The original Master of Orion was one of the only games that I could still enjoy playing after it was shipped. This version is shaping up in the same way.

What's your greatest achievement in the game?

Jeff Johannigman My greatest achievement in this game is winning with a diplomatic victory, persuading enough other races to vote me in as head of the Council. While I love the combat of Master of Orion, I appreciate that we also have more peaceful paths to victory.

The characters of Master of Orion where inspired by a lot of Sci-Fi movies and TV shows and should be easily reference-able to real-life creatures, like the Mrrshan to cats.

The packshots of Master of Orion, Master of Orion 2 and Master of Orion 3.

Jeff Dee

Before joining Master of Orion, Jeff had been the Art Director on »Ultima VII« from Origin Systems/Electronic Arts.

What's your race of choice?
Jeff Dee I prefer the Psilon. The research and exploration parts of the game interest me the most, and with the Psilon research advantage I find that I'm usually well capable of defending myself from the other races should the need arise.

What's your total hours spent playing Master of Orion?
Jeff Dee Including hours spent on the original game, which I worked on back in 1993? Many hundreds of hours.

get involved in shaping Master of Orion. Govett specialized in a cinematic style, which was perfect for Master of Orion. With the limited budget, the plan was to take the primitive technology of the time, like FM and wavetable synthesis sound cards, and create something epic. This stripped down sound goal leant itself to more familiar and commercial scores, and Govett paid homage to classics like »Star Trek« and »Stars Wars«.

The goal of Master of Orion's music was to be as melodic and stirring as possible. While today's game scores are on par with film and TV, if a person attempted it back then, it simply became white noise. The key to great sound design was to keep the score moving.

In the original game, Govett was creating MIDI-files, which would eventually stream whatever the user had for their synthesis. If they had FM-wavetable synthesis – fantastic – but most people simply had FM synthesis, so it sounded like, as Govett called it, »farts and squeaks«" the majority of the time, and it was his job to make that as cinematic as possible.

Feedback for the finishing Game Design Touches

Alan Emrich was another piece to Master of Orion's puzzle. A journalist for Computer Gaming World magazine, Emrich was visiting the MicroProse office at the time, when Jeff grabbed him and excitedly promised him that they had just signed »Civilization in space«. Though skeptical at first, once Emrich had a chance to log some playtime with the game, he became Master of Orion's biggest advocate. It was his glowing reviews that gave the game a real boost to get noticed at the time.

Through playing the game, Emrich learned about Simtex' Steve Barcia (programmer and the company founder), and Simtex itself. As an outside observer, he saw the hands-off approach that MicroProse took with the title, allowing Barcia and his team to drive the project.

With a copy of Star Lords, Emrich then sent out the game to his friend and designer Tom Hughes. The two put the game through its paces and had a ton of suggestions. At first, Jeff acted as the middleman in the process, but he soon got tired of it all and just let Emrich and Hughes speak with Barcia directly.

During this time, Master of Orion was shaping its theme and focus.

Hughes helped Barcia in automating the colony slider bars with some AI to streamline the often harsh micromanagement aspect of what was Star Lords. This allowed the player to spend less time on each colony, and the AI would then reassign resources automatically logically. A seemingly small feature, it went a long way to make Master of Orion the experience it was.

Another important aspect that Hughes contributed to was ship design. In the original iterations, a ship only had three weapon slots and two special slots for its systems. The feature seemed pretty limiting so the slots were eventually increased and made universal. Now a weapon or special could potentially go in any slot. However, while this was impossible to do at the game's current stage, Barcia was able to increase the slots available for ship systems to four weapon slots and three special slots, allowing a rich variety of ship designs.

Successful Release creating a Legend

Eventually, with design, art and sound ticking over, it was time to seriously think about changing the game's development name. Part of this is a trademark search to ensure the game name is not too similar to anything else on the market or that a name is not in use by another company.

There was, at the time, a very obscure comic which had already trademarked the name »Star-Lord«. »Guardians of the Galaxy« was its name. Back to the drawing board, then, which spawned several alternates. The team finally landed on Master of Orion, which was a fitting title clear of any other trademarks. Because of this name, Simtex added Orion, an ancient planet with powerful artifacts, to the game itself.

Then it came time to release Master of Orion into the galaxy. In his 1993 preview for Computer Gaming World, Emrich would go on to call it »the best that galactic conquest can offer«, in the process coining the type of gameplay as 4X: eXplore, eXpand, eXploit, eXterminate. Master of Orion was quickly considered the standard by which turn-based strategy games were measured.

The game was named Computer Gaming World's 33rd best game of all time, as well as

making it into GameSpy's Hall of Fame and GameSpot's list of greatest games of all time. Then, in 1996 Master of Orion 2: Battle at Antares was released.

Master of Orion 2: Battle at Antares

Steve Barcia and Ken Burd of Simtex returned for the development of Master of Orion 2: Battle at Antares (originally called Master of Antares). MicroProse still acted as publisher, and partnered with MacSoft to bring the game to the Mac. While Barcia was not as entrenched as before – having been promoted to VP of Product Development at Spectrum, he still oversaw the project and design. Burd stepped in to code, along with his team at Simtex.

Much like the reimagining of Master of Orion, community feedback helped shape the project. Players wanted more automation and detail. As part of this, Barcia went for a »layered« design concept, letting players focus on what they choose. While this was not fully realized in the game, it did lay the groundwork for Master of Orion 3. In its release year, Master of Orion 2 took home the Origins Awards for Best Fantasy or Science Fiction Computer Game of 1996, as well as being well-received by critics.

With the (slight) upgrade in technology, at least by today's standards, Master of Orion 2 breathed a lot more life into its space opera. The graphics and overall presentation of the second game was a large upgrade. Diplomatic encounters were richer than ever before. Races projected a real sense of individuality, monsters guarded planets, and the powerful Antarans were just waiting to take the player down a peg or two. The diverse cast of races also put more emphasis on different species affecting play style. You could unlock new gadgets, build new toys, and there was even the introduction of multiplayer.

Master of Orion 3

It would be a while until the third installment of Master of Orion came to fruition. It was a pretty disruptive time at MicroProse. In 1998, after trying and failing to buy GT Interactive Software, the studio became a subsidiary of Hasbro Interactive. Then, the following year, its development studios in Alameda, California and Chapel Hill, North Carolina, were closed. A little later, in 2001, MicroProse closed, and Hasbro sold the company's IPs to Infogrames Entertainment.

So, Master of Orion seemed over with. However, Michael Mancuso, who was a producer for Hasbro's west coast offices spoke with Quicksilver Software's President, Bill Fisher, at E3 1999. The two of them hit off, finding their ideals of what makes a game great aligned. At the time, Hasbro was looking for developers, which eventually led them to Quicksilver Software.

One of the biggest changes in Master of Orion 3 was that space combat went real-time. Previously, Hasbro execs had evaluated whether the product would even go ahead, and said that space combat must be turn-based. However, after speaking with Tom Hughes and another designer, Floyd Grubb, they changed their minds. At the time, Hasbro wanted Master of Orion 3 to be nearly massively multiplayer, which, around 2000, was a big deal. Computers back then couldn't really handle those kinds of requirements, so space combat had to be limited or made real-time.

Unfortunately, Master of Orion 3 had a lot of design ideas that never saw the light of day, and the game never became the breakout hit that the two previous titles had become. But there was light at the end of the star lane. In 2013, the Master of Orion IP was snatched up by Wargaming.

With its new lease on life, Wargaming assembled a crew to work on Master of Orion, with the input from members of the original team, like Jeff, Dee, Emrich and others, while teaming up with NGD Studios to bring the legend back to life. Very soon, everyone will be able to head out and conquer the stars.

David Govett, Jeff Dee, Jeff Johannigman

> »I often worked late at night and remember listening to fuzzy AM radio while taking a nap on the floor.«
> David Govett,
> Composer for Master of Orion

David Govett

While working at MicroProse, Jeff became the producer for Master of Orion after they secured the option to publish the game.

What's your race of choice?

David Govett I like the Humans (being human and all) and the new evil human race (Terran Khanate). They were some of the most enjoyable to compose themes for, too.

What's your total hours spent playing Master of Orion?

David Govett Haven't kept up. Honestly, I'm not the best Master of Orion player so most of what I'm doing is playing quick and dirty games and randomly punching buttons to see how the music is being implemented. (And sometimes that results in a well-played game. Total 100th monkey thing going.). I've also watched many hours of gameplay videos by expert players as well to learn my way around and see how the sound is working.

What's your greatest achievement in the game?

David Govett Having a successful game without even trying.
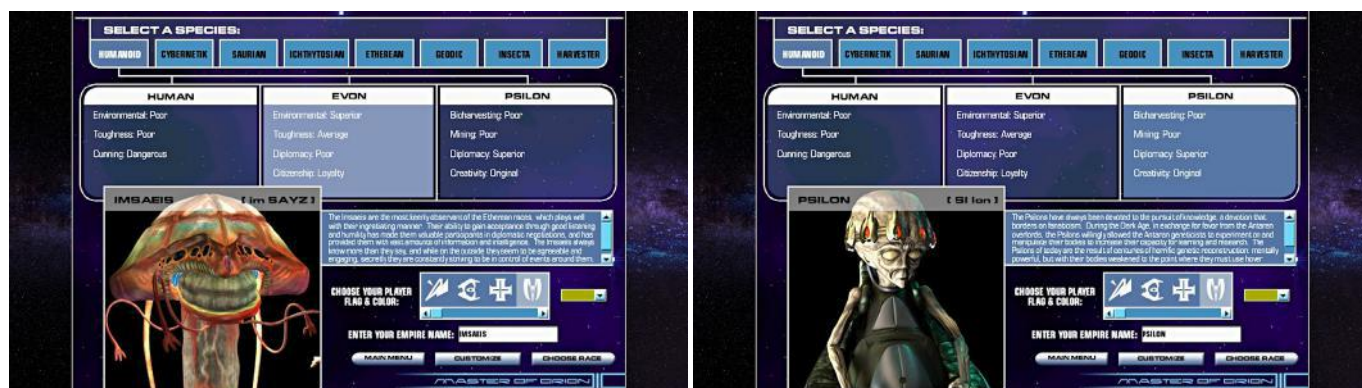
Screenshots from the race selection screen in Master of Orion 3.

FROM SMALL BEGINNINGS
THE NGD STUDIOS STORY

It's been an exciting journey for NGD Studios, and Master of Orion marks the perfect opportunity to reflect on the studio's history and accomplishments.

Andres Chilkowski
is Co-Founder and CEO
of NGD Studios.

Andres Chilkowski is the co-founder and CEO of NGD Studios, with over 18 years of experience in the video game industry. He worked on over 30 published games across a range of PC and mobile platforms, all of which were developed in Argentina. As passionate gamer and huge fan of Master of Orion, he campaigned for the opportunity to help reimagine the game, which saw NGD Studios partner with Wargaming.

Regnum Online was one of the first projects of NGD Studios – an ambitious game for a small developer as it was a full scale MMORPG.

Making Games When was the studio established? How has it grown over the years?
Andres Chilkowski NGD was founded in 2002 with an idea that most thought impossible: to build the first MMORPG made in Latin America. In 2007, after almost 5 years of development, we released Regnum Online (now known as Champions of Regnum). Making Regnum was an amazing feat, as we had to build our own engine and our own MMO server technology with a team of ten developers.
Making Games What noteworthy projects have you released?
Andres Chilkowski Regnum became very popular in Latin America, but was also localized in five languages. It reached a big audience in Germany, as it is a very player driven and PVP focused MMORPG. We also released »Bunch of Heroes«, and »Finn and

Jake's Epic Quest« on Steam, the former was a self-published top-down shooter with over the top action and humor while the latter was an action-adventure title based on Cartoon Network's fantastic IP, »Adventure Time«.
In 2013, we started working on our next MMO, which was a top-down action based MOBA in a heavy metal inspired Sci-Fi setting. That project and our ambitious track record are, what I believe caught Wargaming's attention.
Making Games How did you come up with the idea to develop a new Master of Orion game? How did it start?
Andres Chilkowski In 2013, we met with Wargaming and they felt right away that our studio shared some DNA with theirs. We are, like Wargaming, a passionate development team from a remote country in the world (as

»We added a fake slide for a Master of Orion game to one of our pitches as a joke.«

far as the video game industry goes), daring to build its own MMORPG against all odds. Victor Kislyi himself told me that he felt that NGD was »just like Wargaming before hitting it big time with World of Tanks«.

After those initial meetings, we met several times over the course of 2013 as both companies wanted to work together. While we were pitching an MMO in one of those meetings, something magical happened.

We are big fans of the original Master of Orion games; and knowing that Wargaming had acquired the rights, we added a fake slide for a Master of Orion game to one of our pitches as a joke. After the pitch, Victor told us that they were looking for someone to do a Master of Orion reboot, taking the game to new heights, while being true to the original's soul and legacy. He asked us, if we were up to it. We shouted YES in a second!

Making Games How many people worked on Master of Orion initially? How many are there now?

Andres Chilkowski Our full team has been dedicated to this project, since we started in 2013. At the beginning, we were 25 developers and grew to over 50 in the course of a year and a half. Right now, we are 40+ developers working on the game, since much of the artistic work is done and we moved to pre-production of our next project(s).

Making Games How long did it take the team to create a playable prototype?

Andres Chilkowski We spent three and a half months working on an interactive prototype to convey the look and feel of the game. We needed to show that we had the »firepower« to make a great rendition of the game at current AAA standards for turn-based games. The game is very different now to that original prototype, which was much closer to the originals with no Star Lanes and turn-based combat. It ultimately had to be discarded in favor of a better and more modern approach.

Making Games Had you been thinking about rebooting Master of Orion for quite a while?

»The game is very different now to that original prototype.«

Andres Chilkowski As a fan of the original games and as a game developer, who understands how relevant and loved the original games still are to this day, I always dreamt for a great comeback for Master of Orion. Anyway, being the ones at the helm of such endeavor, was way beyond our wildest dreams.

Making Games What is different about working on Master of Orion from other projects?

Andres Chilkowski Even though we have previous experience working with big IPs (such as »Adventure Time«), a project like Master of Orion comes with a greater deal of responsibility. Not only, because of the fans great expectations, but also, because we are dealing with an iconic game in the history of our industry.

We had a solid foundation of game design to start from, full of clever and well balanced mechanics. But some of these mechanics did not stand the test of time very well, as the industry has matured in the last two decades and now reaches broader demographics. Staying true to the soul of the original games, keeping the high level of depth and strategy, while making the game more accessible and giving it a great rhythm, pacing and flow, has been a great challenge.

Making Games How has the work process changed following the partnership with Wargaming?

Andres Chilkowski We have always been a lean very agile team with quick prototyping skills. Of course, we had to refine our processes as we doubled the team in size, but we tried to play to our strengths.

Our process was simple: We tried to reach a playable game as soon as possible, then we gathered feedback from a lot of talented people (including devs of the original games, great designers at Wargaming and other advisors like Soren Johnson who was the lead designer on Civilization 4). We iterated quickly to deliver a new playable build and so and so forth.

Making Games You guys (NGD and WG Labs) are located all over the world – Argentina, Cyprus, Austin. Did it hamper the work process? How do you communicate? What is your idea-to-development workflow?

Andres Chilkowski Communication is not a problem nowadays thanks to email, chat, videoconferencing etc. We even flew to Austin and Cyprus, where we would stay for a few days to discuss the vision and evaluate the progress of the project. The real problem was to deal with the cultural differences between Americans, Argentines and Russians (Belarussians and Ukrainians, too).

Each culture has different management styles, design/thought processes, colorful ways to discuss about passionate topics and even very different perceptions on the strengths of Master of Orion. Navigating

Impressions from NGD Studios office.
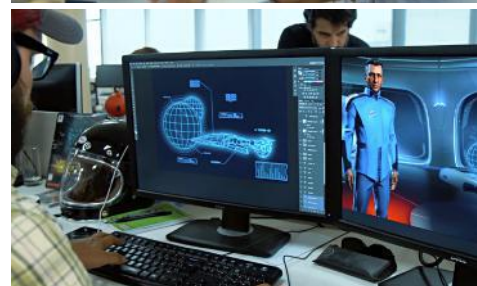
Impressions from NGD Studios office.

these differences was one of the most fun and rewarding parts of the project.

Making Games Master of Orion 3 was met with mixed reviews. What was learned from this and what is being done differently this time?

Andres Chilkowski Master of Orion 3 is, in a way, a typical tragic story found in our industry: A passionate development team with great ambition and a struggling publisher that rushed the game to the market trying to cut its losses, praying for the IP to become a hit.

We believe that they added a lot of complexity and set too ambitious goals – trying real-time 3D tactical battles for a 4X game while developing a software 3D renderer is a good example of that. The mod scene actually fixed a lot of the problems from this rushed release, so Master of Orion 3 is a much more playable game now than when it was back then.

Making Games Can you talk about your vision for this series?

Andres Chilkowski Bring the legend back, preserve its soul, while taking the production values and accessibility to today's standards. That was the vision that guided us.

From a game design point of view, we believe that turn-based games have a certain inherent rhythm: Every turn the player is making small and big decisions with short term and long term goals in mind. Moving units, building structures, diplomatic encounters, technological breakthroughs, random events. If these happen with a certain rhythm, then the game resonates with the player generating that »One More Turn« craving that good 4X games are known for. Achieving this rhythm was our main design goal.

Making Games Is there any extra pressure when working on a licensed property to please fans?

Andres Chilkowski We always knew that the IP was a double-edged sword as we are dealing with a powerful force: nostalgia.

There are people who just wanted Master of Orion 2 with HD-3D-graphics. On the other side some people want something completely innovative. Neither would have been a competitive Master of Orion game in today's market.

Making Games What's the hardest/most rewarding thing about working on the game?

Andres Chilkowski Tactical Battles was probably the most difficult part of the game. We went through several prototypes including a turn-based mode that proved too slow and did not scale well for the end game. Going real-time did the trick. It's fast, it scales to huge battles with hundreds of ships and looks awesome. But even after deciding to do real-time battles, it was very hard to balance the level of interactivity. Too much player control could have killed the purpose of the strategic 4X simulation. Too little would not be Master of Orion. We believe that we found a nice balance there.

Making Games What does the future hold for the NGD team?

Andres Chilkowski Most of our team will be committed to Master of Orion for the rest of 2016, but we are already thinking about how to combine our previous experience in massive online games with our newly achieved expertise in deep strategic gameplay. We hope to be able to make an announcement soon!

Making Games Is there anything you've learned from the process of working on Master of Orion that you'd tell other aspiring developers?

Andres Chilkowski Making a unicorn is not just strapping a horn to a horse.

Interview: Sebastian Weber

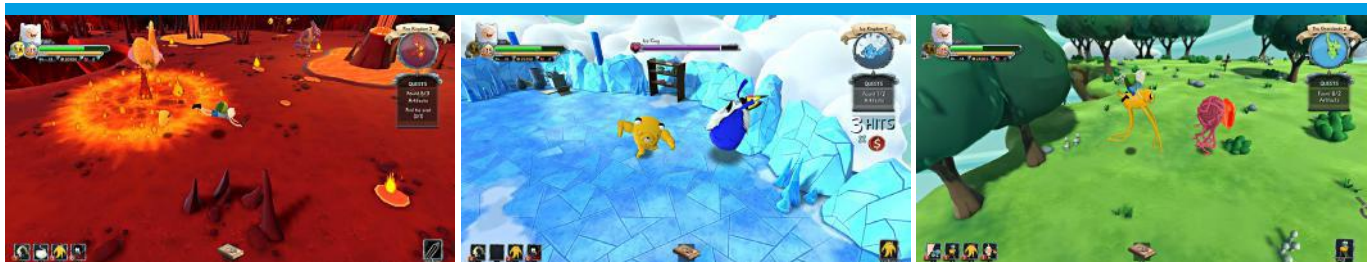> »We are dealing with a powerful force: nostalgia.«

Bunch of Heroes

Finn and Jake's Epic Quest

Bunch of Heroes and Finn and Jake's Epic Quest are projects that NGD Studios published themselves on Steam – the latter was already a game with a well known IP.

THE HISTORY OF 4X GAMES

The genre of 4X was established by legendary games like Civilization and Master of Orion and could successfully endure more than 20 years thanks to its fans.

There is something inherent to each of us as species in the 4X –»eXplore, eXpand, eXploit, and eXterminate« – genre. As a human race, these 4Xs were the foundation of great conquerors like Genghis Khan and Alexander the Great. Though, what those leaders would have felt about playing a few rounds of »Master of Orion« or »Civilization«, would require a time machine or phone box. They wouldn't have called it 4X, that's for sure, because the phrase was first coined by Alan Emrich in his September preview of Master of Orion for Computer Gaming World.
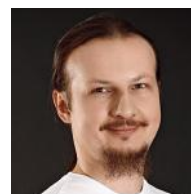
The Early Days of 4X

4X games evolved from board games like »Risk« and »The Settlers of Catan«, with their deep strategic roots and beard-stroking contemplation to build and execute a winning strategy. It's chess. And from that first click of the mouse, you've already put yourself within a niche. While accessible games can be defined by their ability to be picked up and played, 4X and strategy games have, by their very conceit, a higher barrier to entry. That doesn't hinder their success, but you know that you're not setting out to make the »Minecraft« or »Angry Birds« of the strategy genre. But at the same time, you're trying to balance the hardcore fans with the newer fans to create an experience that they find equally rewarding.

In 1982 and 1983, when trees were big and games were small, »Andromeda Conquest« and »Reach for the Stars« were released. We can call them the first examples of the 4X genre in the computer game world. When the very first Civilization game appeared in 1991, which was a genuine masterpiece and a perfect example of this genre, there still was no such term. At the same time, in the early nineties, »VGA Planets« and »Spaceward Ho!«, games that developed the idea of managing a space empire, came into being. And finally, in 1993, MicroProse released the first Master of Orion.

After the release and success of Civilization and Master of Orion, we saw a peak begin to emerge. Ever since then, 4X games have grown in two directions – while galactic conquest games have generally become more hardcore, pushing the limits of size, numbers, and duration, the more historical games like Civ have become more approachable, widening the audience and growing the market. Just like any genre, you build it, and others will start building it, too. In 1994, Stardock brought out »Galactic Civilizations«; »Space Empires« emerged.

Alex Zezulin
is Senior R&D Manager at Wargaming.

Alex Zezulin works at Wargaming's headquarters in Cyprus, in the Research and Development Department. Here, the team comes up with new games for Wargaming and helps to improve existing products and services. Alex is directly responsible for providing leadership for a group of creative minds and visionaries, who generate crazy ideas for games, test if they are interesting and up-to-date, using a variety of scientific methods, and submit them as formal documents to take their project off the ground. In Master of Orion, Alex performed several duties. At the beginning of the project, he was in charge of communication between the NGD team in Argentina and Wargaming visionaries, and personally with Viktor Kislyi, who actively participated in the design of the game. Later, Alex was involved in guiding the project regarding game design, and helped verify/greenlight the stages of development.

4X games evolved from board games like »Risk« and »The Settlers of Catan«.
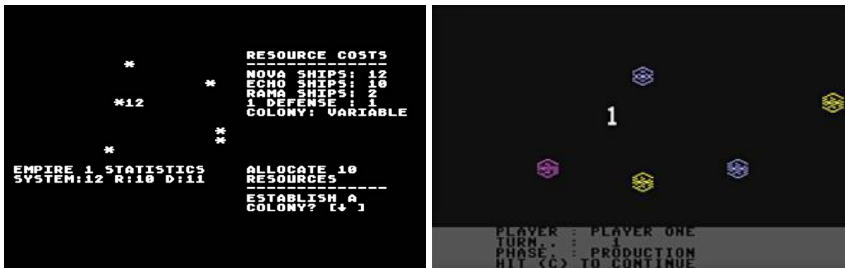
In 1982 and 1983, Andromeda Conquest (left) and Reach for the Stars (right) were released – the first examples of the 4X genre.

By the late nineties, real-time was king and was even outselling turn-based games. But it was a quick rise and sharp fall. There was Sid Meier's »Alpha Centauri«, Civilization III, and Master of Orion III, which all underperformed and encountered development issues.

A successful Niche

A few of the saviors of the 4X genre in the early 2000s were the remake of Galactic Civilizations and the Creative Assembly's »Rome: Total War«. The latter would make the 4X genre

When the very first Civilization game appeared in 1991, which was a genuine masterpiece and a perfect example of this genre, there still was no such term like 4X.

their bread and butter, releasing a number of critically acclaimed games that stayed true to the »eXplore, eXpand, eXploit, and eXterminate« genre. Civ came back triumphantly with Civilization IV (2005) and Civilization V (2010). Hardcore player loyalty has made a big impact on the market and getting games out there. These are the real champions of the brand. They'll wait patiently for titles and spend hours upon hours in their worlds, so there is a sense of »debt« surrounding the genre.

PC and Mac platforms (taking into account DOS, AMI, etc.) have been the dominant 4X platforms since those genres existed. With tablet, and to a lesser extent phones, with their touchscreen capabilities, we're seeing an expansion of platforms, which feels more like a natural extension than console. However, that's more reserved for the table management side of the game; when it gets down to combat, sometimes you simply need the accessibility and response of a keyboard and mouse combo. Not to mention the fact that trying to port a 4X experience to consoles is a really tricky, almost impossible task. To try to boil down the experience to a gamepad can be nigh-on impossible. And perhaps, through that, lies the pass to mass market accessibility? As we've seen, 4X is doing rather well.

How Wargaming stepped in

For Wargaming, some may consider that Master of Orion is not quite one of our core areas, but Wargaming's roots are in strategy games. When the company was in its infancy, with fewer than 100 people, we made Pay2Play games – strategy games. Of course, they were real-time games, dedicated to historical events, mainly warfare. So that genre is definitely home to Wargaming.

Another point was that Victor Kislyi, our CEO and the founder of the company, adores global strategies. In his interviews, he always tells people that some of the titles that had the biggest impact on him were Civilization and Master of Orion. So, as soon as the opportunity to participate in an auction for the right to acquire the intellectual property rights for the game arose, we took part in it. Civilization has been thriving in the modern market, but Master of Orion has been in oblivion for about 20 years. And we gladly took part in its resurrection.

The Evolution of Master of Orion

For Master of Orion, our approach has been to create a space strategy 4X game that is easier to learn and play than the originals, but still retains all of the complexity and opportunities for micromanagement under the hood. As technology has moved forward, allowing us to create fully animated 3D characters with voice overs to replace 2D images with text and orchestral scores to replace MIDI music, we have also been able to expand the game onto multiple platforms and improve some of

Alex' Master of Orion player profile

What is your role in the Master of Orion creation process?

When we just started working on the game, I acted as a link between the Wargaming development team and creative potential, organized meetings of NGD designers and Victor Kislyi, the chief visionary of the game at that time, and took part in such discussions myself. After the project reached the production stage, I remained a consultant on the game design and continued to arrange for the acceptance of the game versions. We call them greenlight meetings in Wargaming and use them for key stages of the development of each product.

What's your race of choice?

Definitely the Sakkra. They are a kind of crossbreed of orcs and dinosaurs: impossible to resist!

What's your total hours spent playing Master of Orion?

Well over 140 hours – but that's just the time I have recorded on Steam!

What's your greatest achievement in the game?

Controlling and building up most of the galaxy with my own Jump Gates – that's my favorite achievement.

the design to make the game better suited for modern players. It's not only for ourselves, who are older now and with less free time to play, but also the younger generation of gamers that we hope will take up the challenge to enjoy these kinds of games into the future.

The 4X game genre evolves and grows along with the development of the whole video game market, which in its turn depends on technology and platforms. In early times, it seemed that the step-by-step approach to arranging a 4X gaming session is a matter of course. However, after the rapid increase in computer power, which occurred in the late nineties, we saw the arrival of a beautiful real-time Imperium Galactica followed by other games that combined the depth of 4X strategies and the flexibility to control the rate of time flow. In Master of Orion, we use one form of this combination, where the strategic part of the game is turn-based, and clashes take place in real-time with the option to control the time flow and to pause.

Technical Advancements

As for the graphical component, it has never been the determining factor in 4X strategies. A game may be both perfectly ugly and dreadfully cute. All in all, the player will spend their time throwing back and forth imaginary numbers or pictured data tables and implementing their own victorious strategy. We have invested a lot of effort in giving Master of Orion a gorgeous outside filled with interesting content. However, at the end of the day, it's only the skirmish of wits of real or computer opponents that matters.

And this brings us to the key thing that can evolve in this genre – the artificial intelligence (AI). The more computer hardware evolves, the less game developers need to help AI fight against live players. Games of the past used to deal with the issue of strong AI in a straightforward manner. Most of all, its strength was based on inexhaustible resources and situational awareness superior to that of the player.

Frankly speaking, AI was a cheater. In today's games, developers tend to avoid it. We know that it is honest competition and transparent conditions that are of importance for players in a strategy game. This is the kind of game we wanted to make of Master of Orion.

Alex Zezulin

The Total War series (images: Total War: Shogun 2) made the 4X genre their bread and butter, releasing a number of critically acclaimed games that stayed true to the »eXplore, eXpand, eXploit, and eXterminate« genre.

THE CREATION OF WG LABS

For Master of Orion, Wargaming worked with a third-party developer and acted as publisher for the first time. Maxim Matveyko talks about the founding of WG Labs and how their first project turned out.

Maxim Matveyko
is Publishing Product Director
for WG Labs
at Wargaming.

As Publishing Product Director at WG Labs, Maxim Matveyko manages all WG-Labs-related activities, including publishing of selected products and games developed under the supervision of the Wargaming R&D team. Previously, he worked as Managing Director of Game Insight and VP BizDev at Nival. Max focuses on building strong relationships with the external development community, finding prospective games to invest in and publish, as well as define and implement WG Labs' overall strategy.

WG Labs owes its creation to »Master of Orion«, which acted as the catalyst that got the unit up and running. Before this, Wargaming had never worked with a third-party game developer to such an extent. At Wargaming, our development and marketing – it was all in our hands. Reaching outside your comfort zone and putting the development of a legendary title, which is dear to a lot of people at Wargaming, in the hands of another company, can seem like a risk. But if we didn't take any risks, then Wargaming wouldn't be where we are today.

After seeing how passionate NGD Studios were about Master of Orion, and the high quality of their playable prototype, we were all really excited about what they could do with the game in their hands. The decision to collaborate with NGD was, unbeknownst to us, the first step into the creation of a totally new organizational unit within Wargaming: WG Labs.

An independent Unit with Startup Mentality

Creating the unit just made sense. Just like we have marketing managers looking after our internal products – »World of Tanks«, »World of Warships« etc. –, there were going to be a lot of publishing activities around Master of Orion. Because Wargaming has a wealth of experience in this area, and the fact that we originally started out with RTS games, it meant we could fully support the title.

WG Labs helped define what it meant to globally market a product, work with new genres and people, and connect with a worldwide audience. With Master of Orion, we set the bar and expectations high. Further down the road, we knew that WG Labs would have the expertise to be able to focus on smaller titles up to huge, triple-A games with a legacy behind them.

WG Labs is, first and foremost, an independent unit. It's not a giant team, and we wanted it to have that »startup mentality« to the way we work. It's a mentality that helps to stay agile. We have a very »troops on the ground« mentality.

Before founding WG Labs for »Master of Orion«, Wargaming was mainly working on warfare based games like »World of Tanks« or »World of Warships« that all were developed internally.

Building up strong connections at events, being face to face with people we could potentially work with, is important to the team. There's no middlemen or go-betweens. You're able to communicate directly with someone who is an active part of helping to develop your project.

The Idea behind WG Labs

With all those ideas up in the air, we were feeling our way through the first few months of it all. So we had to define what the goals of WG Labs would be, and working with NGD Studios helped form the company ethos.

Above all, we're a breeding ground for new, innovative ideas and solutions. It doesn't matter if you're a single developer or a team, or if you're an industry veteran or new company. WG Labs wants to work with third parties, who believe they're onto the next big thing.

The way the industry is at the moment, there're a lot of people with great ideas out there. The problem is, because creating a game is so accessible these days, many people get lost in all the noise. There are lots of talented teams in the industry, even those that have been around for a while, that just don't have the resources to publish their game. Marketing, PR, testing – anything else – it can be difficult to have those skills if you're just a small team of devs, too. That's where we come in.

We're a worldwide operation, Wargaming has built up a lot of robust business intelligence and statistical tools, as well as CRM. WG Labs is able to draw on all these insights to get to the heart of what gamers really want. If you throw into the mix infrastructure and servers, as well as other PR and SMM activities, we have a lot of resources to help third-party publishers get their game to the right audience. There's no denying that we have access to a massive, global audience – there are over 180 million registered users across Wargaming's titles. We're able to target and connect with a lot of people, who would be interested in our games.

The cornerstone of this is the notion that good ideas become great when working together. Because we're agile, because we have a lot of expertise in different areas, we can get up-to-speed with projects over pretty much any platform and get it the attention it needs.

This expertise lets us experiment with new game mechanics, platforms, services and business models. We're able to take this further thanks to our Evaluation Team, which we have across the world. This team evaluates and shortlists products submitted to WG Labs, with experience in game design, producing, game vision, and publishing. Products can come to us from different areas – just like Master of Orion – and different cultural backgrounds that have great, perhaps even unseen, potential.

So, WG Labs is about finding those passionate people and helping them get their game to market. And the very first project for us was Master of Orion.
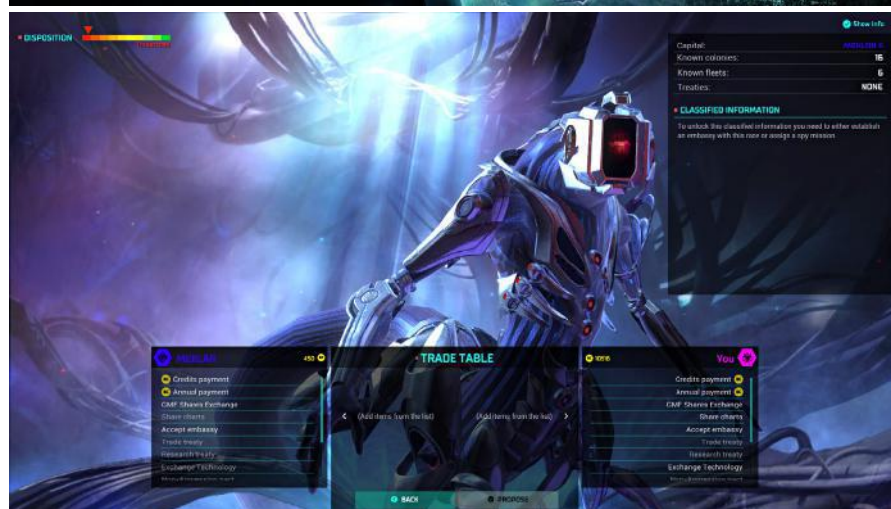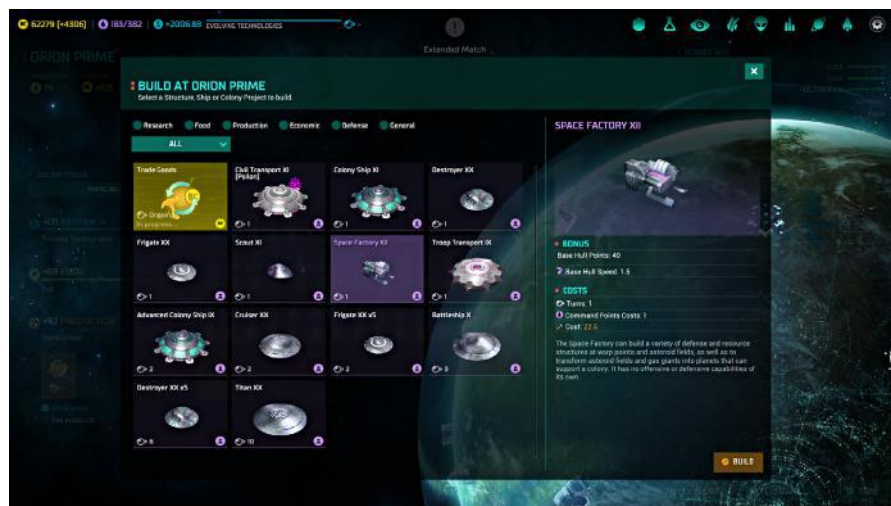
NDG Studios was very keen on developing Master of Orion and came up with a first prototype very quickly.

How Works on Master of Orion started

Working on Master of Orion and with NGD helped us define what we as a unit could offer third-party developers. Going back a little, Andres Chilkowski, the General Manager and CEO of NGD Studios, has been a friend of our CEO, Victor Kislyi, for several years. Our companies share a common background of working our way up from nothing as small indies, living in countries most of the game industry has never heard of, and having a burning passion for making great games. In 2013, when we bought the rights to Master of Orion from Atari, Andres approached us to make a prototype. His enthusiasm sparked approval, and the high quality of NGD's demo prototype three months later sold us on their abilities. We haven't looked back since, and our partnership has been excellent.

However, although our CEOs knew each other, nobody else did. We used the prototyping period as an opportunity to establish our processes, deepen our relationships, and learn about each other as people and as fellow game developers. We were happy to leverage their skills in development and art, while providing a larger publishing framework and supporting them with a lot of external assistance so they

could stay focused on the game itself. While this was touched on above, how we execute our expertise can differ for each project. For example, Wargaming handled all of the voice-over recording, localization, music, art book, and platform contracting. This way NGD could focus on core gameplay, art, animation, story, and mechanics. It turned out to be a great match.

Refining processes like this took time, though. A few years ago, we were newly-global and had spent 15 years as a small indie studio. We didn't have a lot of processes in place to handle third-party relationships because, well … we'd never had any before. This is the first time, we have acted as a publisher to ship a game that wasn't developed in one of our own studios, and it has set a high bar for managing these kinds of relationships. Because of this, the prototyping process was fairly informal, and the prototype approval meeting was held in a hotel at DICE in Las Vegas in early 2014. Andres presented the prototype and his pitch to Victor, his brother Eugene Kislyi, and Slava Makarov, VP of Product Vision. Randy King (Executive Producer on Master of Orion) and Chris Keeling (Senior R&D Expert, Product Vision) were also present. Before the presentation, top management was

a bit doubtful, but after seeing what NGD had accomplished in just a few months, they were ecstatic. The project was then approved to begin development immediately.

Learnings from WG Labs' first Project

So, as said, this was the first time this sort of third-party relationship had been done. And we certainly don't expect the process will ever be the same as this again, because we have learned so much and established a lot of new ways of doing things together that have formed the best practices that we are using going forward with other projects. WG Labs has a more formal evaluation process now, and Wargaming has a more efficient way to approve projects to make sure they are in line with our goals and strategies. While many of us have worked with third-parties before at other companies, this is the first time we have done it as Wargaming and WG Labs. So we knew there would be a steep learning curve as we sorted out the best ways to do things, but now we're definitely ready to take on more projects like this.

However, in taking on new projects, and being unable to be physically located at every corner of the earth, means there are some further challenges. Sometimes working across three continents (and in three languages!), in the case of Master of Orion, made for late nights or early mornings, depending on which side of the Atlantic we were on, but we always made it work. We had stand-up and design meetings scheduled at least three times per week, plus separate Skype channels for design, production, and so forth as well as daily emails.

We kept tasks – including bugs – logged in JIRA and shared dates and documents internally as quickly as they were approved to make sure everyone would be on the same page. It was a very iterative process with sprints of two weeks and monthly Early Access builds, plus usually daily staging builds for QA testing and rapid feedback. On top of the actual production process, we had to also coordinate localization, QA testing, UX testing, and a myriad of other functions like legal, platform distribution, and industry event attendance to support our marketing efforts.

With the confidence and positive experience that we gained from working on Master of Orion, we know that momentum is key for WG Labs. One area in particular that we're interested in is the mobile sector in Eastern Europe and Asia, as well as Latin America. Unlike PC and console titles, mobile definitely has a lot shorter life span. However, uncovering unique projects in a market that is saturated with them, can be a real challenge.

All of this allows WG Labs to go beyond Wargaming's paradigm of military warfare. With our first project, we decided to go out of this world, which has given new life to loads of other exciting, future collaborations.

Maxim Matveyko

Wargaming executives were a bit sceptical in the beginning, but when the developers showed the first playable build in Las Vegas, everybody was ecstatic about the progress that the team could make in just a few month

THE LORE OF
MASTER OF ORION

With Master of Orion's rich space opera setting, Kelsey Howard, Lore Master, discusses the evolution of lore through the series and how the past shaped the future of the game.

Kelsey Howard about The Lore of Master of Orion: The lore has always been a grounding element for the development of the updated game. As Master of Orion evolved, so did our ability to give more depth and life to the races and worlds of the game universe. We started with the seeds given to us by the original development team and were able to continue their legacy in a way that strives to find a clear path between the predecessors and the game we have now.

With the original game, the lore was mostly contained in brief paragraphs found in the instructional booklet. When I first played the early Master of Orion games, I printed the manuals and consulted them carefully as I tried to navigate my way through the depth of the 4X genre. Navigational notes scribbled in the margins, the manual guided me through the dense and rich gameplay. The manual was also my first encounter with background on the races I would later become so familiar with.

From pure Imagination to a vast Lore

The game and the manual both left much to the imagination – we got the headlines and bullet points of an empire's strengths and weaknesses, but not much more. The cast of

the space opera was there, but they didn't have many lines. The races followed the guidelines of accepted archetypes and stereotypes; the gruff bears, the physically weak scientists, the charismatic humans. While our background on them was not detailed, they somehow felt familiar enough that players intrinsically understood what each race came to represent.

The original Master of Orion was done on a small budget and a tight deadline. They may not have had the time to devote resources to going as deep into the lore as they may have liked, but the foundations they set were stable enough to last for decades.

The idea of the player constructing and living within their own space opera carried on to Master of Orion 2: Battle for Antares. The aggressive and terrifying face of the Antarans stares back at the players from cover, threatening their civilizations and empires from the darkness. More questions in the lore, more unexplained faces from the darkness of space.

As the Master of Orion series evolved over time, the races have remained as a familiar core for the players. The races are how we interact with the game – they are how we negotiate, explore, and battle in this created universe. They give us the means to make sense of the universe we have been dropped into. The races also represent facets of our-

> »The Master of Orion series is about as old as I am.«

Kelsey Howard
is Lore Master at Wargaming.

Kelsey Howard has been in the video game industry for around two and a half years, working for Wargaming shortly after graduation. Her primary duties are to create and uphold the background lore of Master of Orion. Kelsey also writes most of the fiction on the website, which offers a closer look at the races and worlds of the game.

selves that we want to bring into our game: from the diplomatic Humans, the headstrong Sakkra, the elusive Darlok – the defining factors of these totally alien races are still traits that we recognize and identify with.

Updating the game and the races was something we approached with a lot of thought and care. We wanted to preserve the familiar, while expanding on the races in a way that the series had not done before. All of the pieces and clues we were given by the original games, became the framework for what we have today. The past of Master of Orion has not so much shaped the future as it continues to be the frame that we continue to build the lore of.

Making Games How did you start out in the gaming industry?
Kelsey Howard I applied for the Research Assistant role at Wargaming almost three years ago. I turned that role into my current one over time and have never looked back! Wargaming is my first job out of college, actually. I studied English Writing and Rhetoric in school, focusing heavily on fiction and interactive narratives. I always knew that this is what I wanted to do and was lucky enough to find an opportunity so quickly after graduation.
Making Games Where does the passion for Master of Orion come from?
Kelsey Howard Science fiction has always been a passion of mine and coming across such a rich IP like Master of Orion has been a dream. It has been a fantastic experience working so closely with the diverse races of the game. It was a blast to take these races, which have been around for over 20 years, and breathe new life into them.
Making Games How does it feel to find quite a few people who share your passion?
Kelsey Howard It's always a bit intimidating, but very cool. I feel like I am still learning so much about my work and the industry itself. Finding people, who share the same dreams and passions as me, is a constant reminder of how amazing this experience has been.
Making Games How does it feel to go from being a fan to becoming a part of the team that reimagine your favorite game?

Kelsey Howard The Master of Orion series is about as old as I am, so there was a lot of pressure and responsibility that went into respecting the existing property. I had always known about the game in a very distant way as one of the great old school games that helped define the genre of 4X. Being able to play the old game and be a part of the new version at the same time, was a bit of a surreal experience. In a lot of ways, we were running full speed ahead, while constantly looking over our shoulder.
Making Games What was it like working with NGD Studios?
Kelsey Howard NGD has been amazing through the whole process. They are a team that has been working so hard to bring something to the fans that we all can be proud of. I'm honored to have been able to help them in any way I could!
Making Games Did you have the chance to meet with the original developers?
Kelsey Howard I briefly met them and spoke to them a bit over email. It's been a huge help to have them around and know where they were coming from all those years ago. The older race development has always been a compass for me as we chart new territory for the races.
Making Games What does your job involve, and what exactly do you do for Master of Orion?
Kelsey Howard I am the Creative Writer behind the majority of content for Master of Orion. It started with writing the story bible that offers all the details on the races that anyone could need; everything from social practices, beliefs, and their dietary preferences. I continued to write the short stories you see online as well as supporting the IP wherever it may go in the future.
Making Games How long did it take to put together a story bible for the new game?
Kelsey Howard The story bible took me about a year to complete, but it is very much a living entity with continued additions as the game moves forward.
Making Games Who did you consult in the lore process of the game?
Kelsey Howard I worked very closely with Chris Keeling and Randy King here in Austin, especially at the beginning. I worked hard to

»Now that the game is live, it's been rewarding to see individual interpretations of the races.«

The lore of Master of Orion was based a lot on imagination in the beginning, but today is written down in a vast and very detailed story bible.
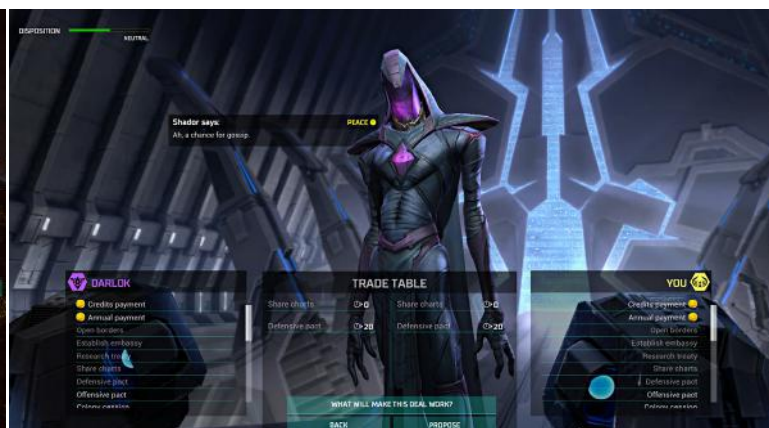
make sure that we always remained true to the original games, so I was frequently pulling up the old game manuals as well.

Making Games What difficulties did you face?

Kelsey Howard The most challenging part of the work was early in the process, back when the concept art was changing pretty quickly and we weren't 100 percent sure, what any race would definitely look like. Managing the lore overall could be challenging as well, as I was constantly updating the story bible to reflect every »canon« decision the devs were making.

At the end of the day, I was getting to bring these races back to life and put a modern spin on them. Coping with the difficulties of development is a lot easier, when you genuinely love the work you do.

Making Games Which race is your favorite, and what is your kind of playstyle?

Kelsey Howard I've always favored the Darlok – who can resist shapeshifting spies. I also love playing as the Mrrshan and just messing with other races in the game. I played most of my hours early on in the first few builds and I'm looking forward to things slowing down a bit over here so I can sink a few hundred hours into the game.

I usually play with more of a diplomatic/scientific focus, so when I do end up playing with a more military focus, I'm always proud of myself. I always feel bad for the civilizations I'm murdering!

Making Games How do you feel now that the game is almost live?

Kelsey Howard It can be a bit strange at times, but I feel really positively that the hard work, we have all put in will, pay off for the fans. I love being able to continue work on the series with other writing pieces so that the lore of Master of Orion continues to live and breathe even past the launch. However, now that the game is live and players are interacting with the lore, it's been rewarding to see individual interpretations of the races.

Making Games Do you have any amusing tales to tell from behind the scenes of development?

Especially for the different races in the game, the lore is important as it describes their behavior, their traits and how the player might interact with them.

»The story bible took me about a year to complete.«

Kelsey Howard Working with these guys has been an interesting journey, to say the least. I don't have any specific tale that comes to mind, but working with a team that has a sense of humor has been a huge asset during the tough times.

Making Games From your contribution to the game, what are you most proud of doing?

Kelsey Howard I love seeing pieces from the story bible reflected in the dialogue of the game. I'm proud of the amount of work put into making the races feel as independent, diverse, and fully contextualized as they are today. Each race stands on their own in the lore and in the game.

Making Games What's the hardest/most rewarding thing about working on the game?

Kelsey Howard Creative work has its own challenges. It's subjective, hard to pin a concrete value on, and many people don't see the benefits of it. I've worked hard to prove that good writing not only engages the community, but that it brings more depth to the game. The most rewarding experience has been with players, who enjoy, interact with, or question the lore.

Interview: Sebastian Weber
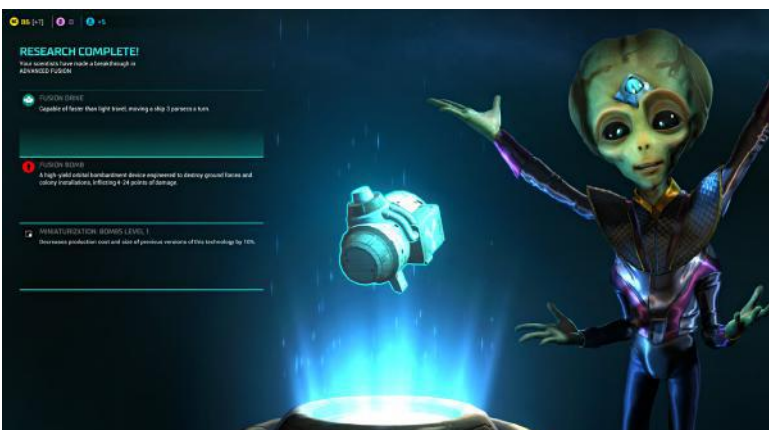
ASSEMBLING A GALAXY OF ACTING TALENT

Every character in the game as well as most of the events during a run are voiced. Chris Keeling explains, how the cast voicing all the different characters was found and how the recordings went.

Chris Keeling is Director Product Vision for Master of Orion at Wargaming.

Chris Keeling is the Director of Product Vision at Wargaming, taking the helm on the reboot of »Master of Orion«. Chris holds a Master's degree in Video Game Production and Design and has worked on such games as »Panzer Elite«, »America's Army: Soldiers«, »America's Army: Operations«, »Order of War«, and »World of Tanks«. He was previously the Program Manager of the Game Design Bachelor of Science program at Full Sail University, and is a retired soldier with 23 years of active and reserve service. Currently, Chris directs the design and development of the reboot of the legendary Master of Orion 4X space strategy game for WG Labs.

»The essence of it [Master of Orion] has been reproduced ... the spirit of it is still there.«
John de Lancie
(»Star Trek: TNG«, »Stargate SG-1«)

In reimagining a legendary 4X game, WG Labs didn't just want to bring the graphics and gameplay up-to-date, but also breathe new life into the eclectic races in the galaxy. To add another dimension to each race, the team wanted a stable of actors with a great pedigree, and the search for voice talent culminated in a legendary cast from science fiction, horror, and video games.

Headlining the cast is Mark Hamill (»Star Wars«) in addition to Alan Tudyk (»Firefly«), Michael Dorn (»Star Trek: The Next Genera-

Michael Dorn (voicing the Narrator) is an American actor and voice artist, who is known for his role as the Klingon Worf in the »Star Trek«-franchise. His work in video games includes »Saints Row 2« as Maero, »Mass Effect 2« as Gatatog Uvenk, »Fallout: New Vegas« as Marcus, and »StarCraft 2: Wings of Liberty« as Tassadar.

tion«), Kat Cressida (»Haunted Mansion«), John de Lancie (»Star Trek: The Next Generation«), Robert Englund (»A Nightmare on Elm Street«), John Kassir (»Tales from the Crypt«), Dwight Schultz (»The A-Team«, »Babylon 5«), Nolan North (»Uncharted«-series) and Troy Baker (»The Last of Us«) among many others.

Chris Keeling, Wargaming's Director Product Vision for Master of Orion, discusses some of the challenges faced in locating the right people to do justice to a game that has a special place in the heart of 4X gamers everywhere.

Making Games How did you go about assembling the cast for Master of Orion? Were there actors you had in mind? Did you see one of the characters and immediately thought »we need that person«?

Chris Keeling There were definitely actors we had in mind, and we were fortunate to be able to get so many of them on the project. It really turned out to be everything we had hoped for. It was especially rewarding to be able to include actors from so many prestigious science fiction movies and TV shows, like »Star Wars«, »Star Trek«, and »Firefly«, along with notable voice actors from other major AAA video games.

Making Games How was the character's voice discovered? Was it left to the actor or did you provide guidance?

Chris Keeling Character voices were established based on a reference audio (generally from a movie or TV show), but from there we worked directly with each actor in the studio to find just the right voice that worked for them and for us.

Making Games If you had to describe a few of the race ambassadors in just one word to convey their character, what would it be?

Chris Keeling Nutty. These characters are the comic relief of the game – as they were in the original Master of Orion. Their job is to convey useful information and point out things the player should pay particular attention to, but they do it in the most overly dramatic and frequently pun-filled way possible. The emperors, while also humorous, take themselves a bit more seriously. GNN, on the other hand, has no serious factor at all.

Making Games What kind of difficulties did you face when organizing V/O work? Is there flexibility with character dialogue? Do you have to keep it set in stone?

Chris Keeling There was certainly flexibility with the dialogue. Sometimes what looks good on paper, doesn't sound quite right when spoken aloud, and then it has to be changed on the fly. Fortunately, we had an excellent studio team led by Amanda Wyatt (voice director for amongst others »Far Cry 3«, »Assassin's Creed 3«, »Batman: Arkham Knight«, and »Halo 5«), taking care of the technical details and organizing the actors, so we could focus on getting the lines just right.

Making Games Which actor is most like their character?

Chris Keeling Dwight Schultz. He's so over-the-top funny all the time that he can't help but bring that zaniness to his role as the »male« robot news anchor in the GNN duo. He's always

> ### »This video game is not only a classic – it's legendary. When I look at what the game used to look like, and what it looks like now. It's even more fun to play.«
> John Kassir
> (»Tales from the Crypt«, »X-Men Legends 2«)

smiling and talking, and this sort of buffoonery fits right in with the character he portrays. Although, he's definitely not out-of-touch with reality like the robot he plays!

Making Games How did you teach them about the game? Old videos? Did they play it? Story bible?

Chris Keeling Some of them had played it or seen it played in their youth, but we also provided concept art and background descriptions along with a guide to the expected voice style, and for each actor I demonstrated the then-current state of the game (their voices were recorded over a year ago) so they could get an idea of the position of their character in the game.

Making Games Was a lot of work done remotely? Were the actors at various studios?

Chris Keeling The actors were recorded at the Warner Bros. studios in Burbank, California. Since that's practically in Hollywood, most of the actors lived nearby and all of them were available to come into the studio for the recording sessions. More difficult was arranging our schedule to accommodate theirs, as they are all pretty busy with other projects.

Making Games If you could have told yourself one thing before starting the project, what would it have been?

Chris Keeling »Calm down, this isn't Luke Skywalker/Lieutenant Worf/Q/Barclay/Wash/etc.« Ok, never mind, I did tell myself that, quite often. It was pretty exciting to be working with these incredible actors.

Making Games How was first contact made? Did you have to pitch the idea to agents?

Chris Keeling We worked through our voice talent agent and studio director, Amanda Wyatt, to coordinate the actors' agents, the talent, and the studio. This allowed us to keep our eye on the game and the lines and the product,

John Kassir is an actor, known for »Tales from the Crypt«, »Pocahontas«, and »Tales from the Crypt: Demon Knight«. Kassir is also known for his role as Ralph in the Off-Broadway show »Reefer Madness« and its film adaptation, as well as his voice work as Buster Bunny.

> ### »What truly struck me the first time I got to see the new rebooted version, is how fully evolved the ships are, the universe, the strategy. It is so fully immersive.«
> Kat Cressida
> (»Fallout 4«, »The Haunted Mansion«)
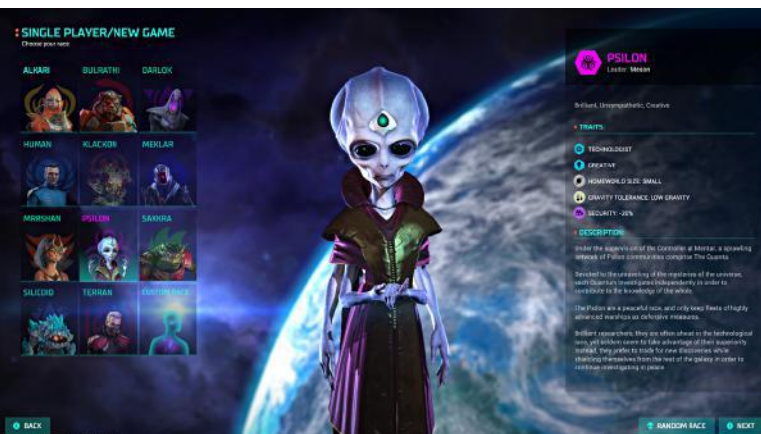
Even in the beginning of the game, when the player chooses which race to play, the narrator tells all important facts about each of them. Later during the game the GNN news show is updating the player on major events.

▦ Additional Actors

Robert Englund
Veteran character actor Robert Englund has appeared in over 75 feature films and starred in four TV series. Since 1984, he's achieved international fame as the iconic boogeyman Freddy Krueger in the hit franchise »A Nightmare on Elm Street« and its seven sequels. Englund has guest starred in hundreds of hours of TV shows most recently »Bones«, »Criminal Minds« and »Hawaii Five-0«.

Mark Hamill
Mark Hamill is an American actor, voice actor, writer, producer, and director. He is best known for his portrayal of Luke Skywalker in the original »Star Wars«-trilogy, as well as being the voice of the Joker on »Batman: The Animated Series«.

Troy Baker
Troy Baker (voicing the Klackon Advisor and Psilon Emperor) is an American voice actor and musician known for portraying lead characters in several video games. He voiced Booker DeWitt in »BioShock Infinite«, Rhys in »Tales from the Borderlands«, Delsin Rowe in »inFAMOUS: Second Son«, Joel in »The Last of Us«, The Joker in »Batman: Arkham Origins« and »Batman: Assault on Arkham«, and Two-Face in »Batman: Arkham Knight«, and many more.

J.B. Blanc
Since moving to the United States, J. B. Blanc (voicing the Bulrathi Advisor, Meklar Advisor and Meklar Emperor) has appeared in television series such as »Breaking Bad«, »Cold Case«, »CSI: New York«, »Raising the Bar«, »The Unit«, »Crash«, »NYPD Blue«, »Prison Break«, »Dr. Vegas«, and »The Company«. He has done voice-overs for video games such as »Dante's Inferno«, »Darksiders«, »Wildstar«, and »007: From Russia with Love«. In 2013, Blanc voiced various characters in »Saints Row 4«, including Emperor Zinyak and Phillipe Loren. He voiced Commander Blisk in the 2014 video game »Titanfall«.

Nika Futterman
Nika Futterman (voicing the Darlok Advisor and Mrrshan Advisor) is an American actress, singer, voice artist, and comedian. Futterman has provided her voice in »CatDog«, »Hey Arnold«, »Mike«, »Lu & Og«, »Kim Possible«, »Avatar: The Last Airbender«, and many more.

Jean Gilpin
Jean Gilpin (voicing the Klackon Emperor) is a British television actress and voice-acting specialist. She has worked regularly doing voice-acting for »Max Steel«, as well as »Neverwinter Nights« and »James Bond 007: Nightfire«. In particular, she has worked regularly in the voice acting cast for Bethesda Softworks, and can be heard in such games as »Dragon Age 2« as the character Meredith, and »The Elder Scrolls 5: Skyrim« as Elenwen, Boethiah and Meridia.
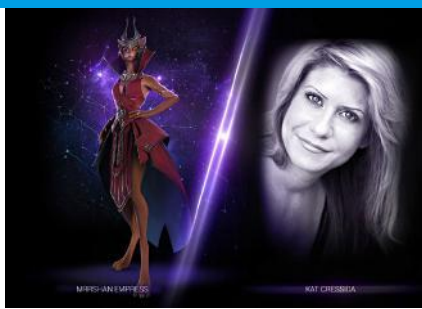

Kathryn »Kat« Cressida is an American voice actress. She guest-starred in several television shows and was featured in a few films, before moving into voice-over full-time in 2000. She is notable as a top celebrity voice matcher, and for being the first female to do live announcing for ESPN's coverage of the 2010 NFL Draft.

Alan Tudyk (voicing the Psilon Advisor) is an American actor and voice actor known for his roles as Hoban »Wash« Washburne in the space western television series »Firefly« and movie »Serenity«. He's voiced significant roles in Walt Disney Animation Studios' »Wreck-It Ralph«, »Frozen«, »Big Hero 6«, and »Zootopia«. Tudyk plays the voice of a Marine in the Xbox 360 game »Halo 3«.

John de Lancie is an American stand-up comedian, actor, director, producer, writer, singer, musician, voice artist, and comedian, best known for his role as Q in »Star Trek: The Next Generation«, »Star Trek: Deep Space Nine«, and »Star Trek: Voyager«. He also voices Discord in »My Little Pony: Friendship Is Magic«.

instead of spending a lot of time trying to work out deals with Hollywood stars. Fortunately, Amanda is an expert at that kind of thing.

Making Games Have you been involved with a project like this before?

Chris Keeling I have been involved with selecting voice actors, writing lines, and approving final recordings and edits, but this was the first time, I was able to work on-site directly with celebrity actors. It is not an experience I will soon forget.

Making Games Any funny moments you can tell us about? Any Easter Eggs hiding away?

Chris Keeling Once we had the final list of actors, we spent a little time trying to work in a line or two that related to at least one role the actor had held previously, or to get the name of one of their famous characters into the game as the name of an emperor, space monster, or

> ▦ **»The way it was explained to me, which I like a lot is: exploring is seeing what's around the corner; expanding is seeing what's around the corner and planting your flag on it.«**
> Mark Hamill
> (»Star Wars«,
> »Batman: Animated Series«)

planet. I am sure our fans will find them and point them out! For the first post-prototype planning meeting, Andres Chilkowski, the CEO of NGD Studios, flew out to Cyprus to meet with us (myself, our CEO, and our top executives, mostly Russian and Belarusian) to present his plan. On the first slide of his presentation was the codename for the project: Hereford. It was accompanied by a simple image of a constellation in the shape of a cow. I was the only person in the room who laughed. Andres had to explain to the group that Master of Orion is commonly known as MOO, and since that's the sound a cow makes, and since Hereford is the most common breed of cattle (and all Argentinians know this, the nation being quite famous for its beef), they thought the name would be a good joke. Apparently, sometimes culture and language barriers do exist!

Misty Lee

Misty Lee (voicing the Silicoid Advisor) is an American voice actress, comedian, and professional magician. In addition to magic, Lee is a prolific voice actor, appearing in award-winning video games such as »The Last of Us«, »BioShock Infinite«, »Grand Theft Auto 5«, »Disney Infinity«, and more.

Sumalee Montano

Sumalee Montano (voicing the Terran Advisor) is an American actress and voice actress, having worked on »Star Wars: Knights of the Old Republic«, »Dead Island«, »Mass Effect 3«, »Saints Row 5«, »Dragon Age: Inquisition«, and more.

Nolan North

Nolan North (voicing the Darlok Emperor and Sakkra Emperor) is one of the most prominent actors in the games industry, known as Nathan Drake in »Uncharted«, and Desmond Miles from the »Assassin's Creed« video game series. He has also played Ghost in »Destiny«, the Penguin in the »Batman: Arkham« video game franchise, Cpt. Martin Walker in »Spec Ops: The Line«, David in »The Last of Us«, and several characters in various pieces of Marvel media (most popularly Deadpool).

Roger Craig Smith

Roger Craig Smith (voicing the Sakkra Advisor) is an American voice actor and former stand-up comedian. He's known as the current voice behind Chris Redfield in the »Resident Evil« series, as Ezio Auditore da Firenze in the »Assassin's Creed« games, as Deidara in the anime »Naruto: Shippuden«. Smith is also Shinji Hirako from »Bleach«, Percy and Belson in »Clarence«, Batman in the video games »Batman: Arkham Origins« and »Batman: Arkham Origins Blackgate«.

Fred Tatasciore

Fred Tatasciore (voicing the Bulrathi Emperor and Silicoid Emperor) is an American voice actor and former stand-up comedian. Tatasciore has portrayed mostly secondary characters as well as monstrous-looking types. He is known for voicing the Hulk in several animated roles. In video games, he is known for voicing Saren Arterius from the critically acclaimed series »Mass Effect« and Damon Baird in the »Gears of War« video game series, and Zeratul from the game »StarCraft 2: Wings of Liberty«.

Kari Wahlgren

Kari Wahlgren (voicing the Human Advisor and GNN Anchor) is an American actress who has provided English language voices for over a hundred cartoons, anime and video games. She got her start in anime voice-overs as Haruko Haruhara in »FLCL«, and would later land major roles in a number of series: Robin Sena in »Witch Hunter Robin«; Lavie Head in »Last Exile«; Fuu in »Samurai Champloo«; Scarlett in »Steamboy«; Pacifica Casull, the Scrapped Princess; Saya Otonashi in »Blood+«; Kagami Hiiragi in »Lucky Star«; and Saber in »Fate/Zero«.

Dwight Schultz (voicing the GNN Anchor) is an American actor and voice artist. He is known for his roles as Captain »Howling Mad« Murdock on the 1980s action series »The A-Team«, and as Reginald Barclay in »Star Trek: The Next Generation«, »Star Trek: Voyager« and the film »Star Trek: First Contact«. He is also well known in animation as the mad scientist Dr. Animo in the »Ben 10«-series, Chef Mung Daal in the children's cartoon »Chowder«, and Eddie the Squirrel in »CatDog«.

> »I see the Khan as these sort of galactic refugees … Think of them as Vikings in space.«
> Robert Englund
> (»Nightmare on Elm Street«)

Making Games Do you have a particularly favorite line from the game?

Chris Keeling I really like the lines that the Meklar advisor has that relate directly to video games, like »All your base are belong to us«. These kinds of Easter Eggs in the game are not only funny, but because the Meklar are cyborgs, they are a perfect fit for their race (and the advisor voice sounds a little like the similarly sarcastic and humorous GLaDOS from Portal, but not too much).

Making Games If the races from Master of Orion were at a Galactic Council meeting, and they ordered intergalactic pizza, which ambassador would say that they didn't want any pizza then take a slice and not pitch in for the meal?

Chris Keeling Let's see … The Silicoids don't eat food, so they would likely pass and nibble on the marble and granite appetizers. The Mrrshan would order anchovies, so I expect the rest of the group would stay away from their pizza. The Meklar would probably put their slice in a blender and puree it with vitamins, then put it into the bio cell on their cyborg body. The Klackon – well, I doubt anyone else would want to eat anything the Klackon put on their pizza, so they would probably get their own, too. My guess is the Darlok would refuse to pay, then sneak an entire pizza for themselves; however, because they are so good at it, nobody would even notice there was one missing!

Interview: Sebastian Weber

Mark Hamill, best known for playing Luke Skywalker in the »Star Wars« movies, unveiled being part of Master of Orion via Twitter.

Photos of Robert Englund, Mark Hamill and John Kassir (from left to right), while voicing their characters at the Warner Bros. studios in Burbank, California.

MASTER OF ORION INTERACTING WITH THE COMMUNITY

Wargaming decided to go for Early Access with Master of Orion and collects a lot of feedback in forums and Facebook. Jacob Beucler explains, how that helped the development of the game.

Jacob Beucler
is Publishing Product Director at Wargaming.

Jacob started his career in the games industry in 2002, as part of Ion Storm in Austin, Texas. He then worked for Midway Games LLC in Chicago, IL, then for the LEGO group in Denver Colorado. He has been at Wargaming for almost 3 years, working at their office in Austin, Texas. As a Publishing Product Director, Jacob is responsible for the health of the business related to Master of Orion. He works closely, on a daily basis, with all of Wargaming's regional offices to ensure the go-to-market strategy is appropriate and is being executed. Jacob also works with the Research and Development Team for Master of Orion. They collaborate to ensure the highest quality product is being built for its audience.

Connecting with players has taken a great leap forward in recent years, and getting to the core of what really matters to the end user is now easier than ever. After all, games are for the players. All the planning, design documentation and testing in the world are no substitute for people having hands-on time with the game. That's why, in Master of Orion, Early Access and the feedback garnered from it has been inviable in creating an awesome 4X experience.

While every Master of Orion player is a little different, there are certain threads that run through all of them. Your typical player who likes strategy games – particularly 4X – only seems to be growing. There's been a real resurgence in the past few years, especially with crowdfunding platforms, which allow smaller developers to work on a genre they're passionate about, but can often seem less mainstream. Our players like to think, be challenged, and are passionate about Sci-Fi. We've seen this flourish on our forums, and one player had even created blueprints of our ships that you can print out and fold. We know that right off, people who are on board are incredibly invested in what we do.

How to get Player Feedback

There are lots of ways in which we were able to discover what players think of Master of Orion. Our primary method of communication came from the community forums that are available with our platform partners – Steam and GoG. We also leveraged various social media channels for each region. By offering many ways for players to get in touch with us, we not only accrued lots of data, but we could see what issues were important to different demographics.

Master of Orion's forums are, perhaps, one of the largest and easiest places for devs and players to communicate. By nature, 4X players want to get down to the fine details. Allowing them to create threads and discuss myriad topics, is a great way to break down their thoughts. Whether they want to talk about battles, trait systems, planetary hubs – the fo-

Wargaming and NGD Studios got a lot of positive but also negative feedback from the fans of the series, which helped a lot to improve gameplay. But also showed that you cannot make everybody happy.

rum allows us to compartmentalize what they think, which we can then act upon.

Likewise, on Steam, there is a live chat for the Master of Orion group. You can even add friends to foster further communication and get a sense of instant feedback. Social platforms are great, too. Take Facebook, for instance. With the ability to post to a wall and to write reviews, you can get direct feedback and discussions between players. If someone's having a problem, they can ask a question and, more often than not, get an answer pretty quickly. It helps us see what issues people are having, but also creates an eco-system where people can help each other out. It's all about giving players the channels and freedom to express themselves conveniently.

What happens with the Feedback?

So, what happens with all this data – and there's lots of it. After each of our Early Access builds, we gather all of the feedback posted on all the forums that we monitor, then we build a master backlog of community feedback and general community sentiment per feature of the game. We then evaluate the feedback, prioritize it and send it to our UX lab to have it vetted against the scientific studies that we run with our UX testing partners. After gathering, prioritizing and vetting the feedback, we then deliver it to the development team for review.

In the process of gathering feedback, you need people on the ground, who are monitoring what players are saying and getting a general feel of the community sentiment. Our main community manager is known as »General Direction« on Steam and our other forums. He's our spokesperson, taking suggestions and engaging the players about their thoughts on Master of Orion.

We have a large bunch of extremely diligent and passionate players. They'll spend hours with the game, discover things we never even thought of, and become extremely attached to the product. By showing them that their thoughts and suggestions matter, we can foster the conversation and build up strong relationships. Players want to know that they matter, that they have the power to help shape the game. A part of this is being available almost around the clock to discuss problems and offer assistance. If they're staying up until all hours, then we need to do our best to be there with them.

Player Feedback never stops

There have been several larger elements that we've overhauled during Early Access. When we began, players were talking about the vague nature of racial bonuses. With Early Access 5, we added things like creative and uncreative traits, as well as other bonuses, taking a page from Master of Orion 2. Choice, particularly in ship design, was another talking point. We worked hard to make creating your fleet an informative process, being clear about
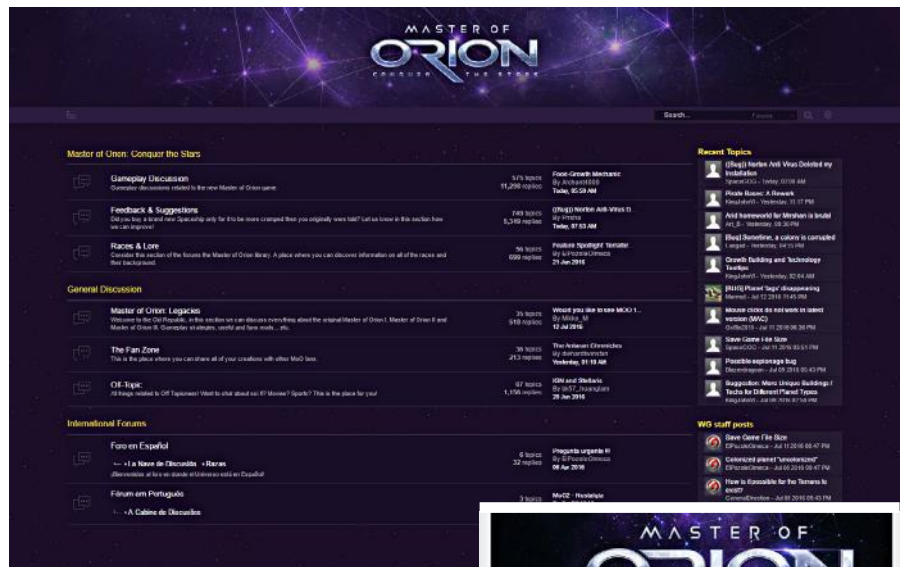
the bonuses which you receive. This sense of choice also extended to the planet types in the game. People wanted a more diverse roster, so we implemented it, which birthed a whole new sense of strategy in Master of Orion.

Master of Orion has a place in the hearts of many gamers, and it was a daunting task to revive a legendary game with such a legacy. So far, it has been a polarizing experience; we have a bunch of fans that are really enjoying the game and we have a bunch of fans that are upset with some of the design decisions that were made. At the end of the day, you can't please everyone. We are simply focused on making the best game possible given the constraints that we are working with. Overall, we see lots and lots of happy fans, and some very vocal not so happy fans. But as anyone knows, the vocal minority have a tendency to out-shout others.

Many wanted the game to be Master of Orion 4, but we were adamant to posit the latest game as a reimagining – a rebirth. We treat the other installments reverently, taking the best parts from the previous games and even bringing on original members of the design team as consultants. If we look at fan reactions, there have been lots of similar discussions and points of feedback. When we were planning on making Master of Orion, we didn't expect to have the voice talent roster that we landed, and there was a really positive reaction to our awesome actors. With Master of Orion, we wanted to update the game for today's audience. It was important for us to create a game that, while appealing to the older, hardcore generation, was also accessible for newcomers.

Community feedback never stops with release, however. All our explorers can expect that we'll be just as invested in what they have to say long after Master of Orion's release, and will always be here to listen and act upon their wishes. **Jacob Beucler**
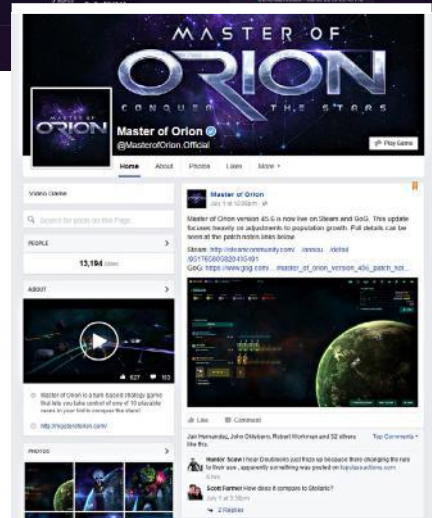
Facebook, the official forums and Steam's discussion boards are the main sources of feedback from the players. That means a lot of work but at the same time a lot of valuable input.

AVOIDING
THE TAGALONG TRAP

Just adding a second player to a game does not make for a good co-op game.
The developers of Shadow Puppeteer explain how they approached co-op based game design.

Catharina Bøhler
is Co-Founder and CEO
of Sarepta Studio.

Catharina Bøhler is one of the co-founders of Sarepta Studio, a Norwegian 3D visualization firm, independent video game developer and creator of »Shadow Puppeteer« – an award-winning, asymmetric PC and console game. Catharina holds the position of CEO.

Marianne Lerdahl
is Co-Founder and
Project Manager/Producer
at Sarepta Studio.

Marianne co-founded Sarepta Studio in 2010, and currently holds the position of Project Manager/Producer. She is a frequent guest lecturer at Hedmark Univeristy College teaching visual communication and game design.

Cooperative games challenge players to work together (i.e., to succeed or fail as a team as they strive to reach a common goal). In these games, players can have identical or differing abilities. But not all co-op games are created equal. Some co-ops are engaging, giving both players a sense of purpose, while others cause frustration or apathy due to an imbalance in the distribution of player skills. So, what makes a good co-op experience?

This was the central question we at Sarepta Studio asked ourselves as we began development on »Shadow Puppeteer«, our award-winning, local co-op adventure, published by Snow Cannon Games. To properly answer it, we turned to other co-op games to pinpoint what exactly it is about these games that makes them deliver an unforgettable and unique experience.

Our analysis and internal discussions resulted in the identification of three components that we believe define what we call »true co-op games«.

1. Relies on Two or More Players

Good co-op games usually offer players two ways to play the same version of the game: The first is playing by yourself, and the second is playing with another person. But, unless all players are integral to the completion of the game, there is limited incentive to cooperate.

For example, »Little Big Planet« has sections that players can only access and complete if they have the minimum required number of players. By comparison, the NES title »Chip 'n' Dale Rescue Rangers« can be played in both singleplayer and co-op. In this example, the addition of another player makes the game easier because it's more accessible to less skilled players.

2. Gives Each Player Different Roles or Skills

Very often in co-op games, characters have identical roles or skills and adhere to the same rules. This is what we call »symmetrical co-op«. This can result in players dividing tasks throughout the game between them to increase efficiency.

»Shadow Puppeteer« is a co-op game where one player is controlling a boy in the 3D world, while the other player controls the boy's shadow in a 2D space and both can influence each other's environment.

This can also, and most often does, result in one character performing all major actions, while the second simply »tags along«.

In contrast, some games are completely asymmetric, having no overlap in gameplay between players. This lack of overlap creates a dependency between players, but can sometimes create too much of a divide. In Shadow Puppeteer, players exist in different worlds. If they had absolutely nothing in common, it might sever the sense of a »shared experience«.

We found that by giving players at least some unique mechanics, and demanding these to be combined in order for them to progress, ensures that both players are integral and become active participants in the experience.

A good example, of how different player skills can create an engaging co-op experience is »Trine 2«. In Trine 2, players control three characters with different abilities: The wizard can cast spells that move or create objects, the thief can use a grapple or a bow and arrows, while the knight has superior fighting abilities and strength. Conversely, in »Halo 3: ODST«, both players play an Orbital Drop Shock Trooper, and although they can choose to equip different weapons, each player's skills and abilities are identical.

3. Gives Each Player Equal Importance/Number of Tasks to Perform

True co-op games engage all players equally. Whether players have different or similar skills and abilities, it's important that they both feel like they have enough to do and are actively contributing to the progress of the team. Players may not be entirely objective here, so it will not be enough to merely listen to their thoughts. Close observation may also be needed.

In »Ibb & Obb« both characters are presented as equals. The two can either move in the world above the ground with regular gravity, or use portals to walk upside down in the world below. However, some portals can only be used by specific characters. This ensures that both players take an active role and contribute to the team's progression. I.e., both the path above and below offer challenges, and players must take turns performing tasks in order to advance as a whole.

Another example of this is »Paul & Percy«. Unlike Ibb & Obb, Paul & Percy utilizes a switch mechanic between the two characters, enabling single player. The characters Paul and Percy have the same abilities, but are separated on either side of screen. This means the characters take turns moving objects on their side to enable both to progress, creating a natural flow of »back and forth« gameplay.

Making Shadow Puppeteer a »True Co-Op« Game

At Shadow Puppeteer's core lay the premise of a boy and his shadow, and the idea of »what would happen if the Boy's shadow came alive?«. I.e., how would gameplay differ for each of these characters, or what similarities would they share?

The premise created a natural divide between the players. Separating them into different »dimensions«. The Boy could operate in 3D space, while the Shadow only existed in the 2D world. With this, we created an internal logic that communicated each character's unique value to players well, making it easy to understand why certain actions and places were accessible to one character and not the other.

Originally, we tried to give our characters different core mechanics, but due to the fact they existed in different dimensions, already set them apart. This created too much of a divide and made it difficult for them to relate to one another. Therefore, we gave them similar core mechanics, but unique complimentary mechanics. These shared actions also fit the narrative well, as both characters are connected (i.e., one is the other's shadow).

In »Little Big Planet« certain sections of the game can only be accessed if the minimum required number of players are present.

In »Halo 3: ODST«, both players play a trooper. Although they can equip different weapons, each player's skills and abilities are identical.
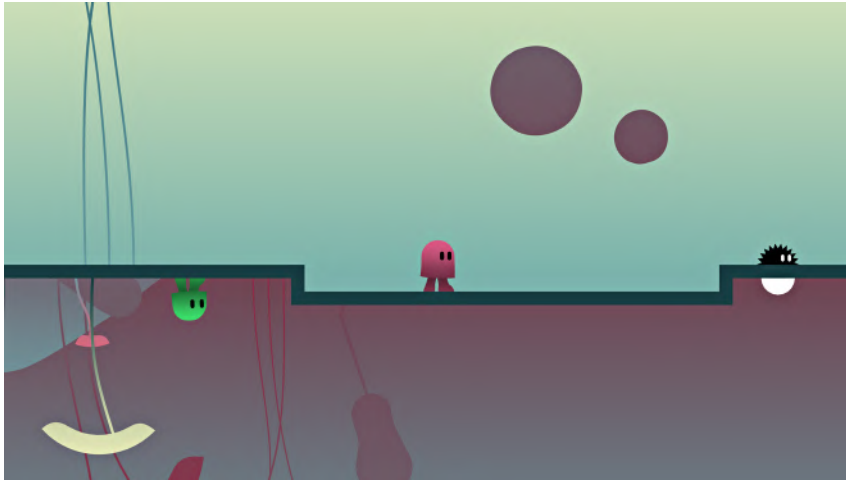
Similar abilities can still provide agency for both characters when they are in separate locations.

The Boy and Shadow of the game Shadow Puppeteer.

In addition, we gave each character the same basic interaction skills, such as moving crates, pulling levers and carrying lids. The difference was that only the Boy could interact with objects in the »real« world, while the Shadow could only interact with the shadows of those objects. Doing this gave us the opportunity to create puzzles where part of the solution involved figuring out which character needed to interact with what. For example, having one object's shadow cast within another shadow, made it inaccessible to the Shadow character. Similarly, placing objects in the background or foreground could bring them in or out of the Boy's reach. Via the individual skills in the complimentary mechanics, we made both players necessary to the progression of the team, while still making them feeling connected.

Each character also has unique skills. For example, we altered the Shadow's gravitational pull to make him drawn to the closest, strongest light source. This enabled the Shadow to reach new and interesting locations within levels. In addition, both characters have skills that are dependent on actions being performed by the other. A good example of this is

when the Boy uses a lantern to cast shadows against the wall that the Shadow can pick up and use. These types of abilities force players to communicate and work closer together.

Balancing Action and Importance

To give each player an equal sense of purpose, the number and importance of tasks each character performed had to be balanced. To illustrate an example of how we did this, let's look at an early level called »Home«.

In Home, the Boy can progress through the first section of the level by climbing a ladder. However, the ladder only exists in the 3D world, which is inaccessible to the Shadow. To help the Shadow progress, the Boy must pull a crate from the shadows into the light to create a platform for the Shadow to jump to.

At the next stage of the level the shoe is on the other foot. A tree branch in the foreground is casting a shadow, creating a platform for the Shadow to use to advance. But, the branch is too thin for the Boy to use as a platform. The Shadow must now create a suitable platform for the Boy by pushing a crate's shadow, which in turn moves the physical crate into the Boy's reach. The »first one, then the other« nature of play creates a dynamic that emphasizes the importance and dependency of both players and balances the amount they have to do so their involvement feels equal. We found there was great effect and enjoyment in switching the power dynamic between the players, alternating who was helpful and helpless in this manner.

Creating Co-op Narratives

If your game has any kind of narrative, you need to think about the story's progression. I.e., what is happening in the story and how does that affect your character(s) physically and emotionally. Or, are there changes happening to the character that should be reflected in the gameplay?

With a co-op title, your characters should have equal story progression. But the question is, how can you achieve this? Most classic

The lid: An example of when both can use an item, but the result is different.

stories have one protagonist, reducing other characters to helpers, givers, or villains. If you cast one of the players in the traditional hero role, the others will automatically be less important, as their role is defined by their relationship to the protagonist. We found it is important to give each character story development, making it impossible to have a traditional protagonist. But then other questions must be considered: Should the characters develop in tandem or asynchronously? How do their experiences coincide? How do they differ? Try to divide the story into two and consider it from each character's perspective, as each character may be affected by the same event in different ways.

We wanted both characters to have their own distinct purpose – mechanically and emotionally – so we decided to create a rich backstory. Even though our players would only be told a fraction of this backstory, even the simple facts about our characters that we told enriched our gameplay. This kind of exercise also helps create consistency in the development of characters, style and gameplay.

In Shadow Puppeteer, we realized our story was centering around the villain. He is the one who incites and creates conflict. He is the focal point and catalyst for the development of the story, and is responsible for bringing the players' characters together. And, even though his story is only hinted at through the game, he actually has the most character development.

Balancing with Skill Charts

One helpful tool we used to ensure that the introduction and frequency of gameplay elements was well portioned, is something we call »skill charts«. In our skill chart for Shadow Puppeteer, we noted when gameplay elements were introduced and in what levels they were used. By getting an overview like this, a skill chart helps balance progression by revealing if certain gameplay elements are far more frequent than others. Skill charts can be

Which of the characters can get up to the next landing?

a useful tool to balance progression, whether it is a singleplayer or co-op game. For our Shadow Puppeteer skill chart, we made notes of when the individual players performed each action. This enabled us to understand the level of importance and participation each character had throughout the game.

Conclusion

Most game development projects have different starting points. Depending on a developer's vision, his/her game might be inspired mostly by mechanics or by narrative. Either way, we found that it's crucial to let the co-op nature of the game guide every part of the design. Co-op is not something you can add toward the end of development and expect to deliver a satisfying and balanced experience to players. You must commit to co-op and make your characters equally important throughout the gameplay experience. This is the best way to ensure you provide joy and engagement, and avoid the tagalong trap.

Catharina Bøhler, Marianne Lerdahl

	climbing/ladders	build path	Boy help shadow	Block smoke	Shield	dangerous heights	Puzzle	split path
w1 lvl0								
w1 lvl1								
w1 lvl2	x	x	x	x				
w1 lvl3	x	x	x	x	x	x	x	
w1 lvl4						x		x
w1 lvl5	x	x	x	x	x	x	x	
w1 lvl6		x	x			x	x	x
w2 lvl1	x	x	x					x
w2 lvl2			x				x	
w2 lvl3			x				x	
w2 lvl4	x		x			x		x
w2 lvl5							x	x
w3 lvl1	x	x	x		x	x		x
w3 lvl2	x	x	x			x	x	x
w3 lvl3		x	x			x		x
w3 lvl4						x		x

A skill chart like this one can help to balance progression by revealing if certain gameplay elements are more frequent than others.

UNTERNEHMENSFINANZIERUNG
IN DER GAMES-BRANCHE

Vor allem junge Entwicklerteams stehen häufig vor dem Problem, wie sie aus einem Hobby am besten eine Profession machen. Dr. Lutz Anderie gibt einen Überblick über verschiedene Unternehmensformen und Finanzierungsmöglichkeiten, wie sie für die Games-Branche funktionieren.

Dr. Lutz Anderie
ist Fachbuchautor von Games Industry Management: Gründung, Strategie und Leadership.

Dr. Lutz Anderie gilt als international anerkannter Branchenexperte der Games-, Medien- und Entertainmentindustrie. Er verfügt über umfangreiche Management-Expertise in der Unternehmensführung sowie der Vertriebs- und Marketingsteuerung und war für Unternehmen wie Sony PlayStation, Atari und Bandai Namco tätig. Dr. Anderie zeichnete für die Markteinführung von über 100 Videogames verantwortlich, einschließlich der Topseller »Uncharted«, »Gran Turismo« und »The Witcher«. Er gründete sein erstes Unternehmen während seines Studiums und unterstützt Start-ups aus den Bereichen Games und YouTube. Weitere Informationen unter: http://www.anderie-management.com

Making Games« ist sicherlich eine der schönsten beruflichen Aktivitäten unserer Zeit. »Financing Games« ist gleichzeitig sicherlich eine der komplexesten Aktivitäten unserer Zeit. Während die Entwicklung und die Vermarktung von Games als »Fun und Action«-Part der Games-Branche wahrgenommen werden, erfährt der Bereich der Finanzierung eine stiefmütterliche Behandlung in vielen Games-Unternehmen. Weil Erfolg und Misserfolg in der Games-Branche dicht beieinanderliegen, gilt es zu wissen, dass die Unternehmensfinanzierung stark dazu beiträgt, ob Studios scheitern oder erfolgreich sind.

Obwohl Games eine Leittechnologie für andere Branchen darstellen, sind Start-ups im Games-Markt regelmäßig chronisch unterfinanziert, was sich im Wesentlichen durch folgende Gegebenheiten erklären lässt:

- Zu geringes Startkapital
- Eingeschränkter Zugang zu den Kapitalmärkten
- Visionen nicht mit Business-Realitäten abgeglichen
- Mangelndes Management-Know-how

Aber auch Games-Unternehmen, die sich schon eine Zeit lang im hart umkämpften Games-Markt behaupten konnten, stehen immer wieder vor der Herausforderung, dass Finanzierungen »gestemmt« werden müssen, um Wachstum zu realisieren oder Krisen zu bewältigen.

Weiterhin stellt die Wandlung des tradierten Developer-Publisher-Distributor-Modells eine Herausforderung für Games-Unternehmen dar. Monetarisierungsmodelle, die auf einem Free2Play-Business-Modell basieren, bergen immer ein hohes Risiko insofern, als die Refinanzierung der Entwicklungskosten nicht sichergestellt werden kann.

Ist das Unternehmen börsennotiert, steht insbesondere die Verschiebung eines Veröffentlichungstermins den Erwartungen des Kapitalmarkts diametral entgegen: Wird das Game nicht rechtzeitig im Markt eingeführt, können Umsatz und Ergebnisziele nicht plangemäß realisiert werden, was mit Kursabschlägen an den Börsen bestraft wird. Wird das Game jedoch erfolgreich im Markt released, können extrem hohe Renditen erwirtschaftet werden, die in anderen Branchen nur schwerlich zu erreichen sind.

Unternehmensgründung und -führung

Unternehmensgründungen in der Games-Branche werden in der Regel durch eine Geschäftsidee initiiert. Oft ist es der begeisterte Gamer, der sein Hobby zum Beruf machen möchte. Gute Ideen, Leidenschaft und Euphorie sind wichtige, wenn nicht sogar zwingende Voraussetzungen für ein erfolgreiches Unternehmertum. Idealerweise werden Leidenschaft und Euphorie kanalisiert und durch Freunde und Bekannte in der Branche oder anderweitige professionelle Unterstützung strukturiert.

Crossy Road

Angry Birds

Plants vs. Zombies

Candy Crush
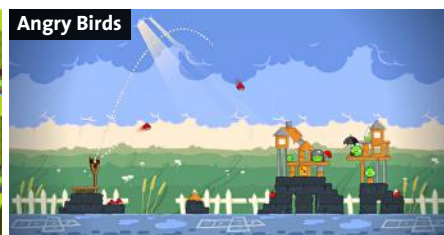
Das Free2Play-Geschäftsmodell ist noch recht jung und hat einige erfolgreiche Spiele hervorgebracht. Doch es birgt auch Risiken, weil die Refinanzierung der Entwicklungskosten nicht garantiert ist.

Für die Games-Branche gilt, dass sich Unternehmensziele an einer Marktorientierung ableiten lassen müssen. Das ist leichter gesagt als getan, weil der Games-Markt – im Vergleich zu anderen Konsumgüter-Branchen – schnellen Veränderungen unterliegt. Die Unternehmensführung marktorientiert nach den Anforderungen des Marktes auszurichten, scheint eine Selbstverständlichkeit zu sein, die keiner weiteren Erläuterung bedarf. Der Markt, die Abnehmer, die in der Games-Branche als Community bezeichnet werden, entscheiden über den langfristigen Bestand eines Unternehmens. Ein Unternehmen, das Produkte entwickelt, die vom Markt nicht angenommen werden, wird in absehbarer Zeit nicht mehr existieren können. Deshalb gilt es, heute die richtigen marktorientierten Entscheidungen zu treffen, um morgen noch als Unternehmen erfolgreich zu sein.

Rechtsform und Businessplan

Für den Unternehmensgründer in der Games-Branche stellt sich die Frage, unter welcher Rechtsform das Unternehmen geführt werden soll. Hierbei kann zwischen einem Einzelunternehmen, einer Personengesellschaft oder einer Kapitalgesellschaft gewählt werden. Die bekanntesten Kapitalgesellschaften sind die GmbH (Gesellschaft mit beschränkter Haftung) und die AG (Aktiengesellschaft). Die UG (Unternehmergesellschaft) und Ltd. (Limited) sind Rechtsformen einer Kapitalgesellschaft, die zunehmend an Bedeutung gewinnen.

Format, Art und Umfang des Businessplans sollten in Übereinstimmung mit den Anforderungen entwickelt werden, welche die Unternehmensführung und Investoren an das Dokument stellen. Im Umfeld der gamescom 2015 wurde auf der Respawn-Konferenz eine Businessplan-Toolbox vorgestellt, die sich in der unternehmerischen Praxis der Games-Branche bewährt hat. Die Businessplan-Toolbox umfasst folgende Elemente eines Baukastensystems: Milestoneplan, Marketingplan, Financialplan und die notwendigen Unternehmensinformationen. Fügt man diese zu einem Dokument zusammen, liegt ein für die Games-Branche geeigneter Businessplan vor.

Finanzierung und Kapitalbeschaffung

Die Finanzierung eines Unternehmens ermöglicht die Gründung, das Wachstum und die Krisenbewältigung. Die Unternehmensfinanzierung wird in der Praxis überwiegend als Kapitalbeschaffung interpretiert, unter monetären Aspekten bedeutet dies die Geldbeschaffung. Die Finanzierung dient der Kapitalbedarfsdeckung. Finanzierung kann somit als Kapitalbeschaffung für die Unternehmung definiert werden. Bei der Finanzierung kann das Kapital »von außen« (Außenfinanzierung) oder »von innen« (Innenfinanzierung) zugeführt werden, ein Gliederungshorizont aus der Perspektive des Kapitalzuflusses. Die Differenzierung zwischen Eigenkapital und Fremdkapital ist ebenfalls möglich. Das Eigenkapital wird von den Unternehmern (Eigentümern) entweder direkt zur Verfügung gestellt, indem sie sich am Unternehmen beteiligen oder es gründen. Oder es wird von den Unternehmern indirekt zur Verfügung gestellt, indem die Eigentümer auf die Auszahlung von Gewinnen, die ihnen eigentlich zustehen, ganz oder teilweise verzichten. Grundlegendes Merkmal ist, dass das Eigenkapital dem Unternehmen dauerhaft zur Verfügung steht. Eigenkapitalgeber erwerben Eigentümerrechte am Unternehmen. Für den Unternehmer der Games-Branche stellt sich deshalb die Frage, ob er einen Investor wünscht, der Eigenkapital in das Unternehmen einbringt. Falls ja, ist zudem zu klären, zu welchem prozentualen Anteil der Investor mit seinem eingebrachten Eigenkapital am Unternehmen beteiligt sein soll. Hier gilt es, zwischen einer Mehrheits- und Minderheitsbeteiligung zu differenzieren. Im angelsächsischen Sprachraum spricht man in diesem Zusammenhang vom sogenannten Controlling Share, der dem Investor ab einem Anteil von 51 Prozent umfangreiche Rechte einräumt. Bei der Finanzierung mit Fremdkapital leiht sich der Unternehmer Geld von einer Person, einer Institution oder einer Bank. Hierfür werden Zinsen gezahlt, die erwirtschaftet werden müssen. Ein wesentlicher Vorteil ist, dass der Geldgeber keinen (direkten) Einfluss auf die Unternehmenssteuerung nehmen kann, solange die Zinsen regelmäßig gezahlt werden.

Business Angels sind häufig wohlhabende Privatpersonen, die in Unternehmen investieren. Bekannter Vertreter ist Klaas Kersting, der Gründer von Flaregames und Gameforge, der als Business Angel unter anderem in »Clash of Clans«-Entwickler Supercell investiert hat, einen der heute am höchsten bewerteten Entwickler der Branche.

Crowdfunding ist heute ein guter Weg, um seine Unternehmung zu finanzieren. Bekanntester Vertreter der Schwarmfinanzierung ist Kickstarter, doch inzwischen haben sich zum Beispiel mit Fig sogar Plattformen etabliert, die sich auf die Games-Branche spezialisieren.

Die Finanzierung durch eine Bank kann durchaus von Nutzen sein, allerdings birgt sie auch einige Herausforderungen. Einer der Pluspunkte liegt darin, dass die Bank beispielsweise eine Kontokorrentlinie zur Verfügung stellen kann, welche die Überbrückung von Cash Outflows bei fehlenden liquiden Mitteln innerhalb des Unternehmens ermöglicht. Insbesondere für Unternehmensgründer ist es schwierig, Kredite zu erhalten, weil Banken oftmals nur dann Kredite gewähren, wenn Sicherheiten vorliegen. Für die Games-Branche gestaltet sich die Beschaffung von Krediten über deutsche Banken regelmäßig als schwierig, weil nur in den seltensten Fällen ein Branchenverständnis bezüglich des immateriellen Wirtschaftsguts »Videogame« besteht.

Als traditionelle Finanzierungsmethoden im Sinne von »Games Industry Management« wird im Folgenden ein Spektrum aufgezeigt, das sowohl einen hohen als auch einen geringen Finanzierungsbedarf abdeckt. Die Finanzierung mit Fremdkapital, die in der Fachliteratur synonym als Bankenfinanzierung bezeichnet wird und bereits dargelegt wurde, wird daher an dieser Stelle nicht noch einmal erläutert.

Bootstrapping

Hierunter versteht man den Unternehmensstart ohne nennenswerte Unterstützung durch externe Finanziers oder Institutionen. Beim Bootstrapping wird mit einer starken Kostenreduktion gearbeitet, das heißt, die Mitarbeiterzahl wird gering gehalten, Equipment wird geleast anstatt gekauft, Lieferantenkredite werden genutzt und alle Gewinne werden in das Unternehmen reinvestiert.

Bootstrapping hat insbesondere in der Start-up-Phase eines Games-Unternehmens eine hohe Bedeutung und wird regelmäßig angewendet.

Einsatz von persönlichem Vermögen

Bei dieser Finanzierungsform eines Start-ups setzt der Unternehmensgründer sein persönliches liquides Vermögen (Ersparnisse, Aktienverkauf etc.) ein. Hierbei bleibt der Unternehmensgründer der alleinige Besitzer des Unternehmens, trägt aber auch das volle Risiko. Erwirtschaftet er Gewinne, stehen ihm diese alleinig zu. Scheitert das Unternehmen, verliert er auch sein persönliches Vermögen.

»Family and Friends«-Finanzierung

Regelmäßig werden Unternehmen auch mit einer Anfangsfinanzierung durch Verwandte und Freunde gestartet. Der Stolz und die Freude, wenn die Verwandtschaft den Unternehmensstart ermöglicht hat und ein Unternehmen prosperiert, können überwältigend sein. Allerdings sollten immer die Chancen und Risiken aufgezeigt werden. Diese Vorgehensweise ist entscheidend für den Fall, dass das Unternehmen nicht ausreichende Umsätze und Gewinne erwirtschaftet oder scheitert.

Eigenkapitalfinanzierung

Wie bereits dargelegt werden bei dieser Finanzierungsform Unternehmensanteile an die Geldgeber übertragen. Diese werden dann zu Investoren und sind entweder mit einer Mehrheits- oder Minderheitsbeteiligung in das Unternehmen involviert. Der Unternehmensgründer muss sich entscheiden, ob und wenn ja wie viele Unternehmensanteile er an Investoren übertragen möchte. Je nach Gesellschafterbeschluss werden die Gewinnverteilung und die Mitbestimmungsrechte geregelt. Unternehmensanteile zu übertragen ist für den Unternehmer risikoreich: Es besteht die Gefahr, die Kontrolle über das Unternehmen zu verlieren, wenn die Interessen von Investoren und Management nicht mehr deckungsgleich sind.

Angel-Investoren

Sogenannte Business Angels sind häufig wohlhabende Privatpersonen, die aus unterschiedlichen Gründen in ein Unternehmen investieren. Als mögliche Gründe können Freundschaften, die Förderung von Unternehmertum in einer bestimmten Branche oder andere Interessen sein. Ein Business Angel möchte an dem erwirtschafteten Gewinn eines Unternehmens partizipieren. Steht hinter einem Investor keine Venture-Capital-Organisation, sondern handelt es sich um unabhängige Investoren, werden diese regelmäßig als Business Angels bezeichnet.

Venture Capital

Wenn das Unternehmen gegründet wird, ist es notwendig, Anfangsinvestitionen zu tätigen. Das benötigte Kapital können Venture-Capital-Unternehmen zur Verfügung stellen, beispielsweise für die Wachstumsfinanzierung. Diese Anfangsinvestition wird als »A Round« oder »erste Finanzierungsrunde« bezeichnet. Wenn das Unternehmen weiteren Kapitalbedarf hat, wirft das schnell die Frage auf, wie im Hinblick auf die Unternehmensanteile zu verfahren ist: Die »Dilution« (Verwässerung) sollte gleichmäßig getragen werden. Ist der Unternehmer – meist der Gründer – in der Lage, weiteres Finanzierungskapital in das Unternehmen einzubringen, sollte ihm die Möglichkeit gegeben werden, seinen Anteil aufzustocken. Auch in Europa und den deutschsprachigen Märkten gewinnt Venture Capital zunehmend an Bedeutung – nicht zuletzt aufgrund der Niedrigzinspolitik der EZB. In Deutschland sind die Voraussetzungen nach wie vor optimierungsbedürftig, selbst wenn in den vergangenen Jahren Fortschritte gemacht wurden.

Strategische Investments von großen Unternehmen

Nach ein oder zwei Finanzierungsrunden kann sich für ein Unternehmen die Frage nach einem strategischen Investor stellen. Im Regelfall handelt es sich um ein großes Unternehmen, das Zugang zu einer neuen Technologie, einem Service oder Markt erhalten möchte. Die Deutsche Telekom etwa hat jahrelang in den Games-Markt (Gamesload) investiert, weil sie sich dort Zugang zu dem boomenden Markt versprach. Unter der neuen strategischen Ausrichtung zog sich die Telekom aus diesem Markt zurück. Den Zugang zu strategischen Investoren ermögli-

FFF Bayern

Film und Medien Stiftung NRW

mdm
Mitteldeutsche Medienförderung

nordmedia

Auf Bundes- und Länderebene gibt es verschiedene Institutionen, die Förderungen vergeben, für die sich auch Spieleentwickler bewerben können. Dies hier ist nur eine kleine Auswahl. Doch Vorsicht: Der Bewerbungsaufwand ist nicht zu verachten!

SALES

Sales (m€) – CAGR 2003-2015 = 31%
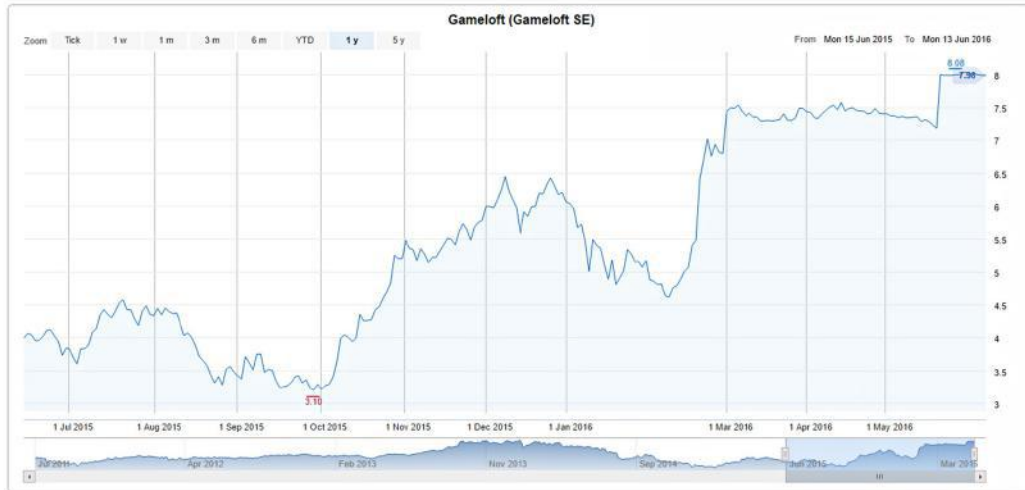
chen für gewöhnlich erfahrene Dienstleistungs-
partner wie Roland Berger, ALP Legal & Finance
Advice oder Global Top Round (GTR). Weiterhin
gibt es den Trend, dass asiatische Investoren
Kontakte zu Unternehmen in Europa suchen
und Millionenbeträge investieren. Es gilt hier al-
lerdings, den Cultural Fit zu prüfen, weil sich asi-
atische Geschäftsgepflogenheiten fundamental
von den nordeuropäischen unterscheiden.

Durch die Digitalisierung der Finanzbranche
gibt es inzwischen zahlreiche »jüngere Formen«
der Finanzierung, wie Peer-to-Peer-Kredite oder
Media-for-Equity-Deals. Dieser Trend wird als
Fintech beschrieben und es existieren mitt-
lerweile über 12.000 Unternehmen, die in das
»neue Marktsystem« drängen. Aufgrund der Re-
gularien operieren diese Unternehmen jedoch
teilweise in einer rechtlichen Grauzone, sodass
die Chancen und Risiken einer solchen Finan-
zierungsform genau geprüft werden sollten. Für
die Games-Branche ist die Finanzierungsform
des Crowdfunding von hoher Bedeutung.

Crowdfunding (Schwarmfinanzierung)
Crowdfunding ist eine der jüngeren Formen der
Unternehmensfinanzierung. Hierbei sammelt
der Unternehmensgründer Kapital von Fans
ein, die er im Allgemeinen über Social Media
gewonnen hat. Relativ bekannt ist die Plattform
kickstarter.com, die jedoch ihre Regularien
regelmäßig aktualisiert, um Missbrauch vor-
zubeugen. Mittlerweile gibt es noch zahlreiche
weitere Plattformen, die eine Option bei der
Unternehmensfinanzierung darstellen können.

Finanzierung durch Förderprogramme
Eine der Möglichkeiten der Games-Finan-
zierung ist die Nutzung von Fördergeldern,
die aus öffentlichen Fonds im Rahmen der
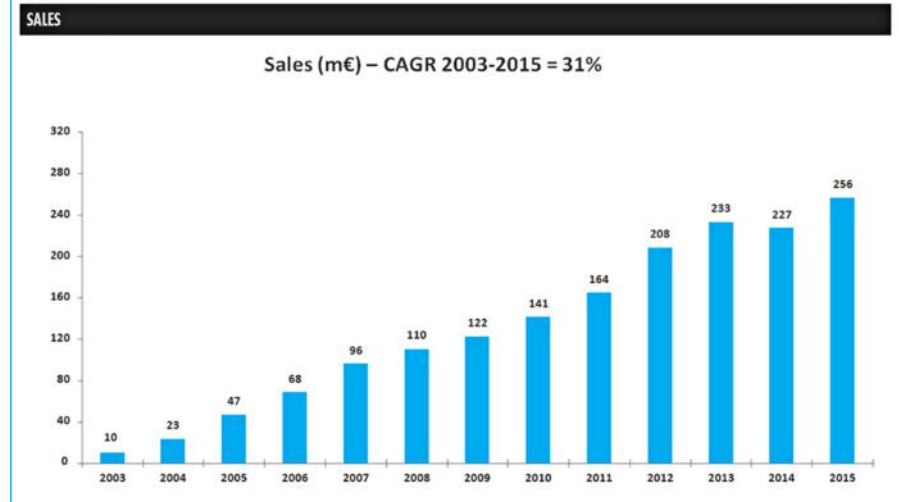
Wirtschaftsförderung zur Verfügung gestellt
werden. Hierbei handelt es sich um Mittel, die
auf Bundes- und Landesebene beantragt wer-
den, teilweise aber auch bei großen Kommu-
nen und Städten abgerufen werden können.
Die Intention dieser öffentlichen Stellen liegt
auf der Hand: Wirtschaftsförderung soll be-
stimmte Branchen in der jeweiligen Zielregion
ansiedeln und dort dauerhaft Arbeitsplätze
und Steuereinnahmen sicherstellen.

Im Folgenden werden einige Organisatio-
nen, die Fördergelder vergeben, exemplarisch
benannt. Weil sie einem beständigen Wandel
unterliegen, bietet es sich an, die jeweilige
Förderstruktur online zu überprüfen:

- Medienboard Berlin-Brandenburg
- Wirtschaftsförderung der Stadt Frankfurt
  und des Landes Hessen (BM H)
- Mitteldeutsche Medienförderung

Ein Börsengang kann als Exit-Strategie funktionieren oder, um
mehr Finanzmittel zu generieren. Doch wie im Falle von Gameloft
und der »feindlichen Übernahme« durch Vivendi kann es auch
nach hinten losgehen.

51

- Film- und Medienstiftung NRW
- MFG Baden-Württemberg – Digital Content Funding (DCF)
- Nordmedia – Film- und Mediengesellschaft Niedersachsen/Bremen
- FilmFernsehFond Bayern (FFF Bayern)
- GameUp Rheinland-Pfalz

Prinzipiell handelt es sich hierbei um eine Option, die als Teil der Unternehmensfinanzierung geprüft werden kann. Die zu überwindenden administrativen und zeitlichen Hürden gilt es nicht zu unterschätzen: Formulare müssen ausgefüllt werden, Wartezeiten sind zu überbrücken, und regelmäßig sind die staatlichen, halbstaatlichen oder auch anderweitige mit der Vergabe der Fördergelder beauftragte Personen nicht mit der Games-Branche vertraut. Laut Branchenexperten kann sich der zeitliche Aufwand auf bis zu 200 Arbeitsstunden belaufen.

Monetarisierung und betriebswirtschaftliche Kennzahlen

Monetarisierung beschreibt den Prozess, durch den aus einem Produkt ein finanzieller Nutzen gewonnen wird. Im Wesentlichen kann durch folgende Erlösmodelle monetarisiert werden:

- Einzelverkauf von Games über den Einzelhandel
- Einzelverkauf von Games über das Internet
- Premium Accounts für Online-Spiele und Spiele für mobile Endgeräte
- Verkauf von virtuellen Gütern

- Abonnements für komplexe Multiplayer-Spiele (z. B. MMOG)
- In-Game Advertising (Einnahmen aus der Vermarktung von Werbeplätzen)

Unter Monetarisierung versteht man also schlicht das Zu-Geld-Machen von Produkten. Die Erlöse der Monetarisierung stellen den Umsatz des Unternehmens dar.

Es gibt zahlreiche betriebswirtschaftliche Kennzahlen, die für eine professionelle, marktorientierte Unternehmensführung in der Games-Branche entscheidend sind. Neben dem im Folgenden aufgezeigten Umsatz und Gewinn sind der Deckungsbeitrag, EBITDA (Earnings before Interest, Taxes, Depreciation) und ROI (Return on Investment) entscheidend.

Wie bereits erläutert führt die Monetarisierung von Games dazu, dass der Umsatz, eine betriebswirtschaftliche Kennzahl, generiert wird.

Umsatz

Der Umsatz ergibt sich durch Multiplikation von abgesetzten Stückzahlen (Einheiten) mit dem Preis. Rechenbeispiel Umsatz: Angenommen, ein Konsolenspiel wird 100.000-mal zum Preis von 49,99 Euro verkauft, so wird ein Umsatz von 4.990.000 Euro erwirtschaftet: 100.000 Stück x 49,90 Euro = 4.990.000 Euro

Dabei ist zwischen Brutto-, Netto-, Handels und Publisher-Umsatz zu differenzieren.

Die Preisstellung des Games beeinflusst den Umsatz nachhaltig. Eine regelmäßig angewendete Vorgehensweise ist die sogenannte Marktabschöpfungsstrategie, die im angelsächsischen Sprachraum als Market Skimming bezeichnet wird. Unternehmen setzen zu Beginn der Vermarktung hohe Preise fest, um die Zahlungsbereitschaft der Kunden Schicht für Schicht vom Markt abzuschöpfen. Das bedeutet, dass beispielsweise ein Konsolenspiel zunächst zu einem Premiumpreis im Markt eingeführt wird. Im Laufe des Produktlebenszyklus wird dieser dann im Rahmen eines Kaskaden-Modells reduziert. Die Darstellung in **Abbildung 1** verdeutlicht die Vorgehensweise.

Vor einigen Jahren wurde in der Games-Branche das sogenannte Free2Play-Modell eingeführt. Dieses war möglich, weil der Markt für Computer- und Videospiele polypolistisch (viele Anbieter und viele Nachfrager) und durch geringe Markteintrittsbarrieren (»Lass uns ein App-Game entwickeln«) geprägt ist. Umso erfreulicher es für die Community ist, dass viele Games kostenlos gespielt werden können, desto abschreckender wirkt dieses Modell auf potenzielle Kapitalgeber und Investoren. Kapital in ein Unternehmen zu investieren, das seine Produkte kostenlos zur Verfügung stellt, lässt sich im Hinblick auf den ROI aus Investorensicht nur schwerlich nachvollziehen. Natürlich kann die Monetarisierung via DLCs (Downloadable Content) erläutert werden. Allerdings ist dieses Monetarisierungs-Know-how limitiert. Expertenschätzungen gehen davon aus, dass von den 10.000 bis 15.000 Games-Unternehmen, die es

Große Unternehmen stecken durchaus Geld in Märkte, an die sie hohe Erwartungen haben. Die Deutsche Telekom beispielsweise hat jahrelang in den Games-Markt (Gamesload) investiert, weil sie sich dort Zugang zu dem boomenden Markt versprach.

Facts und Figures zum Fachbuch

Mit »Games Industry Management: Gründung, Strategie und Leadership« erscheint erstmals ein umfassendes, deutschsprachiges Fachbuch über den Games-Markt aus betriebswirtschaftlicher Perspektive.

Der Autor, Dr. Lutz Anderie, dokumentiert und analysiert die marktorientierte Unternehmensführung in der Games-Branche sowie die damit einhergehenden Managementprozesse. Unternehmensgründungen werden unter branchenrelevanten Aspekten dargestellt. Die Erstellung von Businessplänen, das Gewinnen von Pitches sowie die Möglichkeiten der Unternehmensfinanzierung werden aufgezeigt und durch konkrete Handlungsempfehlungen abgerundet. Monetarisierungsmodelle, Return-on-Investment-Strategien, Controlling-Mechanismen und Finanzierungsformen werden verständlich und praxiorientiert dargelegt. Das Fachbuch, das im Rahmen der Games-Vorlesung »Unternehmensgründung und -führung« an der SRH University Heidelberg entwickelt wurde, beinhaltet zahlreiche strategische und taktisch-operative Analysen, die für die erfolgreiche Vermarktung von Videogames entscheidend sind.

Über 100 Fallbeispiele, einschließlich der Unternehmen Electronic Arts, Ubisoft, CD Projekt, Crytek, Deck 13 und Sony PlayStation, veranschaulichen die unternehmerischen Erfolge und Misserfolge. Die Vertriebskanäle der digitalen und physischen Distribution werden analysiert. Die jüngsten Entwicklungen bei Online und Mobile Games werden ebenso aufgezeigt wie die Distribution von Games im stationären Handel. Multi-Channel-Strategien werden erläutert und durch Perspektiven des Omni Commerce abgerundet.

Über 50 Games-Vermarktungen, inklusive der Titel »The Witcher«, »Lords of the Fallen« und »Clash of Clans«, werden analysiert und die Elemente des Marketing-Mix (Produktentwicklung, Preisstellung, Kommunikationsstrategien, Placement) umfangreich dargestellt. Das Buch veröffentlicht aktuelle Marktdaten und beinhaltet eine Markt- und Wettbewerbsanalyse. Anwendungsorientierte Rechtskenntnisse für Existenzgründer, Publisher und Developer werden dargelegt. Einen besonderen Fokus erfährt das Themengebiet Leadership, bei dem die Zusammenstellung, das Management und die Entwicklung von Teams in Theorie und Praxis erläutert werden.

»Games Industry Management: Gründung, Strategie und Leadership« richtet sich gleichermaßen an Studierende, Unternehmensgründer, Manager und Investoren der Games-Branche.

- ca. 270 Seiten
- Veröffentlichung: 29. Juni 2016
- Springer Gabler Verlag
- ca. 50 Euro
- über 30 Abbildungen
- Businessplan in 5 Stufen
- 8 Kapitel:
  - Einführung
  - Betriebswirtschaftliche Grundlagen unter besonderer Berücksichtigung der Aspekte für die Games-Branche
  - Definition und Abgrenzung von Begrifflichkeiten und Märkten
  - Unternehmensgründung und Unternehmensführung
  - Strategien für unternehmerischen Erfolg in der Games-Branche
  - Leadership in der Games-Branche
  - Erfolg, Misserfolg und Comeback
  - Ausblick und Conclusion

weltweit gibt, nur 100 bis 150 über das entsprechende Monetarisierungs-Know-how verfügen. Die Free2Play-Marktentwicklung lässt sich wohl kaum rückgängig machen, deshalb gilt es für Games-Unternehmen, sich das Free2Play-Monetarisierungs-Know-how anzueignen.

Gewinn

Subtrahiert man vom Umsatz die Kosten, so errechnet sich der Gewinn.

Rechenbeispiel Gewinn: Angenommen, die Kosten für ein Konsolenspiel belaufen sich auf 4.000.000 Euro, so ergibt sich ein Gewinn von 990.000 Euro:

```
  4.990.000,– Umsatz
- 4.000.000,– Kosten
=   990.000,– Gewinn
```

Unternehmens-Exit

Unter einem Unternehmens-Exit versteht man die Beendigung der unternehmerischen Tätigkeit eines Gründers, des Managements oder der involvierten Investoren.

Insbesondere wenn das Unternehmen mit Venture-Capital-Gesellschaften zusammenarbeitet, ist die Exit-Strategie wesentlicher Bestandteil der Geschäftsbeziehung. Grundsätzlich ergeben sich die folgenden Exit-Optionen:

- Börsengang
- Staying Private
- Merge with Competitor

Börsengang

Noch bis zum Platzen der Internetblase im Jahr 2001 galt ein Börsengang, das »going public«, im Rahmen eines IPO (Initial Public Offering) als Königsdisziplin der Unternehmensgründung und -entwicklung. Mit dem Börsengang sind weitgehende Veröffentlichungspflichten von Relevanz. Das Unternehmen muss sich dessen bewusst sein und die Verantwortung übernehmen, die neuen Anteilseigner regelmäßig zu informieren. Das gilt sowohl für gute als auch schlechte Nachrichten bezüglich der Unternehmensentwicklung, und deshalb kommt dem CEO (Vorstandsvorsitzenden) und dem CFO (Finanzvorstand) eine entscheidende Rolle zu.

Staying Private

Als Alternative zum Börsengang zeigt William Draper, ein Silicon Valley Venture Capitalist, der bereits Activision finanzierte, die Option des Staying Private auf. Er benennt zahlreiche Unternehmen, die eine signifikante wirtschaftliche Stellung einnehmen und trotzdem nicht an »die Börse gegangen sind«.

Merge with Competition

Hierunter versteht man die Fusion oder den Verkauf eines Unternehmens an den Wettbewerb. Dies kann unter der Perspektive von Marktanteilsgewinnung erfolgen. Dabei können größere Unternehmen kleinere übernehmen und umgekehrt.
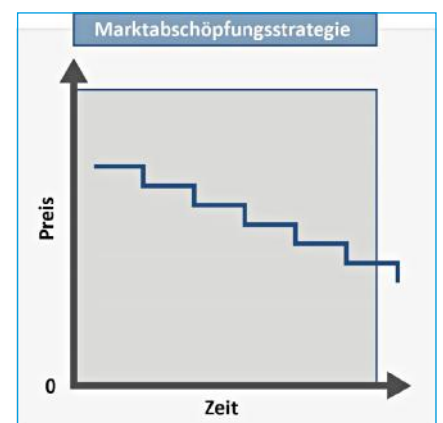
Dr. Lutz Anderie

Abbildung 1: Die Grafik zeigt, wie die Marktabschöpfungsstrategie funktioniert.

INNOGAMES AT DÜSSELDORF

A RETROSPECTIVE AFTER ONE AND A HALF YEARS

InnoGames started with the development of browser games and became successful at it. Here the company describes how they approached the transition to mobile games and why a new studio with new and very experienced employees was important for that.

Dennis Rohlfing
is Studio Director
at InnoGames.

Dennis Rohlfing is a Studio Director at InnoGames, one of the world's leading developers and providers of online games. As part of the InnoGames family since 2010, he produced the company's hit-strategy game, »Forge of Empires«, and later became the Head of Producing, responsible for »Elvenar«, and the company's move to mobile. Now, he leads one of the studios with several mobile game productions in the pipeline, including the strategy game produced in Düsseldorf. In fact, Rohlfing was the main driving force behind InnoGames' journey towards a second location within Germany. A gamer at heart, Rohlfing graduated in Computer Science and later went to work for Bremen online and Ubisoft Blue Byte.

Thomas Friedmann
is Studio Director
at InnoGames.

Thomas Friedmann is a Studio Director at InnoGames and was the Co-Founder and Managing Director of Funatics Software in Oberhausen from 1998 to 2016. A powerhouse in the gaming industry, he is active at BIU.Dev, in NRW and has been involved in various projects. From 2004 to 20013, he was the Co-Founder, Board member and Head of the Board of GAME Bundesverband. He was a Co-Designer of inter alia of the »Cultures« series and »The Settlers – Heritage of Kings«. Friedmann holds various lectures in several educational institutes and holds a diploma in business informatics at FH Karlsruhe.

Recruitment competition in Hamburg is getting tougher. Thomas Friedmann and Dennis Rohlfing reflect on establishing InnoGames in a second location and the huge set of opportunities North Rhine-Westphalia (NRW) offers for game developers. They discuss the lessons they learned from the company's shift from browser to mobile and how this was reflected in the new studio:

While moving from browser to mobile, we quickly recognized that our teams needed new skill sets to fully utilize the capabilities of mobile devices. With ambitions for small, cross-functional teams, we were forced to change our technological foundations and to find experts for our new base technologies: Unity and Unreal Engine. Therefore, a change in strategy towards a second location within Germany became necessary to be able to continue growing through experts.

Going Mobile

Within the last years, InnoGames faced the challenge of a transition from pure browser based development in PHP, Java, JavaScript and ActionScript to efficient mobile development teams working with Unity, Unreal Engine 4 and Java.

The very first projects we quickly initiated were the companion apps for our browser games »Grepolis« and »Tribal Wars«. Meaning, we didn't implement the full feature set. Instead, we focused on gameplay elements that players have to execute frequently. We set up two small teams with less than five people each. Grepolis Mobile was developed with Adobe Air, while Tribal Wars used Objective-C for iOS and Adobe Air for Android. Our main goal was to keep the challenge as small as possible while raising retention for our existing player base. Although we managed to achieve the goal, we didn't convert many new mobile players to our browser games.

As our first true cross-platform experience, Tribal Wars 2 became an important addition to our Tribal Wars franchise. Unfortunately, it didn't reach the level of success we were hoping for. It took us too long to deliver a meaningful feature set for all platforms, while the competition got stronger.

Based on the experience we gathered through our companion apps for Grepolis and Tribal Wars, we approached our browser-based blockbuster »Forge of Empires« differently. We wanted a full feature mobile version, which could be played on all devices with the same

account. For the acquisition of new players, the mobile version had to be another entry point. We used the same backend and ActionScript frontend to Cocos2d (C++) to support both mobile platforms (Android and iOS) with one code base. It took us around a year to have the first releasable version in place. The result was (and is still) a very successful cross-platform game.

Key Findings:

- Companion apps can improve your games' KPIs.
- High production values matter for player acquisition.
- Quality needs focus.
- Make use of technologies with efficient tooling.
- New technologies need experts.
- Cross-platform development is slow and expensive.

Based on those findings, we decided to go for Unreal (C++) and Unity (C#) as our default technologies and focused on the mobile platforms specifically.

Since then, we've sent three Unity- or Unreal-based mobile games into production, located in our Hamburg office. We've learned that recruiting capabilities in Hamburg are limited in this regard and that our overall growth strategy needed to be adapted.

Growth Strategy

We believe in small, cross-functional teams to reduce communication overload and to focus on high-quality results. This means a fine balance between senior and junior staff in our teams and an overall company setup where satellite departments take care of infrastructure and knowledge-building and -sharing.

To be able to target different challenges, we implemented a studio structure around one and a half years ago. This change allowed, and still allows, for vertical and horizontal scaling, meaning more games of a genre or additional genres and technologies.

To improve knowledge sharing capabilities and speeding up development through common, reusable interfaces, we decided for Java as our default backend technology and Unity

After the mobile versions of Grepolis and Tribal Wars were more or less companion apps, the mobile version of Forge of Empires was meant to be completely different. The result was (and is still) a very successful cross-platform game.

or Unreal as our default frontend technologies, for all of our upcoming game productions. We went for two different frontend technologies to improve recruitment speed through hiring both, C++ and C# developers.

Since device fragmentation matters in mobile game development (especially on Android) and the use of C-based programming languages, we identified that experienced »classical PC« game developers in each team were even more helpful now. Unfortunately, finding these types of talent exclusively around Hamburg was not practical for us.

In general, the competition in the north of Germany has gotten really strong during the last years, so much that we decided to opt for a second location. We decided to stay in Germany so as to not add too much additional bureaucracy, while still allowing us to improve our local capabilities.

Strategic Growth Opportunities in a new Location

The decision for NRW was quite obvious. NRW is an international media location with numerous TV, media and film production companies.

Tribal Wars 2 became InnoGames' first true cross-platform experience and an important addition to the Tribal Wars franchise.

A company picture of InnoGames.

Before opening the office in Düsseldorf, the core team was prepared for this adventure in several meetings (symbolic picture).

The office in Düsseldorf, which was rented first, could not cope with InnoGames' plans for the future so that after just six month a new building had to be found.

With gamescom in Cologne, it hosts the biggest game show worldwide and has GDC Europe and Respawn as relevant game developer conferences. An additional pro for NWR is that educational institutes like the Cologne Games Lab, University of Duisburg-Essen, MDH Düsseldorf, SAE Institute, School of Games or the Mediengründerzentrum in Cologne are already training students for the games industry.

Games have also been on the political agenda in NRW for many years and the local government is committed to doing even more. Some examples are the Medien Cluster NRW and the CreateMedia.NRW program that both support game developers in NRW with network and funding opportunities. Another example is Mülheim an der Ruhr, which has the Game Factory (an office building with several game companies), a competence center for creative companies etc.

Even if some global players like Electronic Arts, Microsoft or Ubisoft are located in NRW, the competitive situation is very moderate. Almost 18 million people live in NRW and since it is close to the Netherlands and to Belgium, there's more than enough potential to grow.

The final decision for Düsseldorf was even easier. It has an international airport, is easily reachable from Hamburg by airplane or train, it is within reach of the complete Ruhr area and Cologne and has the unique charm of a state capital.

Key Findings:
- NRW has huge human capital, education and moderate competition.
- Düsseldorf as a local capital offers good reachability and direct access to politics.

Preparing for Düsseldorf

Before we actually started setting up a new office in Düsseldorf, we made sure that we had a core team of experts assigned for this journey. We recruited externally and internally, so that we had an established connection to Hamburg right from the start. In parallel, we discussed different obstacles to overcome; like communication channels, traveling, controlling and managing to offer the same benefits to our employees like in Hamburg.

It took us around four months to have the initial setup in place. The core team consisted of around 12 people, where four had been from our Hamburg office and eight had been recruited internationally and from NRW. Together with the core team, we finalized our communication concepts and office layouts.

The opening date for our new office had been set to February 2015. To be efficient, we started with the conception of our first game project in Düsseldorf in October 2014. In January, we invited the core team to Hamburg for a full month: to do some workshops on processes, corporate systems, marketing, analytics and human resources. In addition, the team got introduced to

the first rough idea for their new game, presented by the Game Designer of the core team.

In February 2015, the core team moved into the new and beautiful office in Düsseldorf and started working on their first mobile game.

Key Findings:

- It's all about trust! Only selling a story in the beginning, without having the actual office set up and project planned, is nothing more than a bargain for those, signing their new contracts. You need to build trust, even before you have real knowledge. Don't promise anything you cannot keep for sure.
- Involvement leads to less pain! Preparation is key, but you won't be prepared for everything. You should try hard to gather as much feedback as possible from all potentially involved parties before you start executing. The more you communicate proactively, the more unknowns will be solved before you even considered them to be unknown.

Arriving in Düsseldorf

In the beginning, the team focused on fleshing out the game design and setting up the technical and art foundations, while synching to Hamburg. The team decided for Unity and started recruiting additional development and art support to be ready to produce high production value on mobile devices.

After the first very promising six months, it was clear to us, that we were going to stay and grow even further in Düsseldorf. Since the landlord of our Düsseldorf office building could not cope with our long-term plans, we decided to move to a different location, even closer to Düsseldorf central station.

To connect to local developers and publishers, we initiated several events in our new office, like our housewarming party or a VR (Virtual Reality) workshop.

Today, our first game team in Düsseldorf is around 20 people strong and is working on a new mobile strategy game. Since a few months, we're preparing the second game production, building upon local experts from Oberhausen.

Key Findings:

- Make sure everything is centered on the game you want to develop. The new employees you're recruiting for this journey first and foremost want to know what kind of game they are going to build.
- Discuss your long-term strategy with your landlord right from the start. You don't want to be interrupted by moving into another building during the production of your game, having 16 people working full speed.

Funatics joined the Forces

This story began with a simple telephone call between Michael Zillmer, COO at InnoGames, and Thomas Friedmann, Managing Director of Funatics. Afterwards, InnoGames managed to get the whole team of Funatics on board. How?

Let's take a step back. Funatics is one of Germany's oldest game developer studios. It was founded in 1998 by Thomas Häuser, Thorsten Kneisel and Thomas Friedmann, all three in the games business since the late 1980s. The team of around 20 people has developed numerous

Cultures Online

Panzer General Online

UFO Online

Valhalla Hills

The team of Funatics has a lot of experience in strategy as well as Free2Play games, having worked on titles like Cultures Online, Panzer General Online, UFO Online or Valhalla Hills.

For Grepolis, InnoGames' oldest game running, the first experiments in mobile were started, resulting in a kind of companion app

A photo of the whole team currently working at Innogames' Düsseldorf office.

In March 2016, developer Funatics merged with InnoGames and a big part of the team joined the office in Düsseldorf. The photo only shows 8 of the 17 team members.

games for numerous platforms over the years, including PC, Nintendo DS, Sony PSP, Mac OS or iOS. »Zanzarah«, the »Cultures« series, »Tom Clancy's Endwar« for Nintendo DS and PSP, »The Settlers – The Next Generation« and »Valhalla Hills« are just some examples. Funatics has also been active in the Free2Play market, e.g. with »Cultures Online« or »Panzer General Online« (developed in cooperation with Blue Byte). The team developed mainly in C, C++ and C# and did use several technologies like Renderware, Flash, Adobe Air, Unity or the Unreal Engine.

Funatics was also one of the founders of the GAME Bundesverband. Thomas Friedmann was member and chairman of the board for more than nine years and thus linked to many players in the business. Therefore, he already knew the founders of InnoGames by loose contact, especially Michael from several GAME meetings and European Game Executive's Summits (EGES) in Mallorca. When the phone rang, InnoGames' reputation was an important reason for Thomas to talk about cooperation opportunities. Another important reason was the current market situation, which many game developers are facing today. The games market has dramatically transformed and has been displacement in a way it hasn't been before. Thanks to worldwide portals like the app stores, Steam or GoG.com, everybody all over the world is now able to release games, facing none or very low entrance barriers. Just with a single click. Worldwide. Immediately.

High-end technologies like Unreal engine, Unity or Lumberyard, whose use was an obstacle in the past (that only professional game developers could overcome), are now available for (almost) nothing and for everyone. Thanks to the associated asset stores, even high-end game assets are available for a minimal investment. That means that nowadays thousands of independent and professional game developers all over the world are competing for very limited space on portal pages.

Besides that, due to the growing market share of F2P and the uncountable sales events on Steam and Co., customers have been educated that games are worth literally nothing. Nowadays, less and less titles are able to sell significant numbers at a reasonable price. Most of the »real gamers« that are still willing to pay money for a game, own a huge library of games that they've bought at budget price, but for which they still didn't find the time to play. When an interesting game gets released, many of them decide to first put it on their watch list and wait until they get a »Now on sale!« email from the platform's notification system. As a result, even if you can sell great numbers, it's getting harder

and harder to make enough revenue to finance the growing development budgets.

So when it comes down to business cases and predictable revenue, it comes down to professional marketing knowledge, significant marketing budgets and analytical systems to optimize every marketing dollar you spent in your campaigns.

This is where Funatics and InnoGames have succeeded. InnoGames is a company with strengths in performance marketing and analytics, while the team of Funatics had the experience of working with numerous development technologies and platforms. They had expertise with C-based programming languages and had realized several projects with Unity and Unreal.

Other aspects that brought both companies together were the philosophies, targets and interpersonal chemistry that fit perfectly. »Even if we had expected positive results from our first visit at InnoGames, we were positively surprised when they presented us their strategies and the way they approached several things. They were very open with all information, which made it easy to have good discussions and meet great people«, said Thomas Friedmann. »This convinced us that it would be a perfect fit. With a view of the current market situation, it was a unique opportunity for all of us that we could not let pass by – even after almost 18 years as an independent studio. Another fact made the decision for us even easier: Almost half of the team in Düsseldorf were former colleagues at Funatics. We've been joking that we could now develop Zanzarah 2, as 90 percent of the former Zanzarah team would rejoin at InnoGames. Even though a number of the Funatics team had been part of the initial team in Düsseldorf, others joined InnoGames when Funatics did.« Finally, a positive decision was taken from both sides and the team of Funatics joined InnoGames in March 2016.

Thomas Friedmann as Studio Director is responsible for the location, while Thomas, Thorsten and most of the former Funatics' colleagues built a new mobile team, complemented by some guys of the existing Düsseldorf team.

This move was also a clear commitment of InnoGames to NRW. In the next few years, we want to build up a worldwide leading mobile studio there. For this, we want to cooperate with educational institutes, local partners and become involved in politics. We want to contribute our part to promote NRW as a significant games business location.

Key Findings:
- Have an open and realistic look at the market.
- Build a good network.
- Know your strengths and weaknesses.
- Be open for opportunities.
- Combine strengths if you cooperate with someone.
- Interpersonal chemistry is key for long-time relationships.
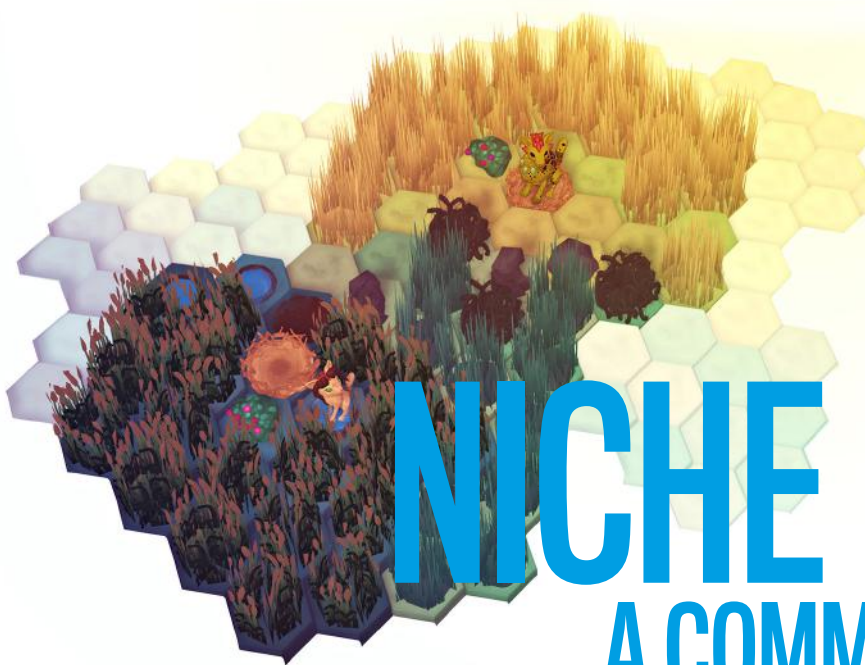
Dennis Rohlfing, Thomas Friedmann

NICHE
A COMMUNITY-BASED KICKSTARTER CAMPAIGN

Niche is a game about about the scientific topic of population genetics – which is quite unusual for a successful Kickstarter campaign. But the team had some very innovative ideas that helped engaging their community.

We launched our Kickstarter campaign on April 28th. What we wanted, above all, was to strengthen bonds with our community through an exciting adventure. By the campaign's end, 2,838 backers had supported us with a total of 72,375 Dollars (which is 482 percent of our funding goal).

All the PR and marketing was handled by our indie developer team of four people. Our team decided to go for a funding goal we were sure we could reach and extend the game's content through stretch goals. Neither money nor marketing was the main goal of this campaign.

About the Game

»Niche« is a turn-based simulation/strategy game about the scientific topic of population genetics. Players shape their own animal species and find an ecological niche for it to live in. Hungry predators, climate change or spreading sickness constantly challenge the species survival. Resource management and smart breeding based on real genetics are key in Niche.

Before Launch

»You must have a community before launching your Kickstarter!« For us, this sentence was utterly true. We could never have reached the same level of funding without our small, but dedicated fan-base. Over the past year, we visited various events (such as GDC, gamescom and Game Connection) and posted frequently on social media (mostly Facebook and Twitter) in order to connect with people that are interested in our game idea. We entered the Kickstarter with a small, but loyal following of around 700 people.

A few weeks before we started the campaign, Niche had passed Steam Greenlight. There had never been so much positive energy in our tester group before. Reaching a shared goal together was a great feeling that we wanted to replicate with our Kickstarter campaign. Thanks to the Greenlight, we had already produced most of the PR material for our campaign, most notably the trailer for Niche. However, there was a downside to launching the Kickstarter campaign after having our game greenlit: If we would have launched Greenlight in parallel with our
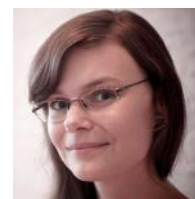
Philomena Schwab
is Game Designer and Marketer of Team Niche.

Game Designer and Biology lover, currently working on Niche. Philomena finished her master's thesis about community development for indie games in 2016 and is founder of Playful Oasis and chair member of the Swiss Game Developers Association.

Alexander Grenus
is Game Designer and Project Manager at stillalive studios and Consultant for Team Niche.

Enthusiastic game developer, who loves game design, 3D art and architecture. Alexander got involved with game development in 2002, released his first game in 2007 and works currently at stillalive studios.

Niche is a turn-based simulation/strategy game, where players shape their own animal species while facing predators, climate change or sickness.

150 Caring Cats
Getting an extra key for a loved one <3

If this goal is reached:
If all the 150 "Caring Cat" rewards are taken, the animal species mutates the gene "Healing Purr", which heals all adjacent group members.

The team tried an approach called »Shared Reward Tiers« that turned out to be very popular amongst backers, adding new features to the game if a certain reward tier was taken completely.

Playful Oasis is a collective of currently 25 indie game developers, who are working on nature and biology related games.

Kickstarter, all the yes-voters would have been potential backers. We tried reaching out to the Greenlight yes-voters again when the campaign launched, but our Kickstarter announcement was only seen by a handful of people.

With most of our PR material in place, the rewards turned out to be the most time-consuming aspect of the pre-launch phase. We went through many iterations, restructuring the rewards, asking for feedback, restructuring them again. Each of the reward tiers was named after an animal, starting with the »Frugal Frog« tier of 1 Dollar up to 5,000 Dollars for the »Benevolent Blue Whale« tier. Our stretch goals and community goals were designed to follow a specific concept. We let potential backers know that their actions would influence the evolution of the animal species in the game.

During the process of restructuring rewards, we came up with a new reward concept that we haven't seen before. We named our new approach »Shared Reward Tiers«. The concept is simple: We offered a reward tier with a limited quantity. If all these rewards were taken, we would implement a new feature in the game that all backers would benefit from. These community rewards were very popular amongst our backers.

We decided against Early Bird and Kickstarter exclusive rewards in order to avoid splitting our community into winners and losers, based on the great advice from Stonemaier Game's book »A Crowdfunder's Strategy Guide« (EDS Publications Ltd., 2015). Stonemaier's insights also convinced us to add a 1 Dollar reward tier, because it lets people join the update loop to build up trust in our efforts. Many of our 1 Dollar backers later increased their pledge to a higher tier. There are many Kickstarter experienced developers out there who are happy to help. KeokeN Interactive was a huge help for us.

There are just so many small things to pay attention to, such as adding a »We are on Kickstarter«-button on your website, changing your Facebook and Twitter information to mention your campaign, telling all your friends about it, sending out announcement newsletters etc. This list goes on forever.

In terms of campaign length, we decided to go with a 33 day Kickstarter. We were advised by multiple sources that a game studio's first crowdfunding campaign benefits from a longer campaign duration, because the news of your game needs time to spread. We didn't believe it at first, but it was definitely the right thing to do. A few more days would probably have benefited us even more.

Playful Oasis

A year ago, we founded Playful Oasis – a collective of indie game developers, who are working on nature and biology related games. The collective currently consists of 25 indie teams from all over the world. Five members had run a Kickstarter campaign prior to our launch and promised to give us a shout-out, which turned out to be a great push for the first few days. Two other members (Slug Disco and Axon Interactive) were running their campaigns at the same time as ours. This was beneficial for all three teams. We spent many hours strategizing together and did a lot of cross-promotion.

YouTubers and Streamers

YouTubers and streamers have become important allies for game developers. They are in direct contact with potential buyers or in our case backers and can significantly increase a campaign's reach. We prepared a special challenge for them. If a YouTuber/streamer managed to beat the challenge, they'd receive a bunch of Early Access keys for Niche as a giveaway for their viewers. We made a list of content creators who'd potentially be interested in our game. They were selected mostly by browsing YouTube for »Let's Play«-videos of games that had themes similar to Niche. We sent out a total of 50 emails and challenged each YouTuber/streamer via a short pitch text. Ten of them answered our call and promised to create a video during the campaign.

Kickstarter Launch

We launched our Kickstarter campaign on a Thursday evening (UTC + 1), which is midday in the USA. In order to celebrate the launch, we organized a modest party in Zurich, which could be accessed worldwide via a livestream. There were only a few people watching, but it still felt like an important event that we wanted to share with our most dedicated community members.

As mentioned earlier, we didn't use any Early Bird rewards so we had to come up with another way of motivating people to back the project right away instead of later. We did this by using a timed community goal. If 100 people backed the project within the first 24 hours, a new feature would be added for all the future players to enjoy.

These first few days of the campaign were clearly dominated by friends and community members who backed the game. We made sure to clearly communicate the incentives

for backing Niche right away: Reaching 30 percent of the funding goal in the first week is important proof to potential backers that the game has a chance to get funded.

The not-so dry Middle

The time between the first few and the last few days of a crowdfunding campaign are often called »the dry middle«. This wasn't really the case for us. A lot of things happened during these three weeks. To maintain momentum, we constantly challenged our community with new goals to unlock additional features for Niche. In hindsight, adding three to five additional days to the campaign duration may have been a good idea.

On the 4th day of the campaign, we were close to reaching our funding goal, but the day started slow and we needed to do something about it. A few days prior, our friends from Slug Disco had managed to raise several hundred dollars thanks to a post on imgur. We decided to copy their approach. This strategy worked out better than we had expected. In just one day our imgur post received over 100,000 views and resulted in a lot of new backers. Thanks to this post, we reached our funding goal after just three days!

We were totally unprepared for this early success. Our intention had been to start planning the stretch goals a week after the Kickstarter launch. After a stressful night shift the first stretch goal was in place. One could think that we learned from our mistakes, but we didn't. We kept on underestimating the speed of our campaign and had to create new stretch goals every few days. If we ever run a Kickstarter again, then we will certainly prepare at least three stretch goals in advance.

We hadn't contacted the press before the campaign launched. This was more of a question of time than an actual plan. We believed that YouTubers and streamers would be easier to get in touch with, so we focused on them. After we had reached our funding goal, we put together a press release, did some research on editors who we subsequently contacted. This resulted in an article by PC Gamer and another by Rock, Paper, Shotgun. We also uploaded a press release on gamespress.com. Our friends from Slug Disco saw a lot of small review sites pick up their gamespress post, using this method. Unfortunately, this wasn't the case for us.

Our YouTuber/streamer challenge was in full bloom. The news had spread and many small content creators picked-up the demo via our website. Around 70 video reviews were created during the Kickstarter campaign with a total count of over 250,000 views. This constant flow of content for the game kept people engaged and showed a positive impact on backer numbers.

We continued to showcase Niche during our Kickstarter campaign. Some of our team

100 Ideas for Genes

You have cool ideas for genes? Share them with us in this Google Doc.

If this goal is reached:

At least one the genes is mutated by the animal species (Chosen by the team & The Creative Cougars)

50 pieces of Fan Art

We are a creative bunch! Let's create some cool art (drawings, crafts, poems or whatever you can think of) and send them to info@niche-game.com

If this goal is reached:

A Fan Art section is added to the digital making-of and to our website. A selection of creations will be featured, including the creators portfolio link.

To keep momentum, the team constantly challenged the community to e.g. come up with ideas for genes or send in pieces of fan art to unlock new game features.

members exhibited Niche at the Nordic Game Festival and we also attended multiple local game events within Switzerland and nearby. This was a nice change of pace and we even met some of our backers in person and found a few new ones along the way, although compared to other things we did, the impact was rather small.

The Whale Search

A particularly interesting experiment we tried was the so called »Whale Search« event. Long story short: We asked our community to help us find a backer for our 5,000 Dollars reward tier. If they managed to complete this challenge, we promised to add a new feature to the game. We opened up a Google Doc to communicate with our playtesters and backers as we had done previously to brainstorm gene ideas for a community stretch goal. Aside from a short incident with a troll, we are very satisfied with our communication experience via Google Docs. Five hours after the search had started, we had already found our whale. Fun fact: The whale was already in our playtester group, but telling a story
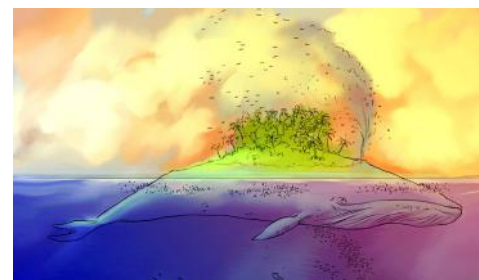
The so called »Whale Search« was another community event, where a backer for the 5,000 Dollars tier should be found to add a new feature to the game.
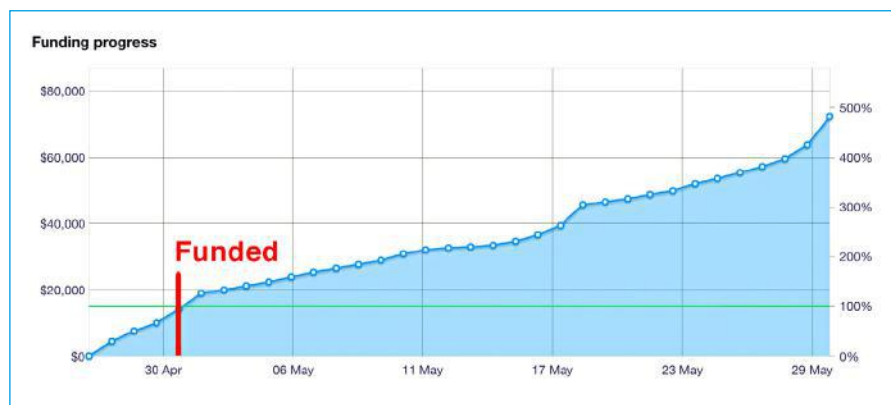
Niche was funded just three days after the launch of the Kickstarter campaign and reached almost 500 percent of its funding goal.

Stretch Goal 1 - 20'000$
Let's go swimming!

If this goal is reached:
Rivers and lakes will become part of the world.
Fish is added as a new food ressource.
5 new water related genes are mutated.
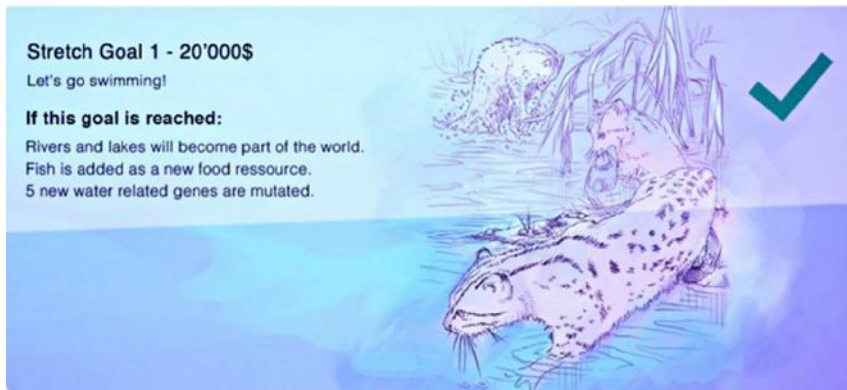
The success on Kickstarter was a surprise for the team and so the first stretch goals had to be prepared during a night shift.

Final Stretch Goal - 65'000$
The sky is the limit

If this goal is reached:
Feathers grow, the winds are calling.
Wing-like limbs to glide over short distances are mutated.
Explore the world and find an animal with this rare trait.

The final stretch goal was reached ten hours before the campaign ended and as it was already announced to be the final one, the team withheld announcing further ones.

allows people to connect with something on a different level.

As mentioned, we had a hard time reaching the people that had earlier shown interest in our game on Steam Greenlight. We decided to set up our Steam page and community hub in order to ensure that they were alerted about our Kickstarter campaign. We invited every user that left a positive comment on the Greenlight page and had soon built-up a solid following on Steam. We didn't see much impact for the Kickstarter, though.

There are countless things going on during a Kickstarter campaign and it's hard to keep track of them all. Services like Google Alert are helpful, but they don't pick up everything. We asked our playtesters and backers to let us know whenever they discovered a post about Niche and thus stumbled upon many small sources we hadn't noticed, such as different science communities on Facebook who were talking about us.

Last Days

We were unsure whether or not our project would get a big final push since we were already funded, but the fear was unfounded. Every person that hit the »Remind me«-button on a Kickstarter page receives an email 48 hours before a campaign ends. This helpful reminder caused a flood of new pledges. We reached our last stretch goal about ten hours before our campaign ended. Since we had already communicated this goal as the final one, we withheld announcing any further stretch goals.

We decided to do a Thunderclap to broadcast the last few hours of the campaign. To make the signup process a bit more entertaining, we offered people three teams to choose from, each with its own Thunderclap message. People enjoyed the idea and started rooting for their team (»Team Cute«, »Team Science« and »Team Gamer«). Unfortunately, not enough people signed-up (we needed at least 100 per team) and therefore only two of the three messages were sent out at different times of the day. This happened mainly, because we didn't pre-schedule enough time to contact people. We still believe that doing a
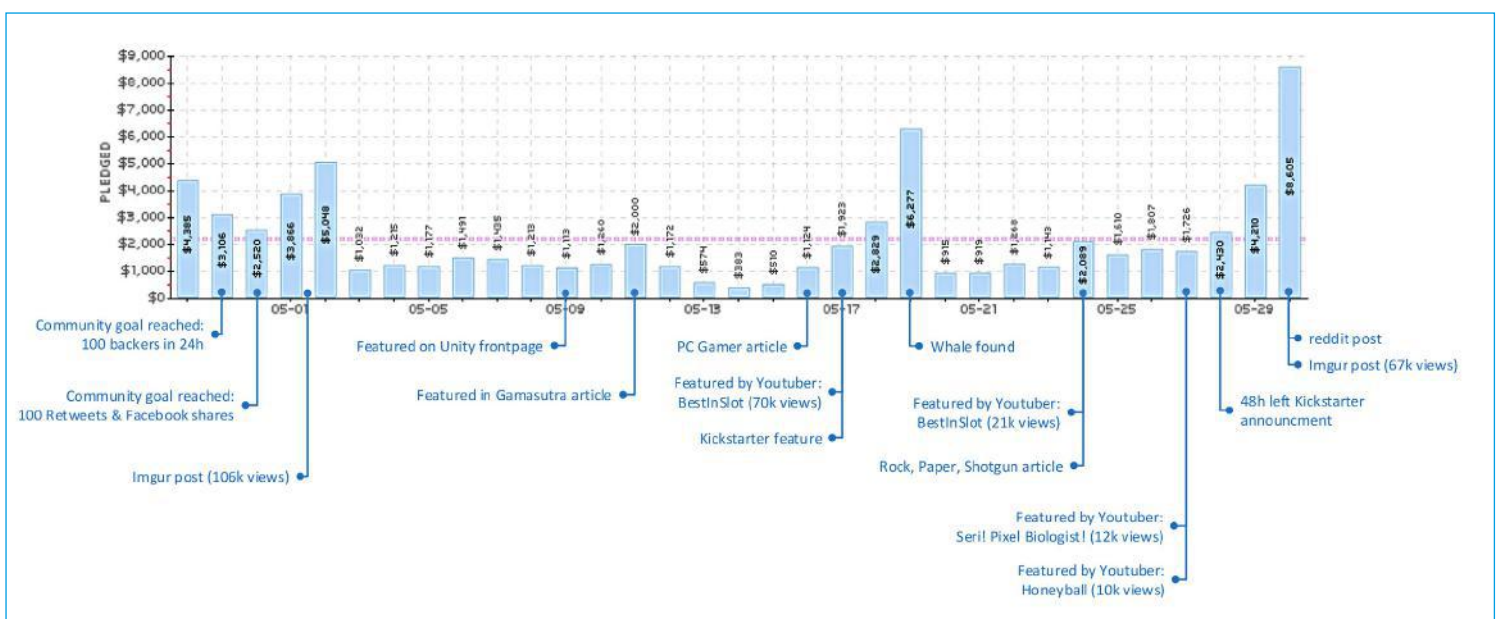
This charts shows how the various actions during the campaign affected funding.

»Multi-Clap« is a good idea, but we will go for less team options next time.

On the last day our friend Alice Ruppert made a reddit post, which generated quite some attention and attracted a few additional backers. In addition, we created another imgur post, which managed to generate another round of views.

A few minutes before the Kickstarter campaign was over, we cleaned up our campaign page and added links to our Steam page and website. Important: Kickstarter pages cannot be edited after the campaign ends!

After finishing up our »Thank you« image and sending it to our backers it was time to rest.

Post Kickstarter

We woke up the next day and found ourselves inundated with »I missed the Kickstarter!«-messages. PayPal had already been a payment option during the campaign, so we decided to open up a simple pre-order system on our website and link to it from our Kickstarter page by using a »Late backer«-button. Our Kickstarter ended a week ago, but the pledges are still coming in at a constant level with 3-5 people pre-ordering Niche per day.

We are very happy with the Kickstarter campaign results. Not only did we receive far more money than we ever expected to further develop Niche, we enjoyed the shared adventure with our community, which brought us closer together with our supporters. The community has also grown in numbers. More than 3,500 members are now part of the Niche pack.

More Data
- 36 percent of our backers came directly from Kickstarter.
- 64 percent of our backers came from external sites.
- The average pledge amount of our backers was 25 Dollars.
- Additionally to the money on Kickstarter we received about 1,500 Dollars via Paypal.

Most of our Backers came from
- USA: 1,396 backers
- United Kingdom: 280 backers
- Switzerland: 203 backers (we are Swiss)
- Canada: 170 backers
- Australia: 152 backers

Main Sources of Backers
- Kickstarter: about 19,000 Dollars
- Facebook: 12,796 Dollars
- Twitter: 3,899 Dollars
- Our website: 3,001 Dollars
- Google: 1,602 Dollars

There is one thing that feels strange to us now that the campaign is over. We always try to be as generous as possible, giving away keys freely without hesitation. This is no longer possible, because we don't want to decrease the value our backers invested into Niche. This new mindset is something we need to get accustomed to. It is strange to realize that after so many hours of unpaid work, we've now turned your hobby into a paid job.

Conclusion

If we had the chance to travel back in time, there are quite a few things we would approach differently. Firstly, running our Greenlight and Kickstarter campaigns at the same time would most likely have led to a synergy effect we missed out on.

Given the chance, we would definitely prepare the images for the first few stretch/community goals before launch. Creating them during the campaign was very exhausting since there are countless other things that require attention as well. We also weren't prepared for our limited rewards to run out so quickly and only managed to fill the constantly opening gaps in a delayed manner. Generally, the keyword here is low expectations. We should have believed in ourselves more and been prepared for the seemingly unlikely option of being successful.

We never expected to earn so much money with our community-based Kickstarter approach. Without the constant support of our community, it would have been impossible. The fact that our game refers to a science topic was a great help as well. This allowed us to contact various science blogs and news sites alongside the game press we reached out to.

During the campaign we constantly tried to come up with new approaches to increase our reach, such as the whale search. Many of these ideas worked out better than expected, which encouraged us to keep pushing. We hope this insight helps you plan your future Kickstarter campaign. We believe you can do it and we wish you all the best!

Alexander Grenus, Philomena Schwab

The »Thank you« image that was posted a few minutes before the Kickstarter campaign ended - once it closes, you cannot change the campaign page anymore.
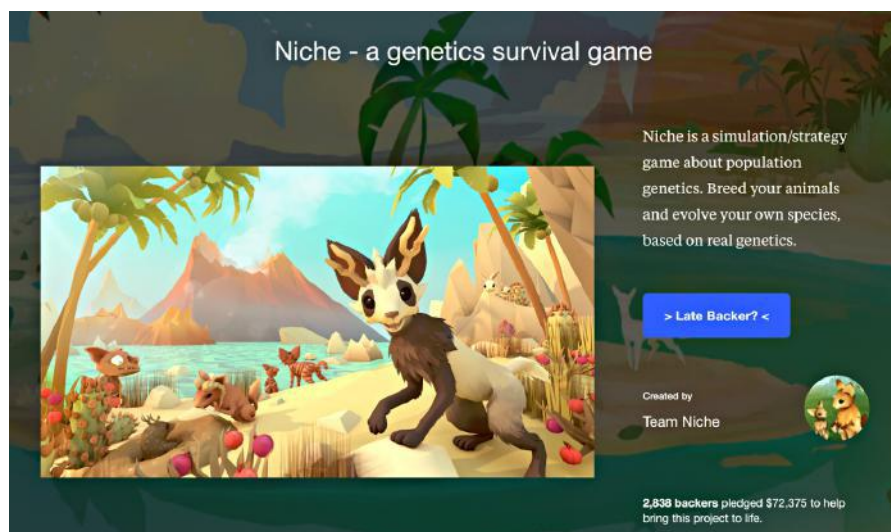
Even after the Kickstarter campaign ended, people could still back the game on Niche's website via PayPal using the »Late Backer«-button.

THE STORY OF QUIZ TALES
INNOVATING WHERE UNEXPECTED

Quiz and Trivia games quite often are all the same. Alexey Sazonov and Sergey Kozyakov from Krabwerk explain how they try to spice up gameplay with innovation and which games were great sources for inspiration.

Alexey Sazonov
is CEO and Co-Founder of Krabwerk.

Alexey is CEO of Krabwerk since April 2015. Before joining Krabwerk, Alexey was Sales & Marketing Director at HeroCraft, where he also worked as a producer on the mobile strategy game »Warhammer 40.000: Space Wolf«. Alexey is also coordinator of IGDA Kaliningrad (the only Russian chapter), as well as mentor and expert at Gamefounders and Skolkovo Foundation and also a lecturer at Baltic State University in Kaliningrad.

Sergey Kozyakov
is COO, Creative Director and Co-Founder of Krabwerk.

Sergey is COO, Creative Director and Co-Founder at Krabwerk. Previously, he worked as art director at Herocraft and was the team lead of »Warhammer 40.000: Space Wolf«. Sergey also worked at Katauri and Mail.ru.

How it all began: I'm (Alexey) one of those guys who would bear game ideas for years, only to find out about a new game and kick myself: »I knew that feature or game mechanic would work, I should have done it myself years ago.« And for years, I was playing other quiz games and wondered: Where's all that innovation in meta game and variety in game mechanics? So I ended up bearing some kind of a strange feeling between a creative itch and anger that I have no interesting innovative quiz games to play with. Even genres like idlers, where you basically don't do anything, had more interesting things than quiz.

Inspirations

The game idea was »growing« inside me for more than a decade. And I think, I remember when I got the inception:

Back then there was a web game called »ConQuizTador« (now it's »Triviador« on Facebook and mobile). This game has blown my mind by the fact that it is a PvP arena with elements of tactics: There were several phases and you could employ tactical thought to outsmart your opponents, for instance, rush one of the bases, or sit back while the other two players are fighting.

I've met the author of Triviador – Atilla Bihari – a few times at gamescom. He's a great man and my true hero, just like Sid Meier to other people. Would there be a common ground to do something together with Attila, I would immediately jump on that opportunity, but since there were none, I had to do my own game.

An example of how items were supposed to work in concept stage.

Some other games that contributed to my itch of moving forward are »Bookworm Adventures«, »Trivia Golf«, »Quarrel« and many others that I can't remember. Games that pushed the limits of core mechanics and introduced some innovations.

At some point, I started collecting ideas that may or may not become useful at some point. Once I even started collecting ideas for various quiz mechanics from British quiz shows and those were pure gold!

So I ended up with having a long list of ideas I saved to get inspiration. The list of cryptic notes would look something like that, containing TV show names, descriptions of mechanics and sometimes thoughts on where and how I could use all that: »Wogan's Pefect Recall, Multiplayer, 4x5 grid, answers (typed / said) make cells. 2nd round question have those cells as answers. Smaller grid. Could be used for real-time multiplayer. D in NATO alphabet
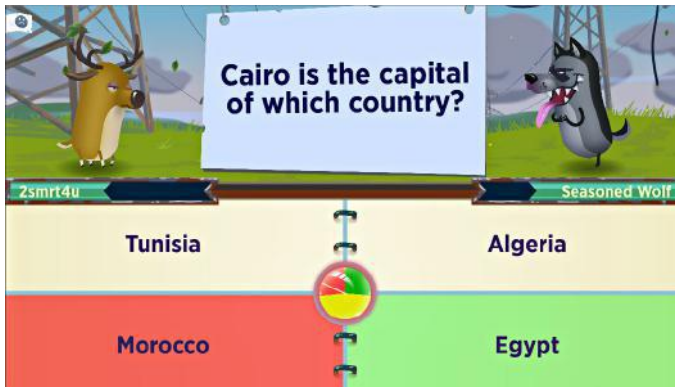
This is how items were supposed to work in concept stage.

One of the mini games in Quiz Tales.

is Delta. Military elite – Delta force.« Later I started to add ideas from old quiz games on PC and tabletop games.

The Plan

So basically our intention was to take the quiz genre to the next level. And that doesn't mean only in terms of visuals. As a studio, we already had a taste of the Apple Editor's Choice and we all are suckers for good design.

Did we make rich graphics a core of our game? We had no such intention and we didn't want graphics to stand between the user and game experience: heavy graphics could mean bad UI, heavy loading times, a shorter list of support devices – and we wanted neither of that.

There were already nice looking games like »QuizUp« and even those that had more than quiz, with a bit of characters etc. – like »Trivia Crack«. Or »QuizRPG«, which had a lot of art, but of very different kind. So we knew, we'll step up the game with graphics and there should be a lot of quiz users who will appreciate that.

Maslow's Hierarchy of Needs

When the game was only a conception, I formulated what I want to do as a pyramid (see **figure 1**). Most of the ideas came from experiencing bad and good things while playing other quiz games for about a decade, e.g. »why the heck are they asking me so many questions about baseball stars, they know that I selected UK English and that I live in Europe.«

So in the pyramid's base of our hierarchy of player needs the most important thing was the flesh of core gameplay. Which, for the quiz genre, is answering interesting questions of proper difficulty. On top, there would be bells and whistles, which would only matter if the rest is done right. Here's what we did, layer by layer:

- Base (core gameplay) level: We not only hand-pick the questions, but we make sure that you don't get repetitive question with a question queue. Another thing is to track the difference in difficulty in various countries. The easy question about geography of Europe would be considered rather hard in Americas. But the question about the personal life of a baseball star would be

of impossible difficulty in Europe – so this rather belongs to question packs that are specific to particular countries.

- We have strict guidelines for filtering out and producing new questions: like nothing boring, only interesting facts, most of the questions must be of normal difficulty (and definitions of that) etc.
- Next thing, we added more types of quiz mechanics, like solving a number or year, »this or that« combo rounds, a question with four clues and so on. On top of that, you level-up and unlock new stuff.
- In every little aspect we tried to figure out, how can we not only add something new, but also improve already good standards or make something differently. Another example, we don't just have people play against each other, we have city ladders, and your placement can't be bought by spamming clues/bonuses or by just playing more than anyone else.
- On top of everything, we are working on a group mode. In the first version, you have 24 hours and a set number of moves and you work with a group of other people to get as far as possible – in a board game style. You have to carefully select categories of your mastery and not spoil the cells someone else might have answered right.
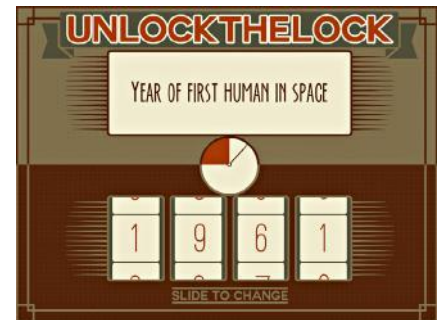
Concept of the chest opening mini game.

Figure 1: Krabwerk's hierarchy of gamer's needs.

This screenshot shows how the prototype looked like

BEFORE — AFTER

This is how the Main screen evolved from prototype to release version.

Finding the perfect Play button, which was neither of those back-pointing ones.

Various character sketches for Quiz Tales.

The GTA Syndrome

The »GTA syndrome« is what I call a blind spot preventing game development professionals from exploring new genres and game mechanics. It takes different forms: in mobile, it would be building games based on »Clash of Clans«, »Clash Royale« or whatever is making money and people talk about most.

In theory, you do something for millions, but in reality, there's just a handful of people who would really care and be genuinely interested in helping you develop that. For the rest of the world, you do something »unnecessary« – they assume you are building an RPG game over chess gameplay (which would be an ok idea, I'd play that). So lesson is that it may be very detrimental to morale if you are not prepared to being virtually unseen by media and games industry colleagues.

But since I was making a game for myself, it doesn't count. Worst case scenario, I thought, would be a not so good game, but this whole movement will help to make something out if it. So, for instance, if we fail to develop an engaging group game experience, then someone else will notice the direction and make a proper thing out of it.

The Struggle for Monetization

There is an interesting issue with the genre, which is not so bad for players though: Playing just a quiz is free or almost free. Which also means that trivia games generally don't make a lot of money per download. As a result, developers of existing games won't have extra cash for experimentation.

In concept stage, we thought we'll be different in monetization aspects as well. Being influenced by truly Free2Play games like »Dota 2«, I thought going the cosmetics way is one of the opportunities. That was a long reach indeed, as you first need a huge fan base and eSport element – otherwise, why boasting showing off in your rare skins and hats.

But somewhere along the way, we came to realization that this approach is neither a selling point for media, nor will it let us go on with development of the product of our vision after the release. As best case scenario, it would be cents per download.

Paying our way to get the word out and getting early traction would be impossible with our resources as a startup and without that we won't be able to raise funds as well.

So we went back to the classic scheme: Slow progression with ways to speed it up, which is also great for players who would just enjoy playing the game and not feel any pressure to buy anything at all.

Promotion and Soft Launching

As I already mentioned, reaching out to journalists with a quiz game is very hard as no one expects anything new or exciting. So I will only mention things that worked for us: We applied and were nominated for International Mobile

Game Awards in the category Best Upcoming Game. If I could turn back time, I wouldn't miss any single opportunity like that. We never won any Big Indie Pitch, but I'll keep making games and trying.

Similar thing is Indie Arena Booth, having a free space at gamescom is kind of a big deal for small game company – we applied and got it. Small victories like this also make you feel good, as it is hard to be active and creative without any positive feedback.

Another thing would be reaching out to press, we got into top games in soft launch list by PocketGamer. There are not so many media channels covering games in soft launch and we obviously were not good enough for TouchArcade news, at least my five emails didn't help. But we were good enough for their forums, we had a lot of feedback and promo code requests.

We also worked along with Marilyne Chasseur from the marketing agency Mobilize My Game (by iQU) on Quiz Tales. They helped us to reach high quality users in markets such as Belgium and South Africa. The results: Install costs as low as 1 USD per install in these countries through video ads, which can be considered as very cheap compared to the average CPI in the industry.

What's next?

When I wrote this, we were still in soft launch. Unfortunately, we never had enough users and feedback to use soft launch to full advantage.

When deciding what to do next, we do an educated guess, based on some of the feedback, slightly supported by statistics. Our priorities now and after full release are retention and user engagement.

We didn't do an energy system which is good as many people and we personally find it annoying, but there's a down-side to that decision – there's no pacing as a result. The brutal truth about successful F2P titles is that they must be
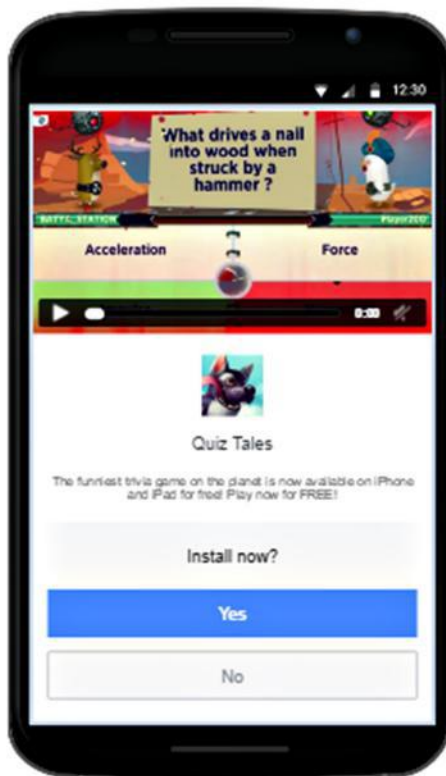
On Facebook CPI: The best performing creative was the video.

designed to become »habits«. People do need an incentive to come back and forth to the game in cycles. That works only in naturally good games though, otherwise it's poison.

So one of the things we want to add is a continuous mode: It will involve car progression, enemy selection, bitter cooldowns for losers, interesting ways to involve and then prevent your friends from driving farther than you.

Other things we want to work on include better group mode, new game mechanics, online group mode, question factory where own questions are used as a part of the gameplay and many other things.

Alexey Sazonov, Sergey Kozyakov

One example of how concept art was transfered to the final asset.

Adverts on the Audience Network are shown in third-party mobile apps and mobile websites.

Please note that this is only a preview. The advert may appear differently in other apps and websites.

Images may animate to reveal the entire image.

This concept artwork shows various hats for the characters.

About Quiz Tales

Quiz Tales is a trivia game with progression, animal characters, and a variety of game modes. The game was featured by Apple on the front page in the U.S. and 34 other countries. After release it hit Top 3 (Trivia) in the U.S. and other countries and Top 90 among all games. Features are:

- Explore seven various trivia mini games and modes.
- Challenge other players, get trophies, gain ranks in your city and country and the whole world.
- Team up with your friends to reach the juicy goal in the group game.
- Level up to discover new houses and game mechanics.
- Unlock fancy animals and collect dozens of nifty hats.

In-App purchases explained: Everything in the game is available for free. There are no paywalls and no Pay2Win elements. You can protect yourself from selected categories, but it works both ways for you and your enemy. Buying in-game gold allows to get new hats and animals and enables you to progress faster. Some hats and animals are only available for paying users. You can play the core mode as much as you want, but some game modes (e.g., head-to-head) require a small entry fee, and other modes may have a cooldown that can be removed by spending in-game gold.

THE IMPORTANCE OF
MOBILE GROWTH STACK
AND HOW THE GAMING INDUSTRY CAN LEVERAGE FROM IT

The market for mobile apps and games is getting bigger every year and at the same time it is getting harder and harder to acquire users. The Mobile Growth Stack framework is meant to help developers successfully market their apps.

Viral Patel
is Co-Founder & COO
of GetSocial.im.

Viral Patel is Co-Founder & COO of GetSocial.im, a company that supplies technology to app developers to amplify retention, virality and revenues. Viral has extensive SaaS application development, mobile gaming, business intelligence and internet security background.

Over the years and various technological advancements, the use of mobile has grown exponentially. From being a device for communication purposes, it went on to being »the« device for accessing the internet, entertainment and even the smallest of things like setting an alarm.

Picking up the cues laid down by the people, businesses today are venturing into the mobile environment. Even though their target is to offer or cater to a need that hasn't been addressed before, there are practically hundreds of applications getting launched everyday on iOS and Android.

Some of these applications get almost instantly picked-up in the market, but the majority of them gets lost in the noise. No matter what the features they offered or what purpose they served, they're barely able to make it higher than the initial handful of users.

Marketers and developers have been noticing this market trend as well as the change in user behavior for some time now, to be able to create growth strategies that are sustainable. A very comprehensive app growth framework that has been creating a buzz is the Mobile Growth Stack (MGS).

What is a Mobile Growth Stack (MGS)?

MGS is a lightweight framework for strategic mobile growth. It focuses on listing down what areas a developer needs to focus on to achieve sustainable growth.

In the Mobile Growth Stack shared by Andy Carvell on Medium, the core elements of sustainable growth of a mobile app include:

- Channels for app promotion
- User acquisition
- User engagement and retention
- App Monetization
- Insights and analytics

The growth stack lists down all the possible sub elements that define the growth of an app at every stage from soft launch to the main launch. It takes into account every little tactic that can be used and has been proven to be effective for app growth in the current mobile environment.

In this write up, we'll be taking a look into why the Mobile Growth Stack is considered so

Number of Global Users (Millions)

comSCORE

© comScore, Inc. Proprietary and Confidential.   24   Source: Morgan Stanley Research
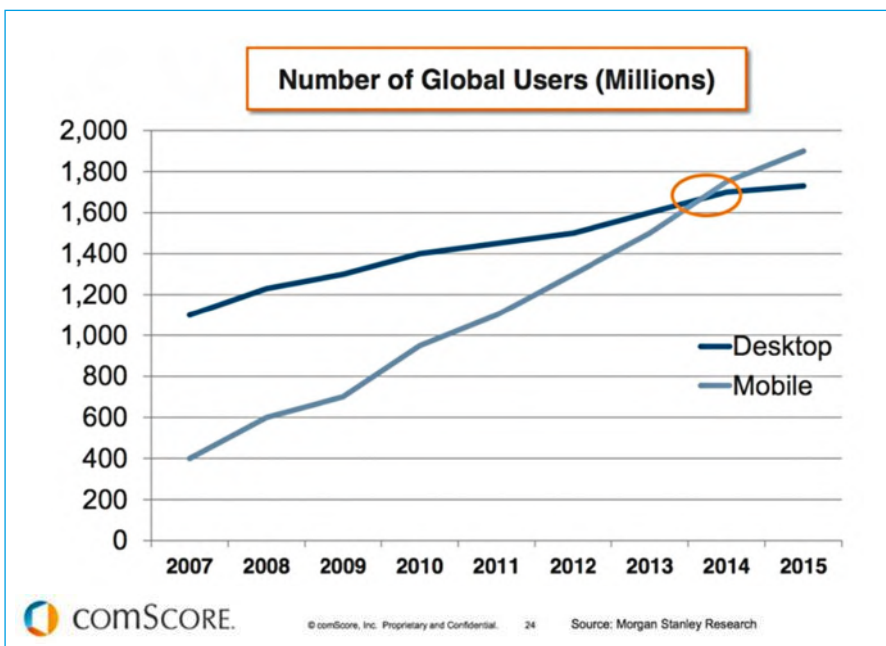
As this study shows, Mobile has outrun Desktop over the last years.

Channels	Push	In-App Messaging	Email	SMS	Search	Social (SNS, Blogging Platforms, Forums)	Mobile Ad Networks	**TV**, Print and Radio	Owned (AppStore Listing, Website, Blog, etc.)
Acquisition	App Store Optimization	PR	Content Marketing	Performance Marketing	Distribution Deals (inc. pre-installs, traffic exchange)	Viral Loops (invites and content sharing)	Cross Sell	Content Indexing (Mobile SEO)	
Engagement & Retention	First Time User Experience (onboarding, sign-up flow, tutorial)	User Accounts (Data persistence across sessions & devices)	Deep Linking	Lifecycle Marketing	Activity Notifications	Community Engagement & Support			
Monetization	Revenue Model (Freemium, Paid Apps, Ad-Supported, Subscriptions, Virtual Goods)	Payment Processing (Carrier Billing, PayPal, Offer Walls, Credit Card, Boleto, etc.)	Conversion Optimization	Pricing (Fixed, Dynamic, Regional, virtual currency bundles)	Merchandising (inc. virtual goods refresh & management, special offers, etc.)	Ad Inventory Management (Native Ads, Sponsorship, Direct Sales, Ad Exchanges)			
Insight & Analytics	Install Attribution	Deeplink Attribution	Event Tracking	Campaign Measurement	App Store Analytics	ASO Keyword Performance Tracking	User Segmentation	Cohort Analysis	Content Analytics	Sentiment Tracking
	User Testing	A/B Testing	Touch Heatmaps	Screen Flows	Conversion Funnels	Billing & Revenue Reporting	Performance Analysis (CPU, Battery, Network, Bug Tracking)	LTV Modelling	Growth Accounting (Growth Rate, Churn, Sessions)	Growth Modelling (Opportunity Identification)

Right-side columns: Retargeting · International · Partnerships

Mobile Growth Stack v3.0 www.mobilegrowthstack.com
@andy_carvell
(contributions from Moritz Daan)

The Mobile Growth Stack framework as describes by Andy Carvell.

important in the current mobile market scenario and how businesses can implement the same for rapid as well as sustainable growth.

Why is the Mobile Growth Stack important?

The aim of the stack is to make businesses focus on all the possible elements that can be associated with the growth of an app. But each element of the stack comes in at different stages for a business depending on its objectives.

Consistent acquisition, engagement, retention and monetization are the key players of sustainable growth. Even though acquisition of users via various digital channels and marketing budgets is possible, sustaining it in the market depends on how effectively the remaining elements are strategized and executed.

A number of apps in the market offer the same or similar set of features to users. This gives the mobile users to experiment with different apps, in case one doesn't suit them. The

Cost per Install (CPI) Index: January 2016

The Cost per Install (CPI) Index measures the cost per app install directly attributed to advertising. On iOS, CPI rose 28 percent to $1.88, a 47 percent increase year-over-year. On Android, CPI fell to $2.42, a 27 percent decrease since December and an increase of 58 percent since last year.

FIKSU — Fiksu CPI Index

Jan 2016 Android: $2.42 iOS: $1.88
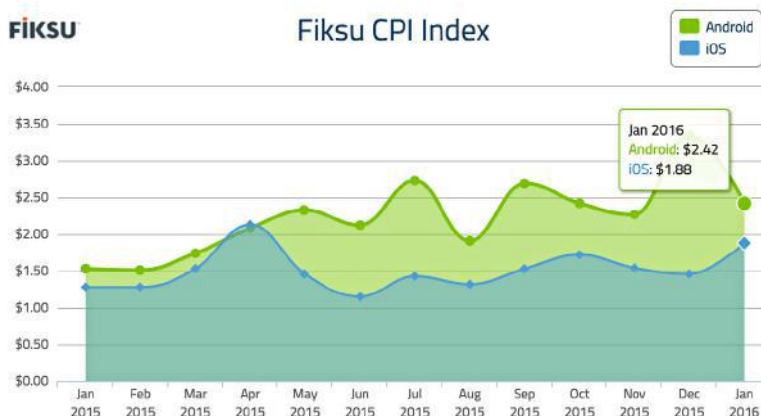
The Costs Per Install a developer can expect as measured in January 2016.

About GetSocial

GetSocial is a data-driven in-app marketing platform. It transforms gaming & entertainment apps into valuable social networks.

GetSocial supplies developers with technology to amplify user acquisition, retention and revenue, guided by valuable data. GetSocial makes it incredibly easy to seamlessly blend social engagement, acquisition & promotional layers into an app.

GetSocial AMPLIFY YOUR APP
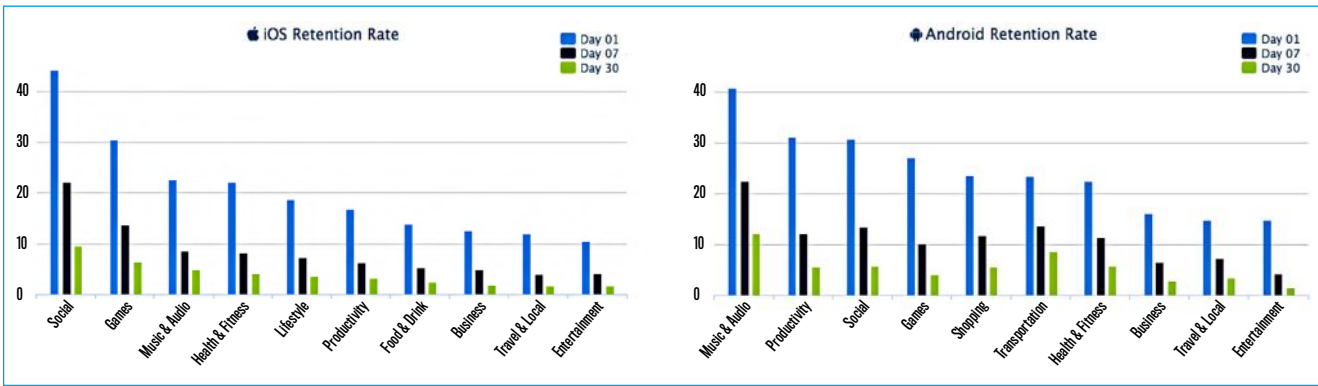
Figure 1: This figure by AppsFlyer shows the user retention rates on iOS and Android devices.

An example of Deeplinked Invites so that users can bring their friends into the game.

abundance of choices has led to an increased churn rate and a low user acquisition rate.

A lot of or even most businesses launch their apps into the market via aggressive paid campaigns. They don't just acquire these users at a high cost, but also lose most of them in just a few days. This could either be because of their inability to offer them a concrete solution, not meeting the desired experience expectation or simply the lack of engagement and retention strategies.

According to The State of App Marketing report by AppsFlyer (see www.makinggames. biz/appsflyer), the user retention rate on iOS and Android rates, as per major industries, is as in **figure 1** above.

In simpler words, the app user acquisition as well user retention rates are dropping by the day and recovering the same is becoming a challenge for most businesses. This is where a strategic approach laid down by the Mobile Growth Stack comes into play.

Since it is a step by step from promoting the app on relevant channels, acquiring users, keeping them engaged over a longer period of time, measuring analytics to optimize campaigns and other in-app experiences, the stack ensures reducing the overall churn rate and boosting the retention rate.

With the retention rate increased, it gives the apps an opportunity to monetize and grow further in a strategic manner.

The Key Aspects of the Mobile Growth Stack

Here's looking into how mobile apps can effectively execute the key aspects of the Mobile Growth Stack user acquisition, engagement, retention, monetization and analytics.

User Acquisition

Running paid campaigns to acquire your initial set of users is a given. But continuing the same approach over a period of time, can only lead to increased marketing budgets that can hamper the overall growth of the app.

Here's taking a look at strategic tactics that will optimize your user acquisition costs and help your app grow sustainably:

1. **Enable the ability to invite friends:** Once you have acquired a decent number of initial users, enable the feature that lets them send invites to their friends. If they are happy with what your app offers, they are more likely to use widespread communication channels like Whatsapp, Kik etc. and social media channels like Facebook to recommend it to their friends. Users acquired via word of mouth have double the retention rate than those acquired via other campaigns.

   The only thing important here is to ensure that sending invites from within the app is as easy as using it. If the user is required to take multiple steps to send an invite, he is more likely to not do so.
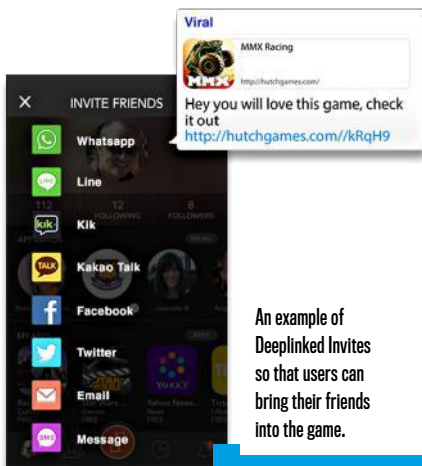
Nike+ as an example of Social Sharing.

2. Make social sharing easy: Create in-app referral programs that encourage users to invite or share their app experience in their circles. When planned strategically, these programs could turn into viral acquisition. But the important thing here, too, is to make it as easy and as personalized as possible.

Acquiring users with the help of social media is a cost effective tactic. It also helps boost the brand's awareness in the desired audience that eventually results in reduced costs of user acquisition.

3. Strategize cross channel promotions: One of the most cost effective and efficient ways to acquire new users is to promote the new app within another app. Be it an app made by a friendly business or another one that was launched by your own sometime back.

This tactic works perfectly when it comes to acquisition as your existing users are already happy with the previous app. Users who are already happy with what an app offers, are more likely to convert on their in-app promotions.

User Engagement and Retention

While there are various ways to acquire new users, the only way to keep them hooked or interested in your app, is through consistent engagement. The more you engage them, the more likely they are to become a part of your user acquisition strategy and stay longer on your app. Hence, solving the second most common challenge faced by businesses user retention.

Here are a few ways to improve your user engagement and retention rates:

1. Make in-app chatting possible: In times where chatting is almost second nature to smartphone users, it is important to prevent a user from switching apps as much as possible. Even though they wouldn't mind doing so a few times, they are more likely

In-app chat like in Adventure Smash is a good way to keep players in your game and to communicate with them directly.

to ditch an app the moment an interesting conversation starts on another.

Give them the ability to add or invite their friends to your app and make in-app chatting a possibility. The seamless experience offered automatically keeps the user in the app longer.

In-app chats also give you the ability to communicate with your users actively on a one-to-one basis or in a group. This gives you an opportunity to collate insightful data on how the app is being used by your target audience, what more do they expect and how you can make it better.
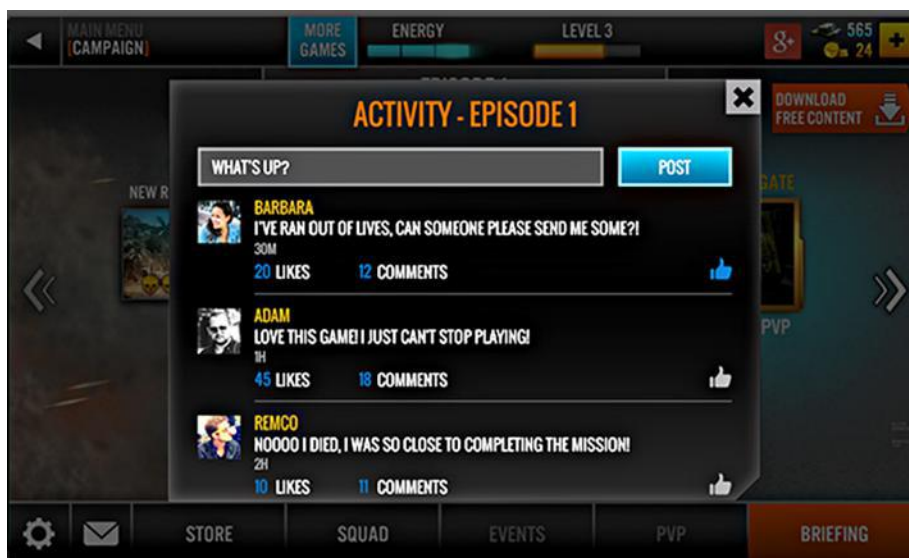
An Activity Feed like in Frontline Commando 2 is a good way to create an active community.

Push notifications like in this example from Adventure Smash can help to motivate inactive players to start using your game again.

2. **Give them an opportunity to socialize:** The generation of today believes in social networking more than real-life get-togethers. When you give them a platform and an opportunity to socialize within your app, you're more likely to become a bigger part of their daily lives.

Give your users the ability to connect with other like-minded users on the app's community. It will ensure that the user remains interested in the app longer. You can also keep the users of this community engaged by frequently interacting with them. Be it an update of an upcoming feature or sharing nifty tips that could valuable to them.

For example, if you have a gaming app, you could enable the player to broadcast a message that brags about his score and asks others to compete with him. This creates an opportunity to raise the gamification levels in the app and create a stronger community.

Similarly, creating an activity feed similar to social media platforms, is a great way to build a community and keep all the users highly engaged with the app.

3. **Become their source of motivation:** There are times when users simply get busy with other aspects of their life and forget about logging into the app. This results in two things either the user stops finding relevance in your app or deletes it thinking it is merely eating into his storage space.

To avoid both the situations, ensure that you have implemented reengagement strategies for your inactive users. In these cases, it is important to keep the users engaged

and motivated enough to use your app. Be it a notification of what's new on the app, what their friends are doing or how you miss them. A subtle nudge can bring back the user to the app.

4. **Giveaway bonuses/incentives frequently:** One of the biggest reasons smartphone users lose interest in apps is because they think they are not getting enough from it. It could be their inability to surpass a level in a gaming app, not being able to achieve a milestone in another or the lack of a positive in-app balance.

Giving away bonuses or incentives for completing certain actions in the app that lead them to their goal, is a great way to keep them engaged.

5. **Create a sense of competitiveness:** The one thing that can get a user hooked to an app is gamification. Being able to invite their friends and pitting against them on various levels of the app, will keep his interest levels high. And he is more likely to have longer app sessions.

For example, if you have an app that tracks a user's progress, show him where his friends rank against him. That way the user will get an immediate challenge, try to see how is his performance against his friends. Make sure the users are able to see the progress of one another, to stay motivated.

6. **Community engagement and support:** When you allow your users to socialize within the app, it gives you an opportunity to build a stronger community easily and keep them motivated to remain engaged with the app. It also gives you an opportunity to directly contact your users, manage and moderate
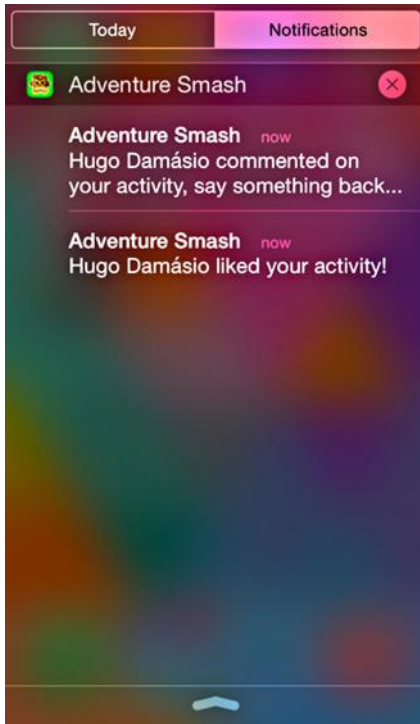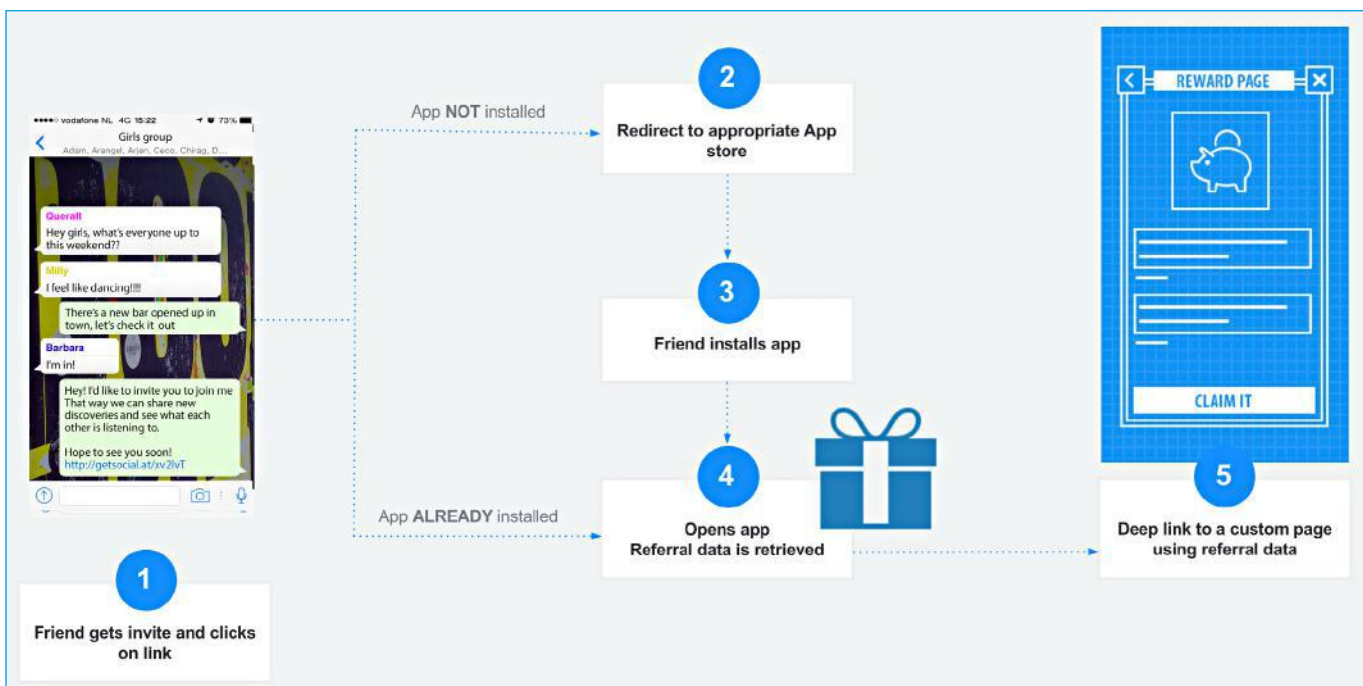
A step by step explanation of Deeplinking.

discussions around your app. This opens the window for providing timely support to a user.

An active community also helps you identify frequent spenders and influencers of your app. You can use these insights to reward and keep these users motivated, promote features and offers they are more likely to convert further on, and inspire them with more tips and tricks for your app.

App Monetization

Post user acquisition, the next big challenge that most apps face is monetization. Converting app users into paying customers is not an easy task. But monetization is an aspect that is extremely important for an app's growth.

Here's taking a look at how you can create an effective app monetization strategy:

1. **Implement social in-app purchases:** To convince a user to convert, it is important to let him know that others like him are doing the same. Social proof like engagement, conversion numbers or endorsements can increase your in-app purchases. It is important to make the user feel the purchases are worth it.

2. **Make use of deeplinking:** The only way you can nudge a user to take a desired action in your app is to target him with a personalized message and experience. With deeplinking you can offer a custom experience to every user based on his interests. Whether it is their first time on the app or suggesting content that is based on their level of usage. Personalization helps deliver better user experience and increases the signup conversions.
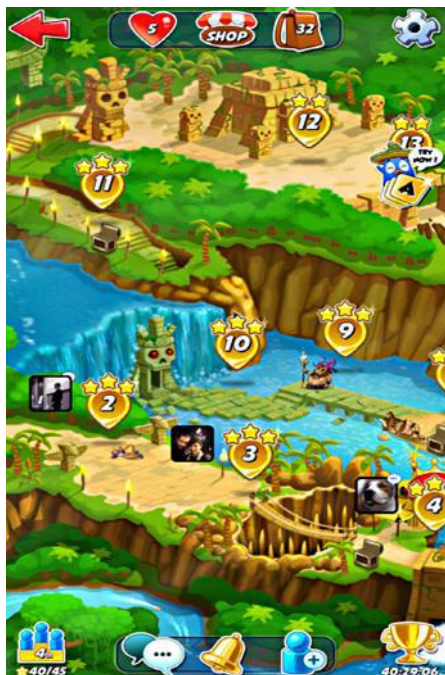
If you show the progress of a player's friends in the game, this might create a feeling of competitiveness which is a great motivation.
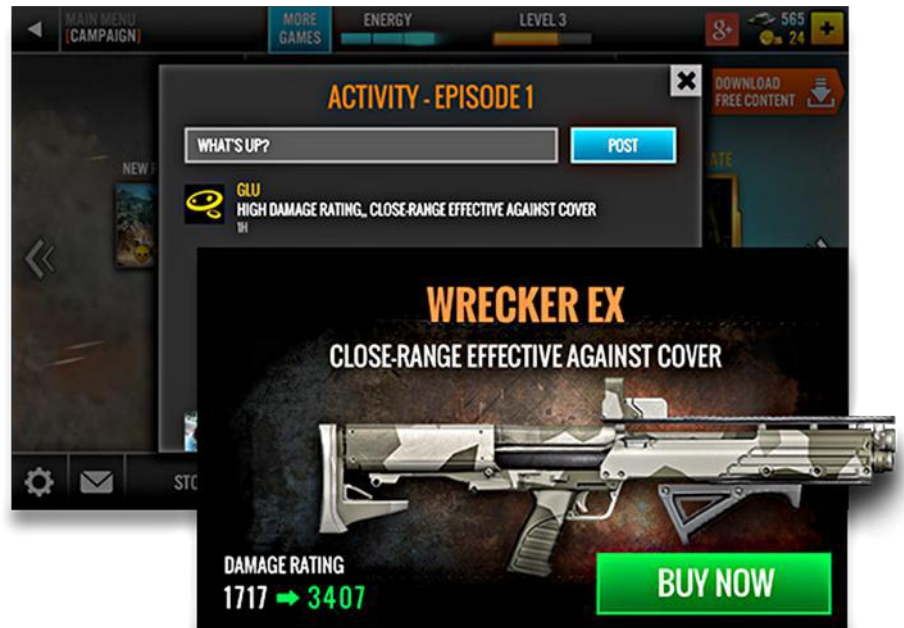
Social In-app Purchases in Frontline Commando 2.

Analytics

If you want to grow your app sustainably, it is important to keep optimizing your campaigns and growth efforts consistently. This requires having robust analytics and reporting in place to monitor each of your campaigns closely, and optimize them for better results. With analytics you can track various aspects like user engagement, performance of in-app promotions and price points, the most effective growth channels (organic and paid) closely. This helps in understanding and collating actionable user insights that can drive the growth of the app.

The Way Forward

The app market is currently booming and offers a perfect opportunity for businesses to grow. If your business is entering this environment, it is important to understand the rising competition and ensure that every small element that contributes to growth is a part of your strategy.

Missing out on even the smallest of elements from the mobile growth stack, can result in missing out a market opportunity to grow more effectively! Hence, a strategic yet flexible approach needs to be adopted by businesses.

What have been the common challenges that you have faced while introducing your app to the current mobile market? Have you tried (or plan to) implement the mobile growth stack in your strategy?

Viral Patel

Helfen Sie uns!

Sie haben einen Fehler entdeckt oder vermissen Ihre Firma? Dann schreiben Sie uns:
info@makinggames.de, Betreff: Firmenregister

DIE BRANCHE IM ÜBERBLICK
FIRMENREGISTER

Vergessen Sie die Auskunft! Hier finden Sie sämtliche uns bekannten Publisher, Entwickler, Dienstleister, Ausbilder und Verbände der deutschsprachigen Spiele-Industrie - von 3d-io bis Z-Software.

DEVELOPMENT					
Firma		**Straße/Hausnummer**	**Postleitzahl/Ort**	**Telefon**	**E-Mail**
3d-io		Rheingaustraße 94	65203 Wiesbaden	0611 / 5829602	info@3d-io.com
5d lab		Georges-Köhler-Allee 79	79110 Freiburg	0761 / 2038043	info@5dlab.com
Adrastea		Bielefelder Str. 5	90425 Nürnberg	0700 / 42300000	info@adrastea.com
Aesir Interactive		Grafingerstraße 6	81671 München		hq@aesir-interactive.com
ANIMA Entertainment		Konsul-Smidt-Straße 84	28217 Bremen	0421 / 5784220	info@anima-entertainment.de
AntMe!		Friedenstrasse 33	85221 Dachau		info@antme.net
Bad Monkee		Grindelallee 100	20146 Hamburg		info@badmonkee.de
B-Alive		Biberacher Straße 38	88444 Ummendorf	07351 / 441307	admin@b-alive.de
Beardshaker Games		Wartenau 16	22089 Hamburg	040 / 28471900	contact@beardshaker.com
BIGITEC		Theaterstraße 22	53111 Bonn	0228 / 42976585	info@bigitec.com
BIGPOINT	key player	Drehbahn 47-48	20354 Hamburg	040 / 8814130	info@bigpoint.net
b-interaktive		Lohbachstraße 12	58239 Schwerte	02304 / 3382391	info@binteraktive.com
Bit Barons c/o Wailua Games		Schellingstraße 35	80799 München	089 / 41617744	info@bitbarons.com
Black Forest Games		Innovationszentrum, Hauptstraße 1a	77652 Offenburg	0781 / 31057910	info@bfgames.biz
Black Pants Studio GmbH		Thiemannstr. 1, Tor 4 Haus 5	12059 Berlin	0160 / 6529506	mail@blackpants.de
Blazing Badger		Niddastraße 64	60329 Frankfurt am Main		info@blazingbadger.com
Blue Byte	key player	Adlerstraße 74	40211 Düsseldorf	0211 / 338000	info@bluebyte.de
Blue Byte Mainz	key player	Römerpassage 1	55116 Mainz	06131 / 554470	info@related-designs.de
Bongfish		Schönaugasse 8a/2	A-8010 Graz	+43 / 676 / 7822203	info@bongfish.com
Bright Future		Gustav-Heinemann-Ufer 56	50968 Köln	0221 / 78982171	info@brightfuture.de
Brightside Games		Marie-Elisabeth-Lüders-Straße 1	10625 Berlin	0177 / 3354447	
Broken Rules Interactive Media		Johann Strauss Gasse 20/8	A-1040 Wien		hello@brokenrul.es
Bronx Studios Entertainment		Olof-Palme-Straße 13	60439 Frankfurt	069 / 870050660	info@bronxstudios.com
BSS web consulting		Savignystraße 74	45147 Essen	0201 / 5200044	info@bss-consulting.de
Buntware Games		Colmarerstrasse 9	79106 Freiburg	0761 / 3891598	contact@buntware.com
Bumblebee.		Gerresheimer Straße 7	51674 Wiehl	02261 / 4795001	tassilo@bumblebee-games.com
ByteRockers		Schivelbeiner Straße 1	10439 Berlin	030 / 232573390	info@byterockers.de
Bytro Labs		Rödingsmarkt 29	20459 Hamburg		info@bytro.com
Caipirinha Games		Kiefernweg 1a	24161 Altenholz	0431 / 324540	info@caipirinhagames.de
Candygun Games		Hamburger Straße 132	22083 Hamburg	040 / 20947878	
cerasus.media		Rosenthaler Straße 51	10178 Berlin	030 / 802089990	info@cerasus.de
Chasing Carrots		Hornbergstraße 94	70188 Stuttgart	0711 / 64519353	office@chasing-carrots.com
Chimera Entertainment		Karlstraße 68	80335 München	089 / 210205790	info@chimera-entertainment.com
CipSoft	key player	Prüfeninger Straße 20	93049 Regensburg	0941 / 6308280	kontakt@cipsoft.com
Cliffhanger Productions		Seidengasse 32/NB/7	A-1070 Wien		office@cliffhangerproductions.com
ClockStone STUDIO		Claudiastraße 14	6020 Innsbruck	+43 / 512 / 890377	info@clockstone.com
Cooee		Europaallee 7-9	67657 Kaiserslautern	0900 / 1002273	
Crafty Studios		Lichtenwörthergasse 112a	A-7033 Pötsching		info@craftystudios.com
Crazy Bunch		Billhorner Röhrendamm 8	20539 Hamburg	0173 / 4361509	team@crazybunch.biz
creatale		Mörikestraße 28/2	71636 Ludwigsburg	07141 / 2399563	contact@creatale.de
CreaTeam Software		Sünderup 6	24943 Flensburg	0461 / 64808	
Crenetic		Kreuzstraße 3	45468 Mülheim an der Ruhr	0208 / 4442142	info@crenetic.de
Crytek		Grüneburgweg 16-18	60322 Frankfurt am Main	069 / 21977660	info@crytek.de
Cyber Arena Entertainment Group		Sebastian Kneippgasse 30	2380 Perchtoldsdorf		info@c-arena.com
Dachshund Games		Turmstraße 48	10551 Berlin		team@dachshund-games.com
Daedalic Entertainment		Papenreye 51	22453 Hamburg	040 / 43261270	info@daedalic.de
Decane		Hallerstraße 5e	20146 Hamburg	040 / 42910947	info@decane.net
Deck13 Interactive		Gutleutstraße 82	60329 Frankfurt am Main	069 / 71671660	info@deck13.com
Deep Silver Fishlabs		Großer Burstah 50-52	20457 Hamburg	040 / 8888000	business@fishlabs.net
Destrax Entertainment		Merkurstraße 10	33739 Bielefeld		info@destrax.de
Digitalmindsoft	key player	Wichernstraße 10	89073 Ulm		info@digitalmindsoft.eu
Doublesmith		Ranzonigasse 3/3	A-3100 St. Pölten	+43 / 699 / 19447880	mail@doublesmith.com
dreiNET		Bergedorfer Straße 96	12623 Berlin		philip@dreinet.org
eelusion		Paul-Lincke-Ufer 39	10999 Berlin		contact@eelusion.com
Egosoft		Heidestraße 4	52146 Würselen	02405 / 4239970	egoinfo@egosoft.com
Elements of Art GmbH		An der Eickesmühle 23	41238 Mönchengladbach	02166 / 9156789	info@eoa.de
Enter-Brain-Ment		Littenstraße 106/107	10179 Berlin		interesse@enter-brain-ment.com
Envision Entertainment		Binger Straße 38	55218 Ingelheim		info@envision-entertainment.de
eos interactive		Carl-Zeller Straße 16	75015 Berlin	07252 / 957757	info@eosinteractive.de
exDream		Hildesheimer Straße 5	30169 Hannover	0511 / 37077675	info@exdream.com
exozet	key player	Platz der Luftbrücke 4-6	12101 Berlin	030 / 2465600	games@exozet.com
extra toxic		Hanauer Landstraße 196a	60314 Frankfurt am Main	069 / 48440040	info@extratoxic.com
eyefactive		Feldstraße 128	22880 Wedel	04103 / 903800	info@eyefactive.com
FAKT Software		Dufourstraße 28	04107 Leipzig	0341 / 14990564	info@fakt-software.de
Fameside Entertainment		Storkower Straße 158	10407 Berlin	030 / 40577053	info@fameside.de
Fancy Bytes		Niederstraße 5	26931 Huntorf	02151 / 3259912	biz@fancy-bytes.de

DEVELOPMENT

Firma		Straße/Hausnummer	Postleitzahl/Ort		Telefon	E-Mail
Far Away Illustration & Design		Im Goldberg 42	63571	Gelnhausen		info@faraway-illustration.com
FDG Entertainment		Romanstr. 7-9	80992	München		info@fdg-entertainment.com
flaregames		Kaiserstraße 146-148	76133	Karlsruhe	0721 / 1831540	info@flaregames.com
Frame6		Mindener Straße 30	40227	Düsseldorf	0211 / 23938236	contact@frame6.de
Freudenreich & Tollknaepper		Paracelsusstraße 57	42283	Wuppertal	0202 / 2721048	mail@german-railroads.com
Fried Bytes		Papestraße 12	66119	Saarbrücken	0681 / 68819141	info@friedbytes.de
Funatics Software	key player	Essener Straße 66	46047	Oberhausen	0208 / 3066670	info@funatics.de
funworld		Photo Play Straße 1	A-4860	Lenzing	+43 / 7662 / 67850	info@photoplay.com
Fusionsphere Systems		Rosenau 8	86551	Aichach	0700 / 38746600	info@fusionsphere.com
GameArt Studio		Bismarckstraße 107	10625	Berlin		kontakt@GameArtStudio.de
GameDuell	key player	Taubenstraße 24-25	10117	Berlin	030 / 288768210	impressum@gameduell.de
Gameforge		Albert-Nestler-Straße 8	76131	Karlsruhe	0721 / 3548080	info@gameforge.de
gameus		Kufsteinerstraße 40	83064	Raubling	08035 / 6689	info@gameus.de
Gaming Minds Studios		Georgstraße 6	33330	Gütersloh		contact@gamingmindsstudios.com
Gbanga		Limmatstrasse 73	CH-8005	Zürich	+41 / 43 / 5366701	matthias@gbanga.com
GIANTS Software GmbH		Rütistrasse 18	8952	Zürich-Schlieren	+41 / 44 / 5082176	mail_us@giants-software.com
Goal Games		Feurigstraße 54	10827	Berlin		info@goal-games.de
goodbeans		Winsstraße 62	10405	Berlin	030 / 802087400	jobs@goodbeans.com
Goodgame Studios		Theodorstraße 42-90, Haus 9	22761	Hamburg	040 / 2198800	pr@goodgamestudios.com
Greentube		Mariahilfer Straße 47/1/102	A-1060	Wien	+43 / 1 / 4945056	office@greentube.com
HandyGames		i_Park Klingholz 13	97232	Giebelstadt	09334 / 97570	info@handy-games.com
iLogos Europe		Pezolddamm 98a	22175	Hamburg	0160 / 7002927	alexander@ilogos.biz
Independent Arts Software		Münsterstraße 5 / HAMTEC Haus 2b	59065	Hamm	02381 / 488818	info@independent-arts-software.de
InnoGames	key player	Friesenstraße 13	20097	Hamburg	040 / 78893350	info@innogames.com
Instance Four		Friederikastraße 65	44789	Bochum	0234 / 89038971	info@instancefour.com
Island Games		Vahrenwalder Straße 7	30165	Hannover	0511 / 35319898	kontakt@islandgames.de
it Matters Games		Am Studio 2A	12489	Berlin		info@itmattersgames.com
Jo-Mei		Monumentenstraße 35, Aufg. C	10829	Berlin	030 / 81494080	info@jo-mei.com
Jumping Llamas UG		Adalbert-Stifter-Str. 8	70437	Stuttgart		contact@jumpingllamas.com
K1010 Media		Erkelenzdamm 59-61	10999	Berlin	030 / 57709936	info@k1010.de
keen games		Dreieichstraße 59	60594	Frankfurt am Main	069 / 66058838	info@keengames.com
King Art	key player	Tiefer 5	28195	Bremen	0421 / 322760	contact@kingart.de
KORION Simulation		Mömpelgardstraße 16	71640	Ludwigsburg	07141 / 3898231	info@korion.de
kr3m.media		Kaiserstraße 158	76133	Karlsruhe	0721 / 18395918	
Kritzelkratz 3000		Dieselstraße 2-6	97082	Würzburg	0931 / 3536091	info@kritzelkratz.de
kunst-stoff		Kottbusser Damm 73	10967	Berlin	030 / 23457178	info@kunst-stoff.de
Limbic Entertainment		Heinrich-Hertz-Straße 21	63225	Langen	06103 / 5019780	info@limbic-entertainment.de
Looterkings GmbH		Lindenstraße 20	50674	Köln	0221 / 93825101	admin@looterkings.de
MADE		Alter Schlachthof 39	76131	Karlsruhe	0721 / 78809460	
MaDe Games GbR Neetix - Wycislik		Hochstraße 34	41334	Nettetal		info@madegames.com
McPeppergames		Nikolaus-Molitor-Straße 11a	97702	Münnerstadt	09733 / 781006	info@mcpeppergames.com
Media Seasons		Liviastraße 6	4105	Leipzig	0341 / 2156752	contact@mediaseasons.com
Mex IT		Mallinckrodtstraße 320	44147	Dortmund	0231 / 58680722	mex@mex-solutions.com
Mimimi Productions		Berg-am-Laim-Straße 64	81673	München	089 / 809115070	info@mimimi-productions.de
Mind Elevator Games		Prenzlauer Promenade 190	13189	Berlin	030 / 91744394	info@mindelevatorgames.com
mobivention		Gottfried-Hagen-Straße 24	51105	Köln	0221 / 6778110	info@mobivention.com
Moonbyte Games		Wormser Landstraße 17	67346	Speyer	06232 / 8774482	info@moonbytegames.com
NeoBird		Südwestpark 37-41	90449	Nürnberg	0911 / 3092097	info@neobird.de
Neopoly GmbH		Hellweg 5-7	44787	Bochum	0234 / 369177-0	info@neopoly.de
netmin games		Philipp-Reis-Straße 6	55129	Mainz	06131 / 507896	schreiber@netmin.de
northworks		Stahltwiete 23	22761	Hamburg	040 / 78107075	info@northworks.de
Noumena Studios		Lützowstraße 33	10785	Berlin	030 / 53148825	info@noumenastudios.com
NovaTrix / Animedo		Schlüsselwiesen 19	70186	Stuttgart	0711 / 3102770	info@animedo.de
Nurogames GmbH		Schaafenstraße 25	50676	Köln	0221 / 3988040	info@nurogames.com
online4ever Limited		Manitiusstraße 6	1067	Dresden	0351/ 2063875	info@online4ever.biz
OFM - OnlineFussballManager	key player	Eupener Straße 60	50933	Köln	0221 / 88892920	office@onlinefussballmanager.de
Outline Development		Hauptstraße 12	57074	Siegen	0271 / 3131331	webmaster@outline-development.de
Pappuga		Fürther Straße 212	90429	Nürnberg	0911 / 32378310	info@pappuga.com
Phobetor		Wiesentalstraße 5	90419	Nürnberg	0911 / 9389292	wendt@phobetor.de
Piranha Bytes		Ruhrallee 63	45138	Essen	0201 / 806720	info.nospam@piranha-bytes.com
pixeltamer.net		Clausewitzstraße 6	10629	Berlin	030 / 34347690	welcome@pixeltamer.net
Pixon		Jaffestraße 10	21109	Hamburg	040 / 33399430	welcome@pixon.de
Playnik		Im Derdel 17	48161	Münster	02534 / 9733530	info@playnik.de
playzo		Heinrich-Herz- Straße 6	64295	Darmstadt	06151 / 6673700	info@playzo.biz
plazz entertainment		Augustmauer 1	99084	Erfurt	0361 / 2169460	info@plazz-entertainment.com
Pop Rocket Studios GmbH		Forsmannstraße 8b	22303	Hamburg	040 / 68878691	info@poprocket.com
Procontis		Am Bauhof 18	64807	Dieburg	06071 / 430111	sales@procontis.de
Promotion Software		Karlstraße 3	72072	Tübingen	07071 / 91670	mail@promotion-software.de
Quadriga Games		August-Bebel-Straße 27	14482	Potsdam	0331 / 23189660	info@quadrigagames.com
Rat King Entertainment		Robert-Franz-Ring 3	06108	Halle	0345 / 6141741	mail@ratking.de
Ravensburger Digital		Kaflerstraße 8	81241	München	089 / 12228180	tellme@ravensburger-digital.com
Reality Twist		Berg-Am-Laim-Straße 64	81673	München	089 / 380129500	mail@reality-twist.com
Realmforge Studios		Hofer Straße 15	81737	München	089 / 55069134	info@realmforgestudios.com
RedMoon Studios		Dieselstrasse 16	86368	Gersthofen	0821 / 45598000	info@redmoonstudios.de
REDOX Game Labs		Jakob-Haringer Straße 5	A-5020	Salzburg	+43 / 662 / 273273	info@redox-labs.com
remote control productions	key player	Karlstraße 68	80335	München	089 / 21020570	info@r-control.de
RockAByte		Schaafenstraße 25	50676	Köln	0221 / 80147950	info@rockabyte.de
SAFKAS Development		Schulze-Delitzsch-Straße 39	04315	Leipzig		mail@safkas.de
Sandbox		Bornholmer Strasse 71	10439	Berlin	030 / 40045181	info@sandbox-interactive.com
Scorpius Forge		Hörvelsinger Weg 29-31	89081	Ulm	0731 / 14410099	info@scorpius-forge.com
Serious Games Solutions		August-Bebel-Straße 27	14482	Potsdam	0331 / 23189680	mail@serious-games-solutions.com
Sharkbomb Studios		Durlacher Allee 53	76131	Karlsruhe	0160 / 92502633	contact@sharkbombs.de
Silent Dreams		Kreuzstraße 3	45468	Mülheim an der Ruhr		contact@silentdreams.de
SilentFuture		Triebelsheide 37b	42111	Wuppertal	0202 / 3935366	info@silentfuture.de
Simlity		Moritz-von-Rohr-Straße 1a	07745	Jena	03641/3279684	info@simlity.com
Skunk Brothers		Dieselstraße 12	61191	Rosbach		hello@skunkbrothers.de
SlipShift		Friedrichstraße 122	10117	Berlin	030 / 27581581	info@slipshift.net
Snapjaw Games		Dieselstraße 7	50259	Pulheim	02238 / 4785813	info@snapjawgames.com
Snowstep Development		Heinrich-Holtschneider-Weg 76	40489	Düsseldorf	0201 / 17848176	business@snowstep.de

DEVELOPMENT

Firma		Straße/Hausnummer	Postleitzahl/Ort		Telefon	E-Mail
Socialspiel		Schmalzhofgasse 26 / Top 5-6	A-1060	Wien		office@socialspiel.com
SOLID WHITE design digital media		Mönchhaldenstraße 27A	70191	Stuttgart	0711 / 12375149	contact@solidwhite.de
Solimedia Productions		Bahnhofstr. 4a	99084	Erfurt	0361 / 658550	hatmut.niemeier@solimedia.de
space orange studios GmbH		Graf-Adolf-Straße 41	40210	Düsseldorf	0211 / 92416956	info@space-orange.com
Sparrow Games		Wegenerstraße 1	13088	Berlin	030 / 50915356	mail@sparrowgames.de
SpinBottle Games		Weidkamp 3	45355	Essen	0201 / 1789614	info@spinbottlegames.com
Spirit		Friedrichstraße 15	70174	Stuttgart	0711 / 96685510	weyrich@go4spirit.com
Splitscreen Studios		Neuer Kamp 30	20357	Hamburg		info@splitscreenstudios.com
Springwald Software		Alter Eistreff 36	44789	Bochum	0700 / 777464925	info@springwald.de
Sproing Interactive Media	key player	Fernkorngasse 10	A-1100	Wien	+43 / 1 / 60430280	office@sproing.com
stillalive studios		Rosengasse 1	A-6020	Innsbruck	+43 / 650 / 3468942	info@stillalive-studios.com
Stratosphere Games	key player	Gormannstraße 14	10119	Berlin	0177 / 7887699	info@stratosphere-games.com
Studio Fizbin		Hoferstraße 20	71636	Ludwigsburg	07141 / 9923866	hello@studio-fizbin.de
Sunlight Games		Im Klapperhof 7-23	50670	Köln	0221 / 16823466	kontakt@sunlight-games.com
symbICrowd		In der Schleh 2	5224	Eschweiler	0152 / 55878044	apps@symblcrowd.de
Team Vienna Games		Kaiserstrasse 84/1/6	A-1070	Wien		office@teamviennagames.com
TG Nord		Große Düwelstraße 28	30171	Hannover	0511 / 9409208	mail@tg-nord.com
the Good Evil		Gilbachstraße 22	50672	Köln	0221 / 16894248	hello@thegoodevil.com
Thera Bytes UG		Zielstattstraße 10a	81379	München	089 / 74809570	info@therabytes.de
Thoughtfish GmbH		Friedbergstraße 9	14057	Berlin	030 / 692054321	hello@thoughtfish.de
Travian Games		Wilhelm-Wagenfeld-Straße 22	80807	München	089 / 3249150	mail@traviangames.com
unikat media		Eckdrift 10	19061	Schwerin	0385 / 64105688	info@unikatmedia.de
upjers	key player	Hafenstraße 13	96052	Bamberg	0951 / 510908100	mail@upjers.com
VisionaryX		Friedrichstraße 12	71101	Schönaich	07031 / 2850/ 414	contact@visionaryx.com
V-Play		Kolonitzgasse 9/11-14	A-1030	Wien		team@v-play.net
Wolpertinger Games		Karlstraße 68	80335	München	089 / 210205700	contact@wolpertingergames.com
wooga		Saarbrücker Straße 38	10405	Berlin	030 / 32505294	info@wooga.com
Xendex		Mariahilfer Strasse 176/6	A-1150	Wien	+43 / 1 / 89080090	office@xendex.com
XYRALITY		Friedensallee 290	22763	Hamburg	0 / 4035730010	info@xyrality.com
YAGER Development	key player	Pfuelstraße 5	10997	Berlin	030 / 69597660	contact@yager.de
YEPS! GmbH		Methweg 22	50823	Köln	0221 / 30191824	kontakt@yeps.de
zeitland media & games		Mathildenstraße 10/1	71638	Ludwigsburg	07141 / 5050565	contact@zeitland.com
Zeroscale		Schwedter Straße 9a	10119	Berlin	030 / 405057929	info@zeroscale.com
Zone 2 Connect		Fürstenwall 70	40219	Düsseldorf	0211 / 5422400	info@zone2.de
Z-Software		Lindemannstrasse 81	44137	Dortmund	0231 / 33015031	contact@z-software.net

FREELANCER DEVELOPMENT

Firma		Straße/Hausnummer	Postleitzahl/Ort		Telefon	E-Mail
Caspar Siebel		Theresienhöhe 1	80339	München	017661615291	mail@casparsiebel.com
Christian Küchmeister (3D Artist / Game Design)		Lauensteinstraße 9	22307	Hamburg	0163 / 4841841	ck@ckuechmeister.de
Eric Jannot (Game Design, Game Writing)		Sonnenallee 70	12045	Berlin	0178 / 5223697	
Filippo Beck Peccoz		Franz-Joseph-Straße19	80801	München	089 / 80033204	mail@fbpsound.com
Jochen Hamma (Producing)		Wehinger Weg 9	78583	Boettingen	07429 / 910793	jochen.hammer@fantastic-realms.com
Jörg Beilschmidt (Game Design)		Berliner Ring 20	21406	Melbeck	0172 / 4311243	j.beilschmidt@creatown.de
Kim Lange (Full Service Agency)		Landwehr 192	46045	Oberhausen	0178 / 2375418	lange@eins2design.de
Marco Sowa (Producing, Development)		Postfach 420566	50899	Köln	0221 / 16916844	mail@marcosowa.de
Martin Linnartz (3D Artist, Game Developer)		Achenbachstraße 19	40237	Düsseldorf	0211 / 17838926	kontakt@cubicity.de
Martin Nerurkar (Game Design)		Durlacher Allee 53	76131	Karlsruhe		mnerurkar@sharkbombs.com
Nico Nowarra (Storytelling)		Friedbergstraße 9	14057	Berlin	030 / 31801899	nno@menintext.com
Niels Bauer Games (Game Design)		Sickingenstraße 37	79117	Freiburg	0761 / 66947	contact@nielsbauergames.com
Pinky Pills (2D-Grafik, Game Design, Concept)		Swindonstraße 162	38226	Salzgitter	05341 / 2886036	pinkypills@arcor.de
Sebastian Zimmermann (3D Character Creation)	key player				0176 / 23844655	contact@szart.info
Thomas Obermaier (Programmierung)		Kapellenstraße 1	86869	Gutenberg	0170 / 3815144	contact@polyforming.com
Wolfgang Walk (Full Scale Producing)		Karl-Leopold-Straße 6	76229	Karlsruhe	0721 / 48399963	wolfgang.walk@t-online.de

PUBLISHING/DISTRIBUTION

Firma		Straße/Hausnummer	Postleitzahl/Ort		Telefon	E-Mail
505 Games		Brunnfeld 2-6	93133	Burglengenfeld	09471 / 3088792	
Activision Blizzard Deutschland		Fraunhoferstraße 7	85737	Ismaning	089 / 9998170	info@activision.de
ad2games	key player	Rosenstraße 17	10178	Berlin	030 / 240888221	info@ad2games.com
Aeria Games Europe	key player	Schlesische Straße 27, Aufgang C	10997	Berlin		info@aeriagames.com
Aerosoft		Lindberghring 12	33142	Büren	02955 / 760310	info@aerosoft.de
Application Systems Heidelberg		Pleikartsförsterhof 4/1	69124	Heidelberg	06221 / 300002	kontakt@application-systems.de
AppLift		Rosenstraße 17	10178	Berlin	030 / 240888208	info@applift.com
astragon Software		Limitenstrasse 64-78	41236	Mönchengladbach	02166 / 146450	info@astragon.de
Bandai Namco Entertainment Germany		Carl-Benz-Straße 21	60386	Frankfurt am Main	069 / 24449100	de.info@bandainamcoent.eu
BHV		Novesiastraße 60	41564	Kaarst	02131 / 76501	info@bhv.de
Bigpoint		Drehbahn 47-48	20354	Hamburg	040 / 8814130	info@bigpoint.net
bitComposer Entertainment		Mergenthalerallee 79-81	65760	Eschborn	06196 / 7793810	info@bit-composer.com
Capcom Entertainment Germany GmbH		Borselstraße 20	22765	Hamburg	040 / 6965620	info@capcomeuro.de
Covus Crobo	key player	Schwedter Straße 263	10119	Berlin		info@crobo.com
Crimson Cow		Tarpen 40, Haus 5	22419	Hamburg	040 / 59355237	info@crimsoncow.de
Crytek	key player	Grüneburgweg 16-18	60322	Frankfurt am Main	069 / 21977660	cryengine@crytek.com
Daedalic Entertainment	key player	Papenreye 53-Workport Unit 2	22453	Hamburg	040 / 43261270	info@daedalic.de
Deck13 Interactive		Gutleutstraße 82	60329	Frankfurt am Main	069 / 71671660	info@deck13.com
dreamfab		Domplatz 3	93047	Regensburg	0941 / 569591520	
dtp entertainment		Goldbekplatz 3-5	22303	Hamburg	040 / 6699100	info@dtp-entertainment.com
dtp young entertainment		Goldbekplatz 3-5	22303	Hamburg	040 / 6699100	info@dtp-young.com
Electronic Arts		Im Zollhafen 15-17	50678	Köln	0221 / 975820	
European Games Group	key player	Wiener Platz 7	81667	München		contact@gamesgroup.eu
EuroVideo Medien		Bavariafilmplatz 7 / Gebäude 33	82031	Grünwald	089 / 96244442	info@eurovideo.de
flashpoint	key player	Valvo Park - Haus 5c / Tarpen 40	22419	Hamburg	040 / 710060	info@flashpoint.de
GameDuell		Taubenstraße 24-25	10117	Berlin	030 / 288768211	impressum@gameduell.de
Gameforge	key player	Albert-Nestler-Straße 8	76131	Karlsruhe	0721 / 3548080	info@gameforge.de
GameGenetics	key player	Alte Jakobstraße 85-86	10179	Berlin	030 / 922512769	info@gamegenetics.de
Gameloft		Karl-Liebknecht-Straße 5	10118	Berlin	030 / 20188429	gregory.wintgens@gameloft.com
GameTwist		Mariahilfer Straße 47/1/102	1060	Wien	+43 / 1494 / 5056	3rdparty@gametwist.com
GamesInFlames		Karlstraße 68	80335	München	089 / 210205715	info@gamesinflames.com

PUBLISHING/DISTRIBUTION

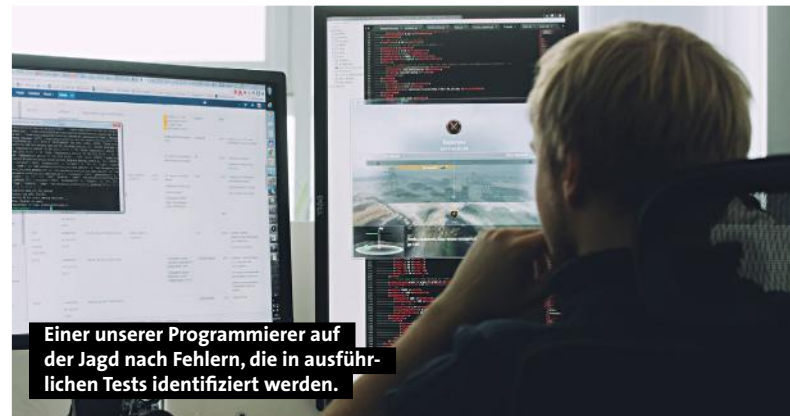| Firma	Straße/Hausnummer	Postleitzahl	Ort	Telefon	E-Mail
gamigo	Behringstraße 16b	22765	Hamburg	040 / 4118850	info@gamigo.com
Halycon Media	An der Autobahn 24	23858	Reinfeld	04533 / 61090	infomail@halycon.de
Headup Games	Nordstraße 102	52353	Düren	02421 / 4868700	info@headupgames.com
HitFox Group	Rosenstraße 17	10178	Berlin	030 / 240888200	info@hitfoxgroup.com
IME – Interactive Media & Entertainment GmbH	Lerchenstr. 28A	22767	Hamburg	040 /28472903	
Infernum Productions	Uhlandstraße 175	10719	Berlin	030 / 91201090	contact@infernum.com
InnoGames	Friesenstraße 13	20097	Hamburg	040 / 78893350	info@innogames.de
Intenium	Neuer Pferdemarkt 1	20359	Hamburg	040 / 25494296	info@intenium.de
Kalypso Media Group	Wilhelm-Leuschner-Straße 11-13	67547	Worms	06241 / 5061900	info@kalypsomedia.com
Koch Media	Lochhamer Straße 9	82152	Planegg/München	089 / 242450	office@kochmedia.de
Konami	Berner Straße 103-105	60437	Frankfurt am Main	069 / 9855730	support@konami.de
McGame.com	Fürstenwall 27	40217	Düsseldorf	0211 / 63550100	support@mcgame.com
Microsoft	Konrad-Zuse-Straße 1	85716	Unterschleißheim	089 / 31760	kunden@microsoft.com
Millform	Kummelenstrasse 20	CH-4104	Oberwil/BL	+41 / 61 / 7220712	werner.sala@millform.ch
mixtvision Digital	Leopoldstraße 25	80802	München	089 / 383770925	kontakt@mixtvision.de
Morphicon Limited	Lindwurmstraße 88	80337	München	089 / 45235460	info@morphicon.de
NBG	Brunnfeld 2-6	93133	Burglengenfeld	09471 / 70170	info@nbg-online.de
Nintendo	Nintendo Center	63760	Grossostheim	06026 / 9500	info@nintendo.de
Nordic Games	Landstraßer Hauptstraße 1/18	A-1030	Wien	+43 / 1 / 2365487-0	office@nordicgames.at
Novitas	Frankfurter Straße 2	38122	Braunschweig	02574 / 9270	kontakt@greenpepper.de
Phenomedia	An der Sandkull 81a	47445	Moers	02327 / 9970	info@phenomedia.com
Playa Games	Alstertor 9	20095	Hamburg	040 / 76793220	info@playa-games.com
Players Rock Entertainment	Goseriede 4	30159	Hannover	0511 / 3539940	contact@playersrock.com
ProSiebenSat.1 Games	Medienallee 6	85774	Unterföhring	089 / 950710	info@sevengames.com
Ravensburger Digital	Kaflerstraße 8	81241	München	089 / 12228180	tellme@ravensburger-digital.com
Reality Twist	Berg-Am-Laim-Straße 64	81673	München	089 / 380129500	mail@reality-twist.com
redspotgames	Postfach 310464	80104	München	089 / 4036370	info@redspotgames.com
Rondomedia	Limitenstraße 64-78	41236	Mönchengladbach	02166 / 618660	info@rondomedia.de
RTL Games	Achnerstraße 1036	50858	Köln	0221 / 4560	entwickler@rtl-interactive.de
Rumble Media	Kriegsstraße 5	76137	Karlsruhe	0721 / 2018020	info@fettspielen.de
S.A.D.	Rötelbachstraße 91	89079	Ulm	07305 / 96290	kontakt@s-a-d.de
Sega	Rablstraße 24	81669	München	089 / 22848000	info@sega.de
SERU	Industriestraße 8	24589	Nortorf	04392 / 84900	info@seru.de
Sony Computer Entertainment	Frankfurter Straße 233	63263	Neu-Isenburg	06102 / 4330	scee_presscentre@scee.net
Square Enix	Domstraße 17	20095	Hamburg	040 / 30633400	
Take-Two Interactive	Agnesstraße 14	80798	München	089 / 278220	info@take2.de
Thumbr	Pfuelstraße 5	10997	Berlin	030 /300137100	info@thumbr.com
Tipp24 Entertainment	Straßenbahnring 11	20251	Hamburg		info@t24e.de
Tivola Publishing	Oeverseestraße 10-12	22769	Hamburg	040 / 7070063	mail@tivola.de
TopWare Interactive	Rittnertraße 36	76227	Karlsruhe	0721 / 9151010	info@topware.de
Traffic Captain	Wendenstraße 21b	20097	Hamburg	040 / 23706800	info@trafficcaptain.com
Travian Games	Wilhelm-Wagenfeld-Straße 22	80807	München	089 / 3249150	mail@traviangames.com
Ubisoft	Adlerstraße 74	40211	Düsseldorf	0211 / 338000	info@ubisoft.de
United Soft Media Verlag	Thomas-Wimmer-Ring 11	80539	München	089 / 29088175	info@usm.de
upjers	Hafenstraße 13	96052	Bamberg	0951 / 510908100	mail@upjers.com
YEPS! GmbH	Methweg 22	50823	Köln	0221 / 30191824	kontakt@yeps.de
ZeniMax Germany	Schillerstraße 15/17	60313	Frankfurt am Main		kontakt.de@zenimax.com

PUBLIC SECTOR

Firma	Straße/Hausnummer	Postleitzahl	Ort	Telefon	E-Mail
BIU	Charlottenstraße 62	10179	Berlin	030 / 24087790	info@biu-online.de
BIU.Dev/BIU.Net	Charlottenstraße 62	10117	Berlin	030 / 24087790	info@biu-online.de
FilmFernsehFonds Bayern	Sonnenstraße 21	80331	München	089 / 5446020	filmfoerderung@fff-bayern.de
Film- und Medienstiftung NRW	Kaistrasse 14	40221	Düsseldorf	0211 / 9305000	info@filmstiftung.de
G.A.M.E.	Französische Straße 48	10117	Berlin	030 / 346550980	info@game-bundesverband.de
gamearea FRM	Holzhausenstraße 22	60322	Frankfurt am Main	069 / 94419441	info@gamearea-frm.de
gamecity:Hamburg	Habichtstraße 41	22305	Hamburg	040 / 2270190	info@gamecity-hamburg.de
GAMEplaces	Hanauer Landstraße 126-128	60314	Frankfurt am Main	069 / 21236214	manuela.schiffner@gameplaces.de
games.net berlinbrandenburg	Ackerstraße 3A	10115	Berlin	030 / 24628570	games.net@medianet-bb.de
GDI.Ruhr	Kreuzstraße 1	45468	Mülheim an der Ruhr	0208 / 69801520	info@games-ruhr.com
Hessen-IT	Abraham-Lincoln-Straße 38 - 42	65189	Wiesbaden	0611 / 7748481	info@hessen-it.de
medienboard berlin-brandenburg	August-Bebel-Straße 26-53	14482	Potsdam-Babelsberg	0331 / 743870	info@medienboard.de
MFG Medien- und Filmgesellschaft Baden-Württemberg	Breitscheidstraße 4	70174	Stuttgart	0711 / 90715-300	info@mfg.de
Mitteldeutsche Medienförderung	Hainstraße 17-19	4109	Leipzig	0341 / 269870	info@mdm-online.de
nordmedia	Expo-Plaza 1	30539	Hannover	0511 / 1234560	info@nordmedia.de
Northstar Developers	Bödekerstr 84	30161	Hannover	0160 / 97880272	d.bruenig@collision-studios.com
ÖVUS	Aichhorngaße 14	A-1120	Wien	+43 / 1810 / 328912	office@ovus.at
Stiftung Digitale Spielkultur	Torstraße 6	10119	Berlin	030 / 29049290	kontakt@stiftung-digitale-spielekultur.de
USK	Torstraße 6	10119	Berlin	030 / 24088660	kontakt@usk.de
WERK1 München	Grafinger Straße 6	81671	München	089 / 9952990	info@werk1muenchen.de

EDUCATION

Firma	Straße/Hausnummer	Postleitzahl	Ort	Telefon	E-Mail
Acagamics e.V.	Universitätsplatz 2, G29	39106	Magdeburg		info@acagamics.de
Akademie für Medien	Balinger Straße 39A	70567	Stuttgart	0711 / 4209444	h.ehlers@amk-net.de
BTK – Hochschule für Gestaltung	Bernburger Straße 24-25	10963	Berlin	030 / 338539510	berlin@btk-fh.de
Cologne Game Lab / Fachhochschule Köln	Ubierring 40	50678	Köln	0221 / 82753095	info@colognegamelab.de
Designhochschule Schwerin	Bergstraße 38	19055	Schwerin	0385 / 5559775	info@designschule.de
EC Europa Campus	Lyonerstraße 34	60528	Frankfurt am Main	0621 / 8425660	
FH OÖ Studienbetriebs GmbH	Softwarepark 11	A-4232	Hagenberg	+43 (0) 5080420	info@fh-hagenberg.at
FH Trier	Schneidershof	54293	Trier	0651 / 8103345	sek@informatik.fh-trier.de
FH Technikum Wien	Mariahilfer Straße 37-39	1060	Wien	+43 / 1 / 588390	info@technikum-wien.at
FH Salzburg	Urstein Süd 1	A-5412	Puch/Hallein	+43 / 50 / 22110	press@fh-salzburg.ac.at
Games Academy Berlin	Rungestrasse 20	10179	Berlin	030 / 29779120	info@games-academy.de
Games Academy Frankfurt	Hanauer Landstraße 146	60314	Frankfurt	069 / 42696460	info@games-academy.de
Gesellschaft für Personalentwicklung und Bildung	Beuthstraße 7-8	10117	Berlin	030 / 9339480	gpb-berlin@gpb-berlin.de
Hochschule Harz	Friedrichstrasse 57-59	38855	Wernigerode	03943 / 659100	dackermann@hs-harz.de
Hochschule Mittweida (FH)	Technikumplatz 17	09648	Mittweida		kontakt@hs-mittweida.de

EDUCATION

Firma	Straße/Hausnummer	Postleitzahl	Ort	Telefon	E-Mail
HTW Berlin	Wilhelminenhofstraße 75a	12459	Berlin	030 / 50190	
Macromedia Akademie	Elsenheimerstraße 63	80687	München	089 / 96160800	ausbildung@macromedia.de
Macromedia Akademie	Naststraße 11	70376	Stuttgart	0711 / 2807380	info.stgt@macromedia.de
Macromedia Akademie	Brüderstraße 17	50667	Köln	0221 / 3108223	akademie.koeln@macromedia.de
Macromedia Hochschule	Gollierstraße 4	80339	München	089 / 5441510	info.muc@macromedia.de
mAHS, media Akademie - Hochschule Stuttgart	Tübinger Straße 12-16	70178	Stuttgart	0711 / 925430	info@media-hs.de
Mediadesign Hochschule	Lindenstraße 20-25	10969	Berlin	030 / 3992660	info-ber@mediadesign-fh.de
Mediadesign Hochschule	Werdener Straße 4	40227	Düsseldorf	0211 / 1793930	info-dus@mediadesign-fh.de
Mediadesign Hochschule	Claudius-Keller-Straße 7	81669	München	089 / 4506050	info-muc@mediadesign-fh.de
S4G School for Games	Gubener Straße 47	10243	Berlin	030 / 96595244	info@school4games.net
SAE Institute Berlin	Soltauer Straße18-22	13509	Berlin	030 / 43094470	berlin@sae.edu
SAE Institute Bochum	Metzstraße 23	44793	Bochum	0234 / 93451310	bochum@sae.edu
SAE Institute Frankfurt	Homburger Landstraße 182	60435	Frankfurt am Main	069 / 543262	frankfurt@sae.edu
SAE Institute Hamburg	Feldstraße 66	20359	Hamburg	040 / 23688080	hamburg@sae.edu
SAE Institute Köln	Medienzentr. Ost, Carlswerkstr. 11c	51063	Köln	0221 / 9541220	koeln@sae.edu
SAE Institute Leipzig	Dittrichring 10	40109	Leipzig,	0341 / 3085160	leipzig@sae.edu
SAE Institute München	Bayerwaldstraße 43	81737	München	089 / 89068771	muenchen.sae.edu
SAE Institute Stuttgart	Stuttgarter Straße 23	70469	Stuttgart	0711 / 81473690	stuttgart@sae.edu
SRH Fachschulen	Bonhoefferstraße 1	69123	Heidelberg	06221 / 884225	it.heidelberg@fachschulen.srh.de
SRH Hochschule Heidelberg	Ludwig-Guttmann-Straße 6	69123	Heidelberg	06221 / 882790	Daniel.Goerlich@Hochschule-Heidelberg.de
Zürcher Universität der Künste	Ausstellungsstraße 60	CH-8005	Zürich	+41 / 43 / 4464646	hs.admin@zhdk.ch

BUSINESS SERVICE

Firma	Straße/Hausnummer	Postleitzahl	Ort	Telefon	E-Mail
4-REAL INTERMEDIA (Lokalisation)	Ludwigstraße 32	63067	Offenbach	069 / 8090880	info@4-real.com
adjust	Saarbrücker Strasse 36	10405	Berlin	030 / 91460083	
Anakan (Lokalisation)	Pfuelstraße 5	10997	Berlin	030 / 531420450	ana@anakan.de
Aruba Events	Kreuzstraße 1-3	45468	Mülheim an der Ruhr	0208 / 6982608	infos@aruba-events.de
arvato games task force	Carl-Bertelsmann-Straße 161F	33332	Gütersloh	05241 / 803074	kontakt@gamestaskforce.de
Beiten Burkhardt Rechtsanwaltsgesellschaft mbH	Westhafen Tower, Westhafenplatz 1	60327	Frankfurt	069 / 7560950	bblaw-frankfurt@bblaw.com
Brehm & v. Moers	Anna-Louisa-Karsch-Straße 2	10178	Berlin	030 / 2603050	berlin@bvm-law.de
Die Hobrechts (Game Thinking)	Hobrechtstraße 65	12047	Berlin	030 / 62901232	info@diehobrechts.de
Dr. Behrmann & Härtel Rechtsanwälte	Kantstraße 98	10627	Berlin	030 / 319984910	info@behrmannhaertel.de
Buschbaum Media & PR	Emanuel-Leutze Straße 21	40547	Düsseldorf	0211 / 5988140	presse@buschbaum-media.com
Clans.de (Network)	Pinnasberg 47	20359	Hamburg	040 / 78800990	info@clans.de
CULTURETRANSLATE	Lyoner Straße 34	60528	Frankfurt am Main	069 / 659998000	info@culturetranslate.de
DELASOCIAL	Christoph-Probst-Weg 31	20251	Hamburg	040 / 87979890	contact@delasocial.com
Digital River	Vogelsanger Straße 78	50823	Köln	0221 / 310 88614	sales@digitalriver.com
Effective Media	Josef-Haumann-Straße 10	44866	Bochum	02327 / 22310	info@effective-media.de
Frankfurter Buchmesse	Reineckstraße 3	60313	Frankfurt am Main	069 / 21020	info@book-fair.com
Freaks 4U Gaming	An der Spreeschanze 10	13599	Berlin	030 / 41719113	info@freaks4u.de
Friedmann Kommunikation	Schanzenstraße 36	51063	Köln	0221 / 5348710	info@fr-k.de
Gärtner PR	Destouchesstraße 68	80796	München	089 / 30766854	info@gaertner-pr.de
Game Developers Conference Europe	Kaiser-Wilhelm-Straße 30	12247	Berlin	030 / 34622644	carsten.kohlenbeck@ubm.com
gamescom	Messeplatz 1	50679	Köln	0221 / 8213894	info@koelnmesse.de
Games Foundation	Neuer Kamp 30	20357	Hamburg		info@gamesfoundation.com
Games Quality	Zum Wasserwerk 15	15537	Erkner	03362 / 885688	info@games-quality.com
Gamify Now!	Karlstraße 68	80335	München	089 / 210205715	info@gamify-now.de
GAMINSIDE	Kaiserstraße 2-4	1070	Wien	+43 / 0676 / 5379776	info@gaminside.com
GAN Game Ad Net	Stresemannstraße 342	22761	Hamburg	040 / 67586750	info@gan-online.com
Ganz & Stock (Personnel Consulting)	Westhafentower, Westhafenplatz	60327	Frankfurt am Main	069 / 710456380	a.stock@ganz-stock.de
GlobaLoc	Storkower Straße 158	10407	Berlin	030 / 428075780	info@globaloc.de
GRAEF Rechtsanwälte	Jungfrauenthal 8	20149	Hamburg	040 / 80600090	hamburg@graef.eu
HoneyTracks (Game Analytics)	Schelling Straße 35	80799	München	089 / 28723995	info@honeytracks.com
IEM Consulting (Business Development, Finanzierung)	Hanauer Landstraße 192	60314	Frankfurt am Main	069 / 15346479	info@iem-consulting.com
IHDE & Partner (Rechtsberatung)	Schoenhauser Allee 10-11	10119	Berlin	030 / 44318660	berlin@onlinelaw.de
INPROMO	Gasstraße 6a	22761	Hamburg	040 / 23881771	kontakt@inpromo.de
iVentureCapital	Wendenstraße 21 B	20099	Hamburg	040 / 8081250	info@iventurecapital.com
LaterPay (Zahlungsdienstleister)	Auenstraße 100	80469	München	089 / 416137319	info@laterpay.net
Lightning PR	Gundelandstraße 13	60435	Frankfurt		koetting@lightning-pr.de
LOVOO	Prager Straße 10	01069	Dresden	0351 / 41889939	boost@lovoo.net
Marchsreiter Communications	Guldeinstraße 41a	80339	München	089 / 51919942	dm@marchsreiter.com
Medienachse (Full-Service, Businessplanung)	Trappentreustraße 10	80339	München		info@medienachse.de
M.I.T. - Media Info Transfer	Albert-Einstein-Ring 8	22761	Hamburg	040 / 30066890	info@mediainfotransfer.de
MOTION AREA	Sommerstraße 3	65197	Wiesbaden	0611 / 56597577	info@motionarea.de
Osborne Clarke (Anwaltskanzlei)	Innere Kanalstraße 15	50823	Köln	0221 / 51084000	info@osborneclarke.de
Partnertrans (Lokalisation)	Leipziger Straße 28	40822	Mettmann	02104 / 172660	info@partnertrans.com
paysafecard.com Wertmarken	Am Europlatz 2	1120	Wien	+43 / 1 / 72083800	sales@paysafecard.com
Pixelworkshop / IG Computergrafik	Hirschengasse 1/26	1060	Wien	+43 / 1 / 5880118698	info@pixelworkshop.at
Quinke Networks (PR, Marketing)	Bei den Mühren 70	20457	Hamburg	040 / 43093949	mail@quinke.com
remote control productions (Producing)	Sendlinger-Tor-Platz 6	80336	München	089 / 210205700	info@r-control.de
Rode + Mathé (Rechtsberatung)	Henriettenweg 4	20259	Hamburg	040 / 43270432	info@rodemathe.de
ROESSLER PR (Marketing, PR, Consulting)	Walter-Leiske-Straße 2	60320	Frankfurt am Main	069 / 514461	communicate@roesslerpr.de
S&H Entertainment Localization (Lokalisation)	Weidenstraße 10a	82110	Germering	089 / 80076290	stefan@shentloc.com
SCC (Crossmedia)	Orleansstraße 5a	81669	München	089 / 33094660	info@scc-feld.de
Schanz International (Consulting)	Bgm.-Oberhettinger-Straße 2a	67146	Deidesheim	06326 / 6010	info@schanzgames.com
Schulte Riesenkampff (Rechtsberatung)	An der Hauptwache 7	60313	Frankfurt am Main	069 / 900266	schulte@schulte-lawyers.com
Selected Minds (Personalberatung)	Walther-Rathenau-Straße 16	64521	Groß-Gerau	06152 / 1871830	info@selected-minds.de
Serious Games Conference	Expo Plaza 1	30539	Hannover	0511 / 1234560	sgc@nordmedia.de
Sputnic Consulting	Ehrenbergerstr. 11	98693	Ilmenau	03677 7996990	media@sputnic-consulting.com
swordfish PR (PR, Marketing)	Habsburgerplatz 2	80801	München	089 / 96160840	info@swordfish-pr.de
Translation-Taxi	Beusselstraße 28	10553	Berlin	030 / 28371428	info@translation-taxi.com
Turtle Entertainment (eSport)	Siegburger Straße 189	50679	Köln	0221 / 8804490	info@turtle-entertainment.de
Two Pi Team	Gerresheimer Straße 9	40721	Hilden	02103 / 9411914	info@two-pi-team.de
Visibility Communications (PR, Text)	Wichertstraße 16/17	10439	Berlin	030 / 58859941	hi@visi.bi
waza!	Sonnenallee 70	12045	Berlin	0178 / 5223697	jannot@wazaservices.de
Webedia Gaming	Ridlerstraße 55	80339	München	089 / 244136600	david.bhulapatna@webedia-group.com
Ahmet Iscitürk	Kernstraße 37	90429	Nürnberg	0911 / 27472885	texte@me.com
Anja Weiligmann	Kramers Kamp 1a	48291	Telgte	02504 / 7399601	kontakt@spielworte.de

FREELANCER BUSINESS SERVICE

Firma		Straße/Hausnummer	Postleitzahl/Ort		Telefon	E-Mail
Anne-Petra Lellwitz (Marktforschung)		Fichtestrasse 65	63303	Dreieich	0160 / 2014364	info@apl-mafo.de
Arwed-Ralf Grenzbach (Consulting)		Friedrich-Ebert Anlage 18	60325	Frankfurt am Main	0171 / 6486720	arg@conflutainment.com
Christiane Gehrke		Friedrich-Wilhelm-Straße 15	12103	Berlin	030 / 72010080	cg@tom-putzki-consulting.com
Elisabetta Corapi					0176 / 99763437	info@corapi-translations.com
Falko Löffler (Autor)		Lindenstraße 8a	36355	Grebenhain-Ilbeshausen	06643 / 918577	mail@falkoloeffler.de
Kerstin Fricke		Wissmannstraße 9	12049	Berlin	030 / 20059246	info@kf-uebersetzungen.de
Prof. Dr. Malte Behrmann	key player	Ganghoferstraße 4	12163	Berlin	030 / 65214472	mb@malte-behrmann.de
Marc Huppke (Projektmanagement)		Frankfurter Straße 5	64521	Gross-Gerau	06152 / 9614432	marc@make-projects.com
Marc Oberhäuser (Consulting)		Berzbuirer Strasse 98	52355	Düren	02421 / 51547	marc.oberhauser@freelancer-games.com
Stefan Köhler (Lektor / Autor)		Am Salgenteich 34	38259	Salzgitter	0176 / 22512273	stefanclemenskoehler@web.de

TECHNICAL SERVICE

Firma		Straße/Hausnummer	Postleitzahl/Ort		Telefon	E-Mail
Akamai Technologies		Betastraße 10B	85774	Unterföhring	089 / 94006308	contact-germany@akamai.com
Augenpulver (Grafik)		Dotzheimerstraße 164, 4.OG	65197	Wiesbaden	0611 / 94574340	info@augenpulver-design.de
Augmented Minds		Fasangartenstraße 134	81549	München	089 / 69386904	info@augmented-minds.com
BiteTheBytes (Middleware)		St. Gallener Straße 9	36039	Fulda	0661 / 2006899	info@bitethebytes.com
B.TON Medien (Audio, Musik)		Luise-Ullrich-Straße 4	82031	Grünwald	089 / 189425490	mix@bton.de
Centroid (Motion Capturing)		Schlesische Straße 27	10997	Berlin	030 / 69807474	sven.bergmann@centroidanimation.com
Chromatrix (Mobile Gaming)		Kalkofenstraße 2	72411	Bodelshausen	07471 / 740828	info@chromatrix.com
Codecult (3D-Engine)		Kemnastraße 21a	44866	Bochum	02327 / 35474	info@codecult.com
ContenTainer (Leveldesign)		Eichelkopfstraße 17	63584	Gründau	06058 / 9178150	info@contentainer.de
Creature Factory		Graefestraße 33	10967	Berlin	030 / 26301330	info@creature-factory.com
Crytek (3D-Engine)	key player	Grüneburgweg 16-18	60322	Frankfurt am Main	069 / 21977660	cryengine@crytek.com
DICO Deutschland	key player	Freiburger Straße 5	51107	Köln	0221 / 20430504	info@dico4u.com
Doublesmith (Art/Animation)		Ranzonigasse 3/3	A-3100	St. Pölten	+43 / 699 / 19447880	mail@doublesmith.com
Dutyfarm		Oranienstraße 6	10997	Berlin	030 / 30368430	info@dutyfarm.de
Dynamedion (Sounddesign)		Barbarossaring 8	55118	Mainz	06131 / 5847895	info@dynamedion.com
eurosimtec		Merowingerplatz 1	40225	Düsseldorf	0211 / 3018560	info@eurosimtec.de
Exit Games (Network Engine)		Hongkongstraße 7	20457	Hamburg	040 / 4135960	business@exitgames.com
Eye Rock Media (Design, Animation)		Essenerstraße 3	46047	Oberhausen	0208 / 82858923	contact@eyerock.de
fadeout (Audio Design)		Austraße 6	CH-4153	Reinach	+41 / 7 / 92793244	info@fadeout.ch
fatfoogoo		Mariahilferstraße 50	A-1070	Wien	+43 / 1 / 23622970	office@fatfoogoo.com
Flow Studios		Gustav-Meyer-Allee 25	13355	Berlin	030 / 80929203	info@flow-studios.eu
Games Quality (Quality Assurance)		Zum Wasserwerk 15	15537	Erkner	03362 / 885688	info@games-quality.com
Global Producer (Production)		Hauptstraße 172	51143	Köln	02203 / 97722400	getintouch@global-producer.com
Glare Studios (Grafik)		Mansteinstraße 18	20253	Hamburg	02307 / 4388404	contact@glarestudios.de
Goal Games		Feurigstraße 54	10827	Berlin	030 / 78957102	info@goal-games.de
GreenMamba-Studios (Animation)		Aloysstraße 7	48249	Dülmen	02594 / 7928217	info@greenmamba-studios.de
Hans HiScore (Audio)		Friedrich-Ebert-Anlage 11-13	60327	Frankfurt	0151 / 11616133	info@hans-hiscore.de
Havok		Arbachtalstraße 6	72800	Eningen	0712 / 1986993	info@havok.com
Intulo (3D, Animation)		Lindholz 89	31139	Hildesheim	05121 / 2944022	info@intulo.de
Keuthen		Robert-Koch-Straße 41	55129	Mainz	06131 / 880890	info@keuthen.net
Konsole Labs	key player	Gritznerstraße 42	12163	Berlin	030 / 23634838	info@konsole-labs.com
Lingoona (Lokalisations-Middleware)	key player	Hildastraße 38	68723	Plankstadt	06202 / 4095030	info@lingoona.com
Living Liquid Software		Langer Weg 15	A-6020	Innsbruck	+43 / 0 / 512263535	info@livingliquid.com
metricminds (Grafik)		Rüsselsheimer Straße 22	60326	Frankfurt am Main	069 / 7593380	info@metricminds.com
MobileBits (Mobile Engine)		Lerchenstraße 28	22767	Hamburg	040 / 33429566	info@mobilebits.de
morro images (Grafik)		August-Bebel-Straße 27	14482	Potsdam-Babelsberg	0331 / 97996610	info@morroimages.com
Nevigo (Tools & Middleware)		Lyrenstraße 13	44866	Bochum	02327 / 8369840	info@nevigo.com
Periscope Studio (Audio)		Am Diebsteich 55	22761	Hamburg	040 / 31811767	info@periscopestudio.de
Phenomatics (XNA-Entwicklung, Consulting)		Hafenstrasse 47-51	A-4020	Linz/Donau	+43 / 732 / 90155230	office@phenomatics.com
PiXABLE STUDIOS	key player	Buchenstraße 16b	01097	Dresden	0351 / 56341360	info@pixable.de
Polyce (Grafik)		Littenstraße 106/107	10179	Berlin	0178 / 3592560	info@polyce.de
Polygonfabrik (Grafik)		Friesenstraße 21	28203	Bremen		kontakt@polygonfabrik.de
Project-C (HYDRA)		Dorfstraße 50	29336	Nienhagen	05144 / 6988871	kontakt@project-c.eu
Rabcat Computer Graphics (Grafik)		Fernkorngasse 10	A-1100	Wien	+43 / 1 / 5237425	mail@rabcat.com
Razer (Hardware)		Winterhuder Weg 82	22085	Hamburg	040 / 419299300	
Rocketbox Studios (Grafik)		Leonhardtstraße 10	30175	Hannover	0511 / 8984384	info@rocketbox.de
Spinor (3D-Engine)		Agnes-Pockels-Bogen 1	80992	München	089 / 54043980	spinor@spinor.com
The Light Works (Grafik)		Otto-Hahn-Straße 7	50997	Köln	02236 / 967322	info@thelightworks.com
ToBringAlive (Animation, Design)		Ostmarkstraße 49	48145	Münster	0251 / 392312	angerbauer@tobringalive.com
Tektroop (Support)		Dechenstraße 8	40699	Erkrath		info@tektroop.ch
TON & SPOT audiodesign (Sound)		Immanuelkirchstraße 15	10405	Berlin	030 / 92129727	post@ton-und-spot.de
Toygardens Media (Grafik, Video)		Walderseestraße 54	30163	Hannover	0511 / 33659800	akunze@toygardens.com
VCC Perfect Pictures (Grafik, Video)		Doormannsweg 43	20259	Hamburg	040 / 431690	hamburg@vcc.de
Versant (Data Management)		Wiesenkamp 22b	22359	Hamburg	040 / 609900	info@versant.com
Virgin Lands (Grafik, Cinematics)	key player	Gneisenaustraße 10/11	97074	Würzburg	0931 / 8049000	info@virgin-lands.com
Z-Ground Illustration (Grafik)		Oeltzenstraße 17	30169	Hannover	0511 / 1696959	jz@z-ground.com
zuukal (Audio, Lokalisation)		Christian-Pless-Straße 11-13	63069	Offenbach am Main	069 / 2475700	mail@zuuka.de

FREELANCER TECHNICAL SERVICE

Firma	Straße/Hausnummer	Postleitzahl/Ort		Telefon	E-Mail
Alexander N. Ostermann (Animator)	Breite Strasse 45	14199	Berlin	0176 / 10365759	nico@nico-ostermann.com
Andreas Adler (Audio)	Wernigeroder Weg 18	30419	Hannover	0511 / 3889163	andreas@adler-audiopictures.de
Calined (Audio)	Lange Straße 22	58089	Hagen	01577 / 9508456	business@calined.com
Daniel Pharos (Audio)	Golddistelanger 15	80937	München	0179 / 5210100	daniel@knightsofsoundtrack.com
Johan Weigel (Music)	Christburger Straße 28	10405	Berlin	0176 / 41446494	johan@sonic-gallery.com
Max Schulz					info@xoco1.com
Olaf Bartsch (Sounddesign)	Sültstraße 62	10409	Berlin	0170 / 7743432	info@olafbartsch.com
Sabrina Heuer (Audio Production)	Bachemer Straße 191	50935	Köln	0163 / 8604004	sabrina@froschtatze.com
Sound42 / Lukas Hasitschka	Kulmgasse 38/8	1170	Wien	+43 / 6641059157	lukas@sound42.com

Ein Tag bei …
WARGAMING MINSK

Auch die Kinder bekommen hin und wieder die Möglichkeit sich anzuschauen, wie es ist, bei einem von Weißrusslands größten Arbeitgebern beschäftigt zu sein.

Interner Machtkampf: Unsere Mitarbeiter treten in einem Firmenquiz gegeneinander an.

Im firmeneigenen Fitnessstudio macht Trainerin Anna ihre Kollegen fit und »kampfbereit«.

Spaß und Spiele stehen im Vordergrund und so wird der Kickertisch gerne für heißblütige Matches genutzt.

Einer unserer Programmierer auf der Jagd nach Fehlern, die in ausführlichen Tests identifiziert werden.

Kate Shmanenko, Head of Visual Communications, bespricht mit ihrem Team, wie die Wargaming-Standfläche auf der gamescom aussehen soll.

Einige unserer Kollegen diskutieren in der Wargaming-Bibliothek über ihre Lieblingsbücher.

Pavel Statkevich (CG Artist) teilt seine Erfahrungen zur Markenbildung von »World of Warships« mit seinen Kollegen.

Das Wargaming-Hockey-Team bestehend aus Alexey Kuznetsov (Head of Offline Competitive Gaming), Michael Clebanoy (Special Projects Manager) und Maxim Grachev (Event Manager) – um ein paar der Medaillenträger zu nennen.

In einem wöchentlichen Meeting besprechen die Account Manager unseres Marketing-Creative-Service-Teams ihre Projekte.

Das Wargaming-Büro in Minsk beherbergt rund 2.000 der etwa 4.400 Angestellten des weißrussischen Entwicklers und Publishers, der seit dem Überraschungshit »World of Tanks« nicht mehr aus der Branche wegzudenken ist. Hier gewährt das Unternehmen Einblick hinter die Kulissen seines größten Standorts.

Kampf um den Bestenplatz: In einem internen Turnier in »World of Tanks: Blitz« treten die Mitarbeiter gegeneinander an.

Flower-Power am Internationalen Frauentag mit Maria Dezhurko (PR Managerin), Maria Balandzina (eSport Managerin), Galina Tokareva (Recruiter) und Olga Sergeevna (Business Assistant).

In unserer Hall of Fame stellen wir einige der coolen Geschenke aus, die wir über die Jahre von unseren tollen Fans geschickt bekommen haben.

Ein Mitarbeiter aus dem Art-Team, das von Sergey Strelnikov geleitet wird, gibt dem IS-8-Ball-Panzer gerade den letzten Feinschliff, der eigens für den »Tanks on the Moon«-Spielmodus entworfen wurde.
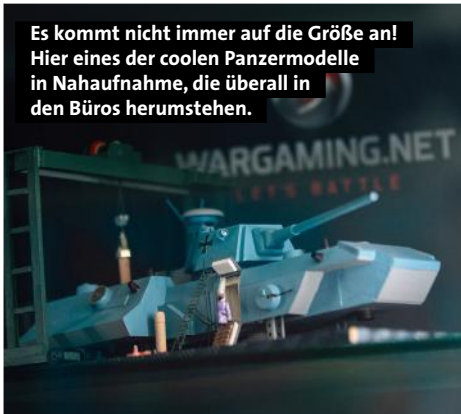
Es kommt nicht immer auf die Größe an! Hier eines der coolen Panzermodelle in Nahaufnahme, die überall in den Büros herumstehen.

Supertalent: eSport Manager Vladimir Skoropupov und seine Band »Taste of Submarines« zeigen auf der Bühne, dass sie rocken.

Das Frühstück, die wichtigste Mahlzeit des Tages, ist an unserer Bar erhältlich – von Früchten über Snacks bis natürlich Kaffee.

Herzlich Willkommen in unserem Büro! Ein Flugzeug und ein Kriegsschiff begrüßen uns hier jeden Morgen.

»WG Talk« ist ein monatliches, internes Event, bei dem unsere Mitarbeiter ihr Wissen und ihre Erfahrungen miteinander teilen, über Spiele sprechen, Workshops und Vorträge halten oder Interviews geben.

Das Wargaming-Büro in Minsk, wo »World of Tanks« entwickelt wird, beheimatet über 2.000 Mitarbeiter.

MAKING GAMES
VORSCHAU

06|2016 MAKINGGAMES | ERSCHEINT AM 21. OKTOBER 2016

The Rise of eSports

In den vergangenen Monaten ist eSports immer mehr in aller Munde, obwohl »League of Legends«, »DotA 2«, »World of Tanks« oder »Counter-Strike« schon seit Jahren mit Turnieren locken. Inzwischen widmet sich etwa der BIU verstärkt dem Thema des elektronischen Sports und traditionelle Sportvereine erweitern ihre Teams um professionelle PC-Spieler. Gemeinsam mit Experten wollen wir ergründen, welches Potential eSports in den kommenden Jahren hat, welche Hindernisse es nachwievor gibt, wie Entwickler in dieses Geschäftsfeld einsteigen können, was ein Spiel überhaupt eSports-tauglich macht oder ob die aktuellen Hits eher zufällig den Durchbruch hatten.

Weitere Themen

Post Mortem zu Sonic Beat

Sonic Beat ist ein Musikspiel, vergleichbar mit »Guitar Hero« und Co. Die Macher erklären, warum die Entwicklung für Mobile-Geräte so schwierig war.

Greenlight Best Practice

Als Indie-Team auf Steam eine erfolgreiche Greenlight-Kampagne abzuschließen, kann knifflig sein. »Wincars Racer« schaffte es innerhalb von 16 Tagen.

Art Case Study

Ein Grafikgerüst, das zu verschiedenen Genres passt, ist schwer zu finden. Thing Trunk beschreibt, warum ihre Entscheidung auf einen Papercraft-Stil fiel.

gamesbusiness.de

DIE NEWS-ZENTRALE DER SPIELEINDUSTRIE

NEWS & INTERVIEWS

JOBS IN DER
SPIELE-INDUSTRIE

BRANCHEN-EVENTS

Täglich die
heißesten
Branchen-Infos:

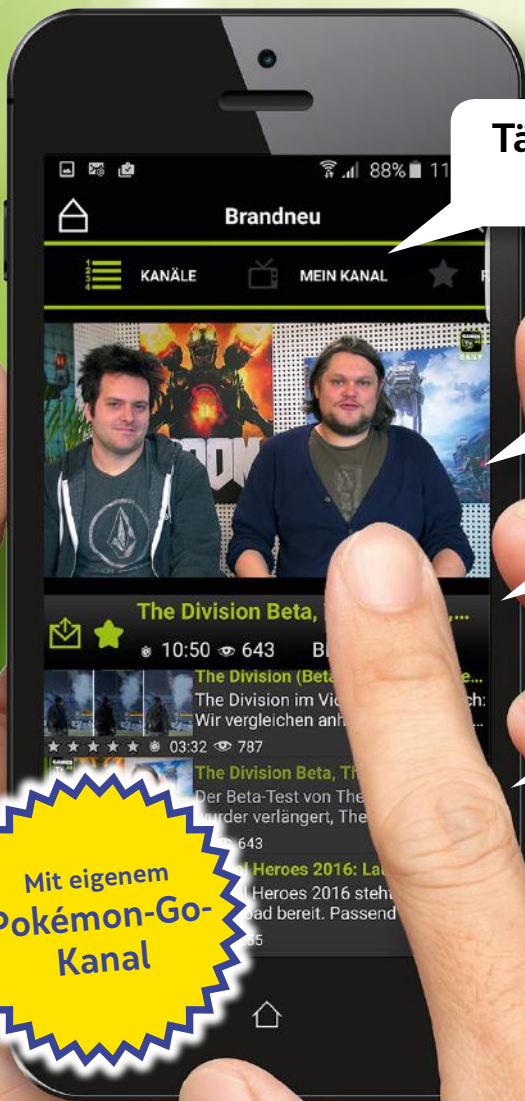Jetzt für den
**kostenlosen
Newsletter
anmelden**!