



2019

THE ICC, BIRMINGHAM
1-3 DECEMBER

Spirit Energy UiPath Use Case Review – Barrier Report

1st December 2019

ENGAGING MINDS | EMPOWERING SUCCESS

#UKISUGCONNECT

Agenda

1. Introductions
2. Spirit Energy RPA/Automation PoC Objectives
3. SAP driven Barrier Model Report Use Case Overview
4. Barrier Model UiPath RPA Solution Demo & Benefits
5. Spirit Energy RPA/Automation next steps
6. AG: Opportunity for UiPath Automation in SAP
7. Q&A

ABOUT SPIRIT ENERGY

- Spirit Energy was created in 2017 following the combination of Centrica E&P and Bayerngas Norge
- Spirit Energy are one of the top independent oil and gas exploration and production companies in Europe, with operations spanning UK, Norwegian, Dutch and Denmark
- The team of 800+ are committed to the development of oil and gas reserves in Europe, overseeing production of 50 million barrels of oil equivalent per year (mmboe)
- Spirit Energy has operated and non-operated interests in 33 producing fields and nearly 150 exploration licenses, and focuses on maximising the potential of these assets throughout their lives



ABOUT UIPATH



Fastest Growing

Enterprise Software Company in History

2,100+

Enterprise Customers

2,000+

UiPath Employees

\$7Bn Valuation

Category Leader



Figure 1. Magic Quadrant for Robotic Process Automation Software



Source: Gartner (May 2019)

ABOUT AG CONSULTANCY & APPS LTD



1. UK HQ + India Off-Shore Delivery centre + Satellite Offices
2. SAP Gold Partners
 - SAP Quality Awards Finalists 2017 & 2018
 - SAP Quality Awards Gold Winner - Innovation 2019
 - SAP Recognised Expertise's in multiple disciplines (Inc' Asset Management)
3. UiPath & Automation focussed
4. Known for Delivering Quality Outcomes, Flexibility, Agility & Value



SAP® Recognized Expertise
in Asset Management & Product Lifecycle Management



Why RPA?

In **every company** we see **people** behaving like **robots** (i.e. doing mechanical things), tomorrow we're going to have **robots** behaving like **people!**

1

'Computer vision' enables automation in every enterprise setting, including remote desktops

2

Many benefits of outsourcing have already been reaped

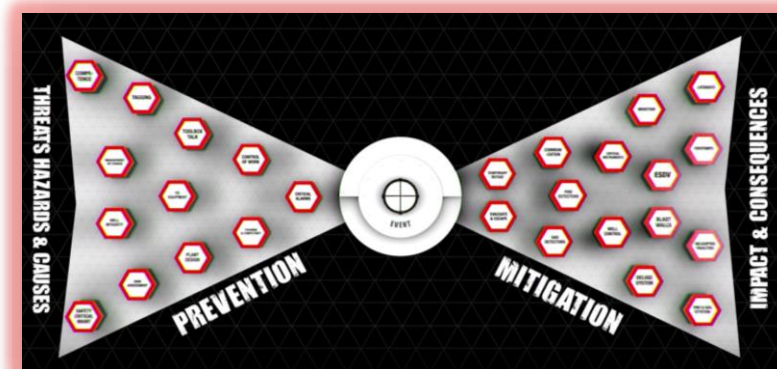
3

Employees use many tools, it is not viable to automate or integrate all of these tools with traditional interfaces

SPIRIT ENERGY RPA PoC OBJECTIVE



1. Spirit Energy keen to understand more about the potential of RPA/Automation
2. Initial discussions set about identifying and prioritising potential 'Use Cases'
3. An unplanned change to the team presented an opportunity to de-risk and drive desirable efficiency gains for a high complexity safety critical report
4. The Barrier Model Report focussed on assuring safety for Major Accident Hazards



BARRIER MODEL REPORT OVERVIEW



1. Barrier review report is a Work order report by asset and work discipline to show the integrity of the Barriers and review the mitigations in place
2. It is created using **3 different sources**: previous historical data and two SAP transactions: IW39 and IP19;
3. It requires more than 90+ Step process to Create, Transform, Publish and typically **6 hours to produce** (without distraction);
4. It is issued every week on Monday.

BARRIER MODEL REPORT STEPS

E4001 - Milton coast M051 - CPC MDP4 - DPC
 B SH1 MCP1 - CPC G - DP6
 DSD1 - CPC MDP3 - DPB 8 - DP8
 DPPA - DPPA MDP1 - CPC Rhtly - DPPA
 HAPI - CPC
 Bca1 - CAUSE

RUNNING THE BARRIER MODEL REPORT

- * BARRIER MODEL REPORT TO BE RUN ON MONDAYS *
- * ONLY NEED TO WORK ON TABS CALLED "CR ASSESSMENT" AND "WORK ORDER SOURCE" *
- * ~~DON'T NEED TO TOUCH ANY OF THE YELLOW TABS~~ *
- * SOURCE DATA FROM S:COMMON/BARRIER MODELS *

TO CREATE MASTER DATA SET WHICH FEED BARRIER MODELS, FOLLOW STEPS BELOW:

STEP 1

1. ACCESS PREVIOUS WEEKS BARRIER MODEL REPORT FILES FROM S:COMMON/BARRIER MODELS AND CREATE COPIES WITH UPDATED DATE STAMP IN DOC AND FOLDER TITLE
2. ACCESS PREVIOUS WEEKS 'SAP EXPORT [DATE]' FILE WHICH AND CREATE A COPY WITH UPDATED DATE STAMP IN TITLE
3. CLEAR CONTENTS OF 'SAP EXPORT [DATE]' FILE READY FOR DOWNLOAD OF NEW DATA FROM FOLLOWING STEPS
4. LOG INTO SAP, TRANSACTION IW39, PICK UP VARIANT MR/IW39 (REIDM07) AND EXECUTE, SELECT LAYOUT 'AC SC BARRIERS' - JB-freelice
5. EXPORT THE FILE FROM SAP AND SAVE AS 'SAP EXPORT [DATE]' IN THE SCBM DESKTOP FOLDER OR COPY ALL DATA AND POPULATE THE BLANK ONE FROM PREVIOUS WEEK.
6. SAP TRANSACTION ZPM_IP19, TO DATE: END OF YEAR. FROM DATE: TODAY. ADD OFFSHORE ASSETS *MCP1*, *DPPA* ETC. ORDER TYPE: UMO1 & UMO2. MAT: SFC, SFF & EXM.
7. ALTERNATIVELY SELECT VARIANT AC/ZPMIP19 BARRIER REPORT AND CHANGE THE DATES
8. SELECT LAYOUT /AC BARRIER - BARRIER MODELS LAYOUT JB-BARRIER
9. EXPORT FILE TO SCBM FOLDER AS ANY RELEVANT NAME E.G. EXPORTZPMIP19
10. COPY ALL DATA FROM EXPORTZPMIP19 TO SCBM 'SAP EXPORT [DATE]' FILE AS ADDITIONAL SHEET X (TAB)
11. CONVERT MI & WO COLUMNS TO NUMBERS
12. HIGHLIGHT ALL AND SORT BY WO NUMBER
13. HIGHLIGHT ALL ROWS WITH A WO NUMBER IN IT AND DELETE
14. CONVERT REMAINING FLOC ENTRIES TO TEXT SUCH AS EIS-DPPA-1902 = DPPA (COLLECTIVELY MCP1, MAP1 & MDP1 = CPC, MDP3 = DP3 ETC)
15. COPY REMAINING DATA ACROSS TO SHEET 1 UNDER CORRESPONDING HEADING (DUE DATE = LAFD) BUT AT THE BOTTOM OF THE PAGE AND DELETE SHEET 2.
16. IN SHEET 1 FILTER ON BLANK DESCRIPTION TO SHOW NEW ADDITIONS
17. IF NO ORDER NUMBERS, ADD TBC
18. IF MI PRESENT, ADD ORDER TYPE UMO1
19. ORIGINAL DUE, BASIC START, EAFD & USER STATUS = TBC
20. COPY THESE VALUES DOWN AGAINST ALL MI NUMBERS WITH 'BLANK' ORDERS
21. SEARCH FOR THE MI'S WITH 'BLANK' DESCRIPTIONS IN SAP TRANSACTION IP18. USE LAYOUT MI, MI DESC, MWC & MAT. ALTERNATIVELY SELECT LAYOUT /AC BARRIER2 - BARRIER MODEL LAYOUT2

convert to #.

convert to #.

take any tabs convert orders and add new to the original sheet in a new tab.

JB-freelice

ICP - copy all from last week. ICP - use TBC.

22. EXPORT TO EXCEL AND COPY 'SAP EXPORT [DATE]' AS SHEET X THEN CONVERT MI TO NUMBER.
23. BACK INTO 'SAP EXPORT [DATE]' DESCRIPTION = VLOOKUP(B:B,SHEET X A:B,2,0).
24. IF DESCRIPTION COMES BACK AS FORMULA, CHANGE FORMATTING TO GENERAL. SELECT FIELD AND HIT RETURN WHICH WILL CONVERT TO TEXT.
25. DRAG DOWN FULL SHEET, CHECK ALL DESCRIPTION FIELDS ARE NOW POPULATED
26. CARRY OUT SAME EXERCISE FOR MAT WITH: VLOOKUP(B:B,SHEET X A:D,4,0)
27. DRAG DOWN FULL SHEET, CHECK ALL MAT FIELDS ARE NOW POPULATED
28. CARRY OUT SAME EXERCISE FOR MWC WITH VLOOKUP(B:B,SHEET3 A:D,3,0)
29. DRAG DOWN FULL SHEET, CHECK ALL MWC FIELDS ARE NOW POPULATED
30. CLEAR ALL FILTERS, COPY FULL SHEET, PASTE SPECIAL VALUES
31. DELETE SHEET X
32. SAVE

STEP 4

1. SELECT TBC FROM FILTER (WO'S) AND ADD N/A IN DEFERRAL COUNT COLUMN
2. CLEAR FILTER TO SELECT ALL AND THEN Deselect TBC FROM FILTER (WO'S ONLY)
3. HIGHLIGHT AND COPY LIST OF WORK ORDERS AND RUN IN SAP ZW38, ENSURE 'PERIOD' FIELD IS CLEARED BEFORE EXECUTE
4. SELECT LAYOUT /ACDEFERRAL WO & DEFERRAL COUNTER (ORDER/DEFERRAL COUNTER)
5. EXPORT TO EXCEL, COPY COLUMNS A&B TO 'SAP EXPORT [DATE]' AS SHEET X
6. CONVERT COLUMNS TO NUMBER
7. BACK IN SHEET 1, DEFERRAL COUNT = VLOOKUP(C:C,SHEETX:A:B,2,0)
8. COPY THE DEFERRAL COUNTS AND PASTE SPECIAL VALUES FOR ENTIRE COLUMN
9. CLEAR FILTERS, DELETE SHEET X
10. SAVE

STEP 5

1. OPEN THE ICP FILE FROM SAM, ADJUST ROW HEIGHTS AND COPY/PASTE FOLLOWING COLUMNS INTO EXPORT FILE AT BOTTOM: ASSET/ (LOCATION)/UNIQUE NUMBER (WO)/ COMMITMENT DATE (LAFD)/ RESULT (WO DESC)
2. COPY FORMAT OF ANY NON ICP ACTION ROW WITH FORMAT PAINTER AND COPY THE FORMATTING DOWN ACROSS THE NEW ICP ACTIONS TO ADJUST ROW HEIGHTS
3. MI NUMBER = N/A
4. ORDER TYPE, MAT, PG & MWC = ICP
5. ORIGINAL DUE, BASIC START, EAFD, USER STATUS & DEFERRAL COUNT = N/A
6. COPY THESE N/A AND ICP VALUES DOWN THE SHEET
7. CHANGE ICP LAFD FORMAT TO (FIND REPLACE 'SPACE' WITH - (DASH))
8. COPY PASTE SPECIAL ENTIRE SHEET
9. DELETE ANY EXTRA SHEETS ADDED FOR VLOOKUP DATA
10. HIGHLIGHT ALL COLUMNS AND SORT BY ASSET/LOCATION
11. *SAVE*

MASTER DATA SET IS NOW COMPLETE FOR ALL ASSETS

updating ICP?

TO FEED THE BARRIER MODELS FOLLOW THE STEPS BELOW

STEP 1

1. SELECT THE BARRIER FILE FOR YOUR PARTICULAR ASSET
2. START ON CR ASSESSMENT TAB, UNSHARE WORKBOOK (REVIEW/UNSHARE) *Review*
3. HIGHLIGHT COLUMNS A, B & C - UNMERGE ALL
4. HIGHLIGHT CELLS A3, A4 & A5, DRAG DOWN TO BOTTOM OF SHEET TO AUTO FILL BARRIER & PERFORMANCE STANDARD VALUES
5. ON WORK ORDER SOURCE TAB, HIGHLIGHT ALL TEXT UNDER SAP AND DELETE THE FIELDS
6. CLEAR DATA IN COLUMN R (PS) & COLUMN U (COMMENT) *FILE READY FOR NEW DATA*
7. FROM 'SAP EXPORT [DATE]' FILE WHICH SHOULD STILL BE OPEN (RE-OPEN IF NOT), FILTER COLUMN A TO SHOW THE ASSET YOU ARE UPDATING
8. HIGHLIGHT ENTIRE DATA SET FOR THAT ASSET, COPY AND PASTE INTO THE BARRIER FILE - SHOULD ALIGN PERFECTLY WITH COLUMNS
9. CHECK HOW FAR DOWN THE DATA REACHES AND DELETE ANY EXTRA ROWS. IF DATA GOES LOWER THAN PREVIOUS WEEK, DRAW DOWN LOOKUP VALUES
10. FILTER COLUMN B ON MI NUMBERS ONLY (REMOVE TBC OR N/A)
11. IN PS COLUMN VLOOKUP(B:B,SHEET ALL SC MI A:E,5,0)
12. DRAG DOWN ENTIRE SHEET TO AUTO POPULATE
13. CHECK ALL ENTRIES ARE FILLED THEN CLEAR FILTERS
14. HIGHLIGHT COLUMN R COPY PASTE VALUES
15. IN COLUMN R, FILTER ON N/A OR BLANK (ANYTHING WITHOUT PS NUMBER)
16. WHERE BLANKS APPEAR, OPEN THE PREVIOUS WEEKS ASSET BARRIER REPORT AND DO VLOOKUP(C:C, LAST WEEKS MODEL, 16, 0) (START ON COLUMN C, HOLD SHIFT AND MOVE ALONG 16 SPACES) (WILL POPULATE MOST AND LEAVE SOME N/A'S)
17. CLEAR FILTERS THEN COPY PASTE VALUES IN PS COLUMN (R)
18. WITHIN ICP SHEET, SEARCH FOR UNIQUE NUMBER AND SEE WHAT THE SCE DESCRIPTION IS
19. FINAL VLOOKUP(C:C, ICP SHEET B:D,3,0) - THIS SHOULD FULLY POPULATE PS COLUMN
20. FIND THE PS TEXT IN PS vs SC BARRIER SHEET AND COPY CORRECT TEXT ONTO PS COLUMN WHICH WILL UPDATE THE OWNER AND BARRIER
21. CLEAR FILTERS, HIGHLIGHT FULL DATA SET, SORT BY 1)SC BARRIER 2)PERF STD 3)DIFF DAYS
22. UPDATE THE COMMENTS FIELD FROM LAST WEEKS ASSET FILE WITH VLOOKUP, OR JUST COPY PASTE ACROSS ONE BY ONE IF THERE'S ONLY A HANDFUL
23. DRAG DOWN ENTIRE DATA SET UNTIL THE VALUES TURN INTO '0' = FULL DATA SET
24. HIGHLIGHT COMMON BARRIERS AND MERGE EACH ONE PER BARRIER
25. HIGHLIGHT COMMON PS AND MERGE EACH ONE PER PS (OK ANY ERRORS)
26. COPY PS FORMATTING AND PASTE INTO COLUMN C THEN CLEAR THE VALUES OF COLUMN C
27. THE BARRIER MODEL FOR THAT ASSET IS NOW COMPLETE, REPEAT FOR ALL OTHER ASSETS
28. ONCE ALL ASSETS UPDATED, COPY ENTIRE FOLDER INTO S: COMMON/BARRIER FOLDER
29. SEND OUT EMAIL WITH LINK TO BARRIER MODEL & SCREENSHOT OF FOLDERS



BARRIER MODEL REPORT AUTOMATION



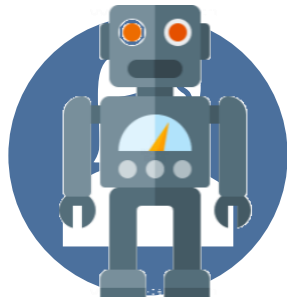
Source Applications



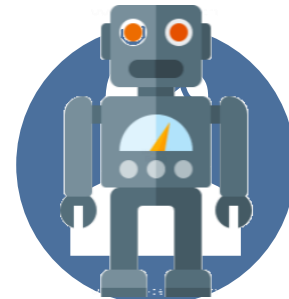
Step by Step Instructions



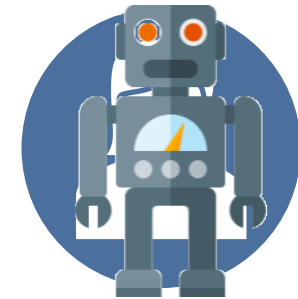
Barrier Review Report



**Data Extraction
and Manipulation**



**Report Review
and validation**



Report Issuing

AG



Barrier Model Report Automation Demo





UiPath Studio - BarrierReport

START DESIGN EXECUTE

Universal Search (Ctrl + F)

New Save Save as Template Run Cut Copy Paste Manage Packages Recording Screen Scraping Data Scraping User Events UI Explorer Remove Unused Variables Export to Excel Publish

Snippets Main x Main

Search snippets

- Samples
 - Advanced
 - Text
 - Calculator Automation.xml
 - Ping Monitor.xml
 - Snippets
 - Delay
 - Loops

Project Activities Snippets Variables Arguments Imports

100%

Output

- BarrierReport execution started
- Killing processes...
- Opening applications...
- Processing Transaction Number: 1

Properties

System.Activities.ActivityBuil...

Misc

DisplayName	Main
Implementati...	

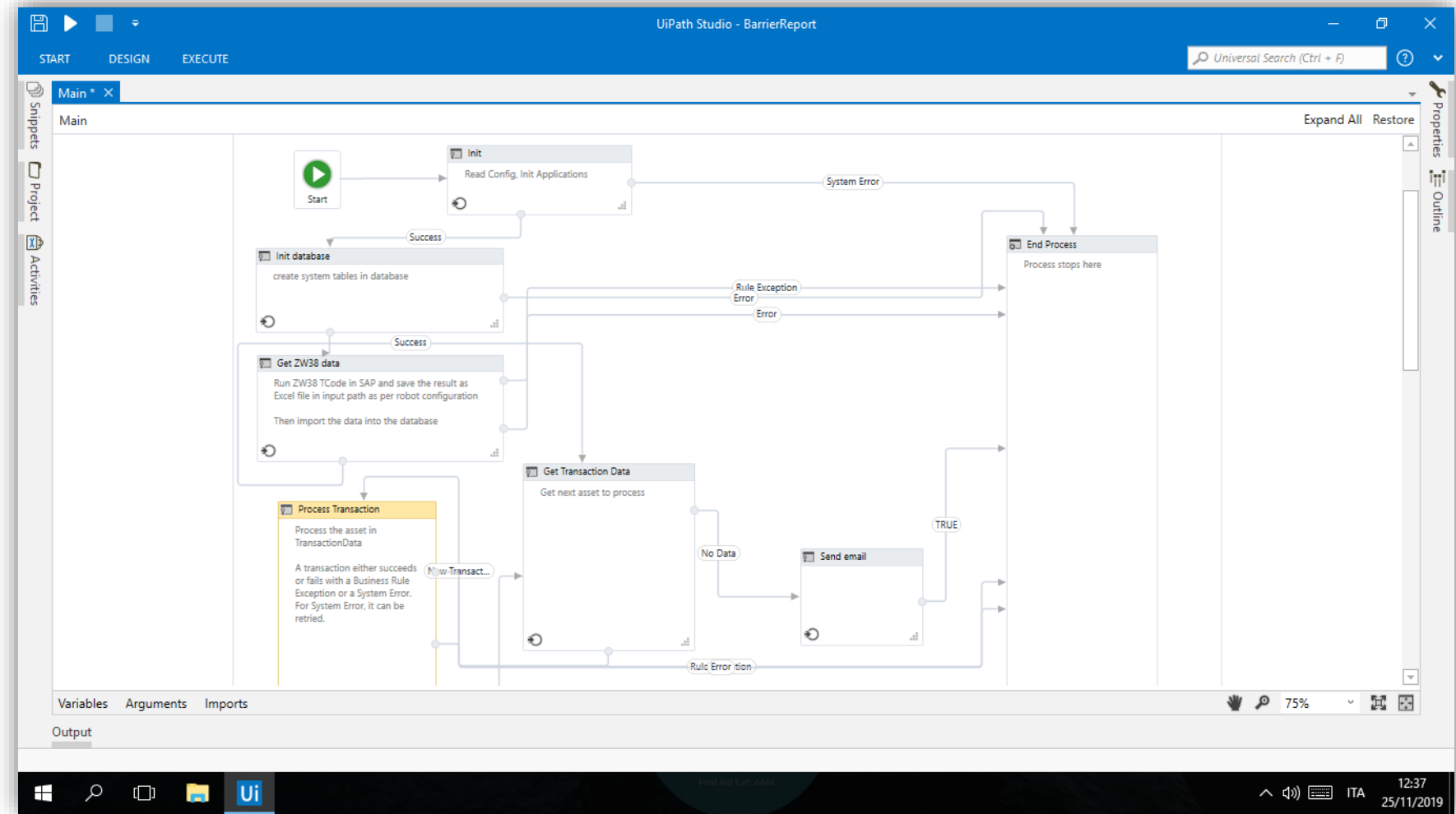
Properties Outline



BARRIER MODEL REPORT AUTOMATION



High-Level developer
view of Barrier Model
Report process in
UiPath



BARRIER MODEL REPORT BENEFITS



- **EXECUTION:** run time from 4+ hrs (manual) to 15 mins (automated)
 - **95% reduction in effort with ROI within 3 months**
 - Manually triggered (but could be scheduled with On-Demand option)
- **FREQUENCY:** Viable to be run daily instead of weekly (a business objective)
- **QUALITY:** Consistent execution with ZERO user errors
- **RISKS:** Less reliance upon individual team members/specialists
- **DEVELOPMENT:** <2 days input to develop with 4 weeks development cycle

SPIRIT ENERGY RPA NEXT STEPS

1. Successful PoC leading to follow-on SAP Finance Use Case Pilot
2. Finance Team identified potential use cases
3. Pilot to determine feasibility for Automation
4. Broader SAP 'Use Case' review underway
5. Expected to extend to automate viable cases
6. Spirit Energy to seize opportunities to improve efficiencies and gain competitive advantages

Process	Automation Tasks
Budget holder reports	<ul style="list-style-type: none"> • Download SAP Reports and pull into excel. • Pull additional information into excel (e.g. plans) • Cut into cost centre groups (MH Specific)
Workday 6 Cost Centre Reporting	<ul style="list-style-type: none"> • Download data from SAP, run look ups to summarise • Run Pivot • Generate standard report and consolidated • Create QBR report
In Month clearing of intercompany balances	<ul style="list-style-type: none"> • Clear all open intercompany items in SAP • Need to go through each SE company with per vendor • Move balance to manual TLA account • Trading partner info lost • Download clearing entry > repost (with trading partner) • Reverse RXD and repost to manual account
Hedging Report	<ul style="list-style-type: none"> • Retrieve Endure file in csv format • Copy inside the Hedging report • Run pivot table • Format tables according to the period • Check the line items totals equals expected trade totals • Save the file on shared folder.

OPPORTUNITY FOR RPA IN SAP?

What do the Experts say?



£ Savings



Scalability



Reduce Risk



Governance



Quality Outcomes



Performance



ROI



Integration



User Friendly

By 2020, automation and artificial intelligence will reduce employee requirements in **business shared-service centers by 65%**. (Gartner)

By 2021, there will be over **4 million robots** doing office and administrative tasks and sales and related tasks (Forrester).

RPA market will reach **\$2.9 billion** by 2021 (Forrester)

Process automation will have limited impact on top-line growth for 50% of organizations that will **erroneously focus on labour reduction**, not on **improving business outcomes**. (Gartner)

POTENTIAL SAP RPA USE CASES

Finance

- Invoice Processing
- Auto FX Updates

Supply Chain

- Auto PO Create
- Delivery Tracking

Master Data

- Embed Business Rules
- Sync Multiple Systems



HR

- New Starter Process
- On-Boarding Process

Sales

- Self-Serve Quotations
- Delivery Tracking

Plant Maintenance

- Sync to specialist DBs
- Auto Recordings > SAP

Other

- **Virtual Support Centre**
- Complex Reports

AG - DELIVERING RPA FOR SAP

1. AG SAP Gold Partners

- AG has a strong reputation & recognised as innovators within SAP ecosystem

2. AG SAP Quality Awards Winner 2019 – **GOLD Award - INNOVATION category**

3. RPA & Automation Focussed

- SAP Specialist UiPath Gold Partners - VAR (incl. BPO)
- AG are the natural leaders in the Intersection Where UiPath Meets SAP

4. See **AG SOAPBOX session** or **Stand B2** for SAP Virtual Support Centre Demo

- Automate High Frequency manual tasks for improved efficiency & reduced costs
- Take the AG express SAP Automation Use Case assessor (+ Free Gift, etc)



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