

# SAP Testing

The anatomy of an ERP/SAP Test Manager

Smart Testing with SAP

# The Seven Habits of Highly Effective (SAP/ERP) Test Management

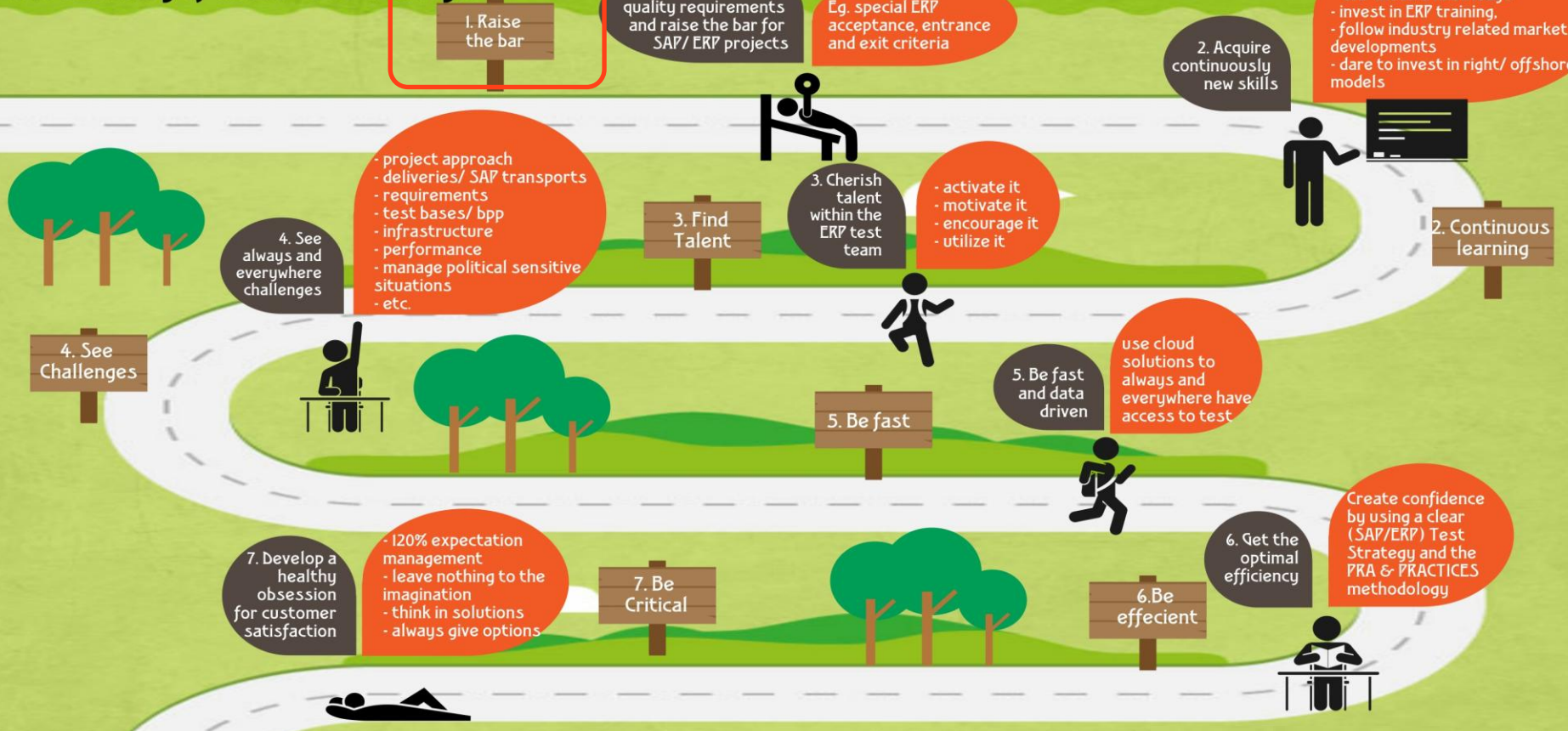
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Senior SAP Test Manager  
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Utrecht, October 2016



# The Seven Habits of Highly Effective (SAP/ERP) Test Management

## The anatomy of an ERP Test Manager

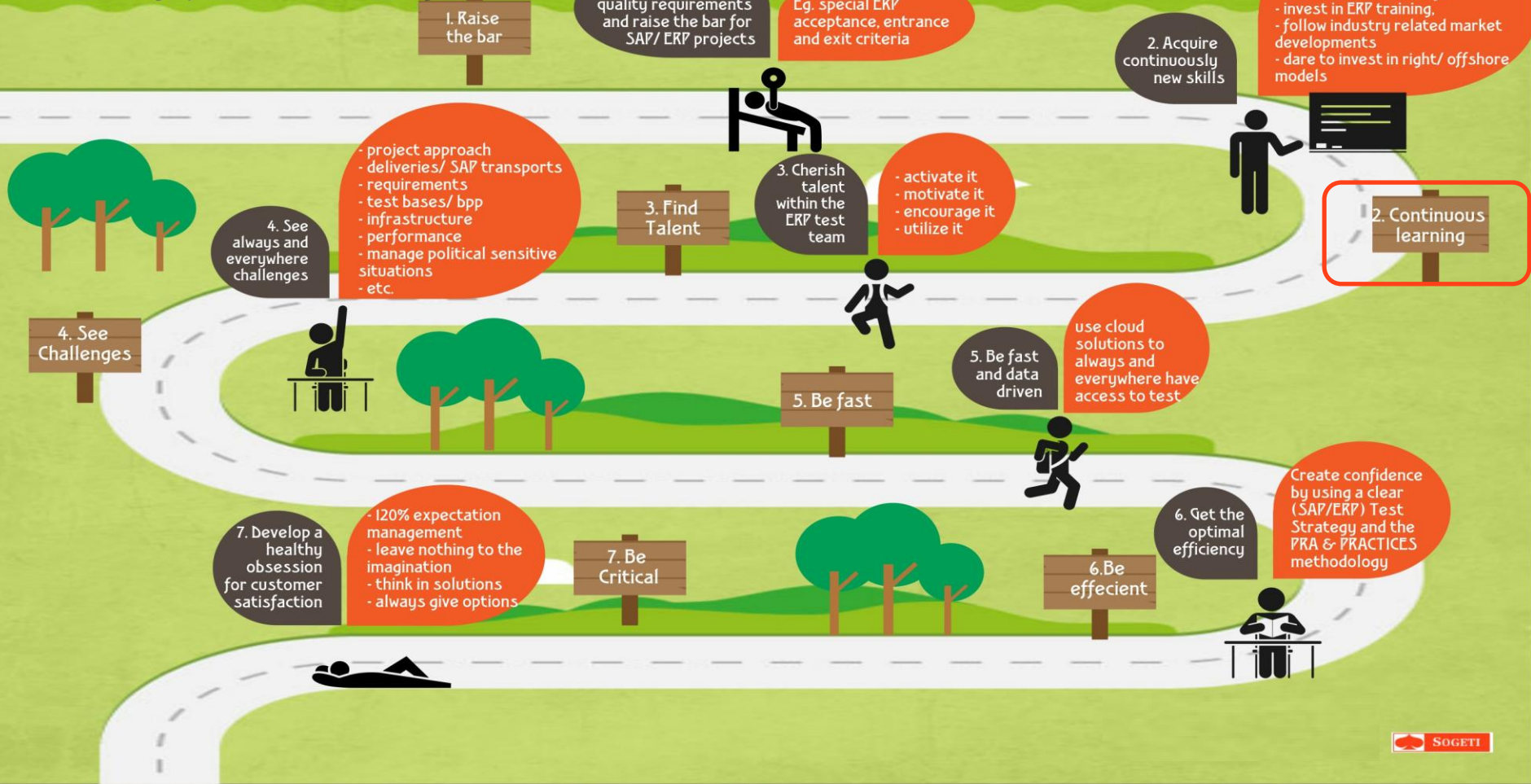


# SAP HANA TEST Acceptance Criteria

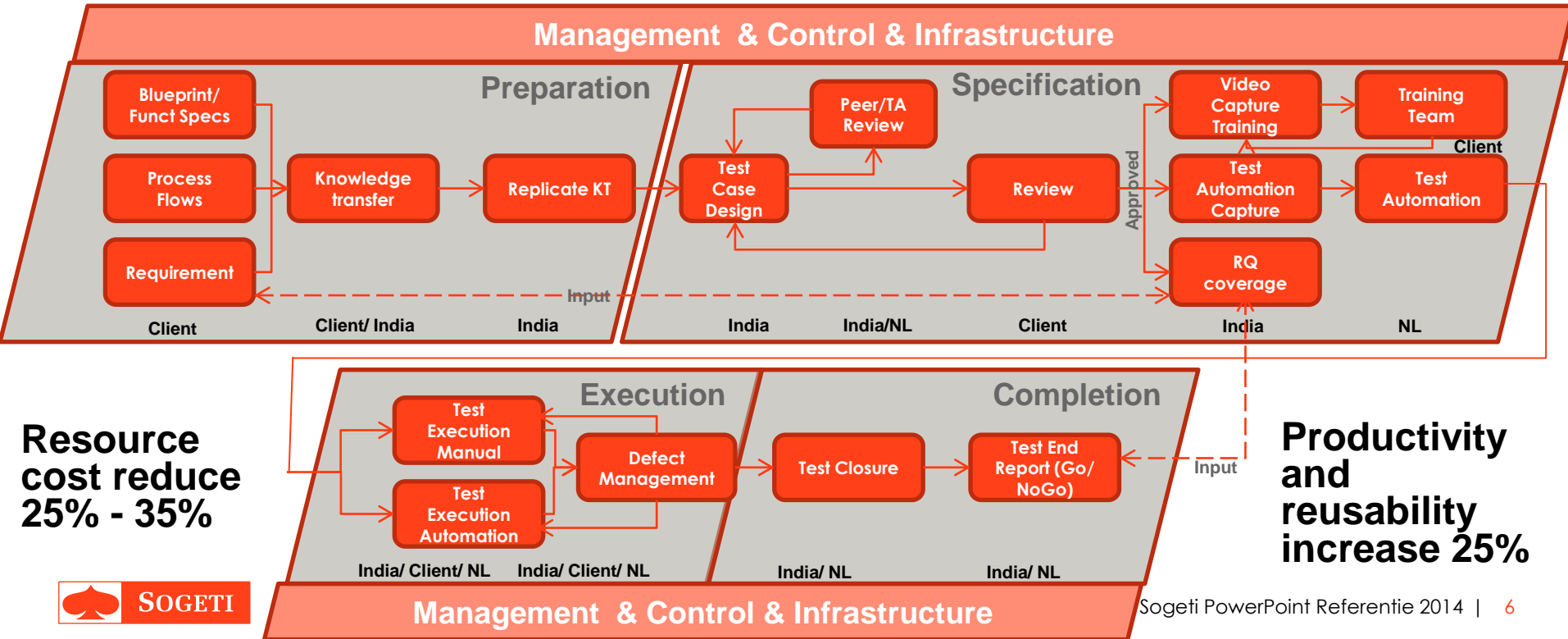
#	Exit Criteria	Responsible	Results (Example)
1	For all functionality, at least, the happy flow (Positive Tests) is tested and approved.	Test Manager	OK
2	For all critical and high risks specified in the test strategy also negative flows are created, tested and approved.	Test Manager	OK
3	When User Acceptance Test is finished and test cases are completely executed, no more defects are available with impact: <ul style="list-style-type: none"> <li>High (Blocking, Critical);</li> <li>Maximum of <b>5</b> Medium;</li> <li>Maximum of <b>25</b> Low (Cosmetic).</li> </ul>	Test Manager Project Manager	<b>NOK</b> High = 2 Medium = 8
4	For User Acceptance Test an overall percentage of executed test cases is <b>98%</b> . <ul style="list-style-type: none"> <li>Completeness of test scripts in risk class critical and high is 100%</li> <li>Completeness of test scripts in risk class medium is at least 80%</li> <li>Completeness of test scripts in risk class low is at least 60%</li> </ul>	Test Manager	OK 100%
5	For User Acceptance Test a percentage of positive executed test cases is <b>95%</b> .	Test Manager	OK <b>97,5%</b> without postponed <b>97,8%</b> with postponed
6	To finalize UAT phase, the following indication for open defects has to be taken into account: <ul style="list-style-type: none"> <li>Postponed to next release (Wish/ Change)</li> <li>Accept (Known-Error) by user organization</li> <li>Don't accept included with reason and remarks (Reject)</li> <li>Housed in a different manner to enable the system is able to continue to the next stage (in Software Development Life Cycle).</li> </ul>	Test Manager Project Manager	<b>NOK</b> Not for all remaining issues a follow up action is defined
7	A documented work-around is available for Known-Errors.	Test Manager	N.A.

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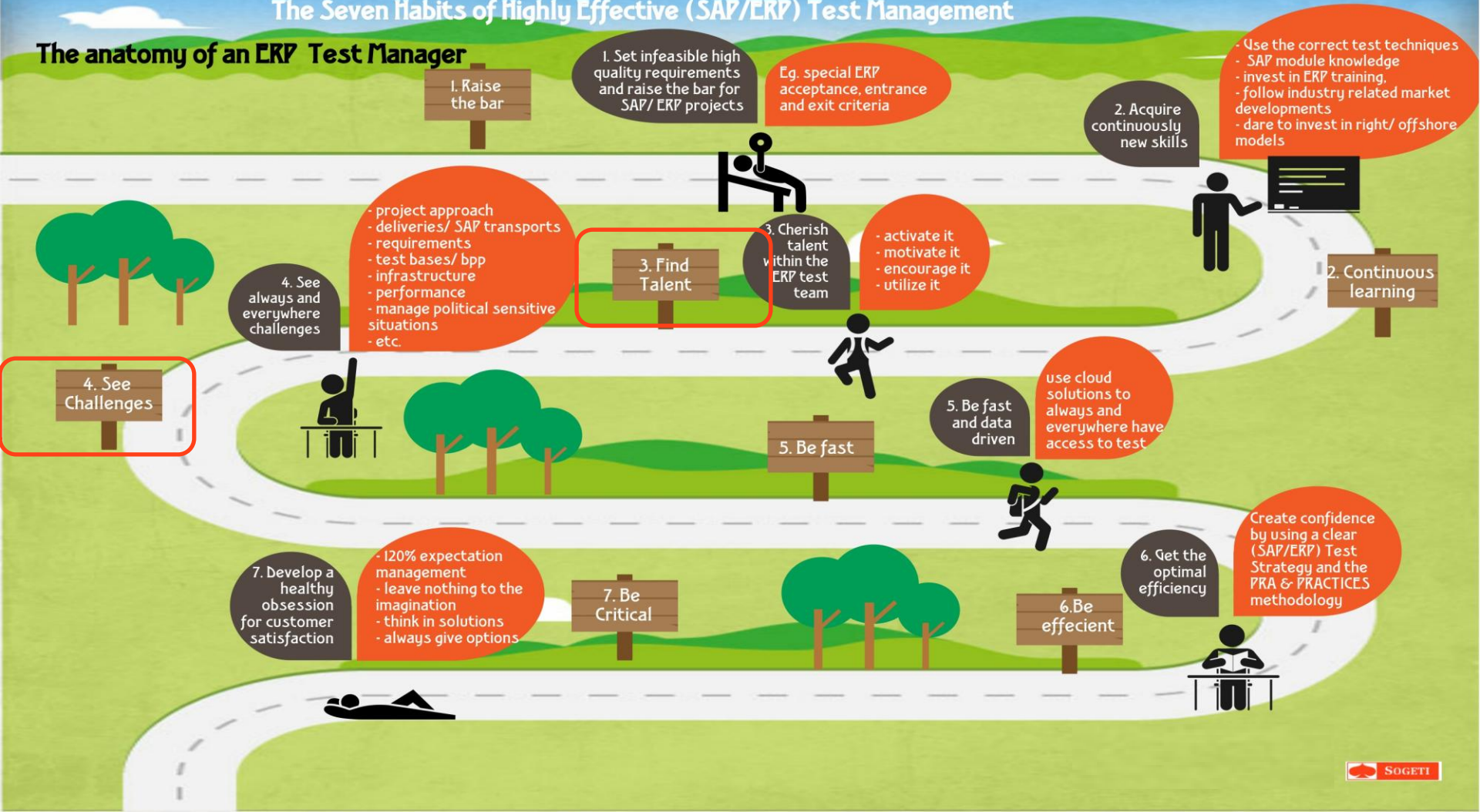
# Integral international Test Process





# The Seven Habits of Highly Effective (SAP/ERP) Test Management

## The anatomy of an ERP Test Manager



# Stakeholders

Supplier  
Hosting  
Partner

Principle/  
Customer

the many  
types

of  
Stakeholders

SAP/ ERP TEST  
MANAGER

Steering  
Committee

SAP Key  
Users (all  
areas)

Functional  
SAP Appl  
Management

Technical  
SAP Appl  
Management  
(ABAP)

Project/  
Program  
management

3rd  
Party  
Suppliers

Integration  
Specialists

Other  
Projects

SAP Test  
Team (Off-, On-  
Rightshore)

Authorization  
Specialists

Transport  
Manager

PI  
Consultants

Infra  
Specialists

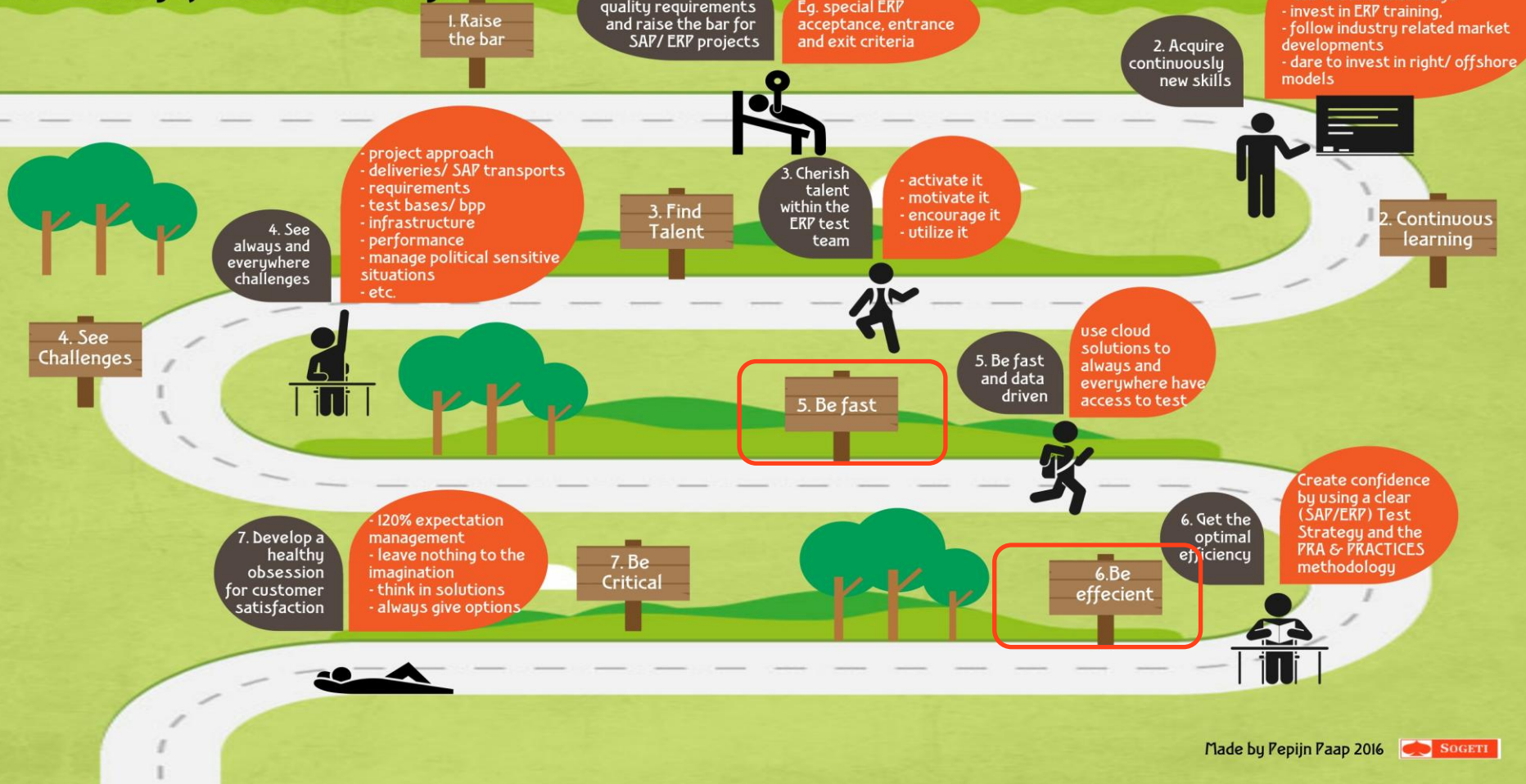
Business  
Owner





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## The anatomy of an ERP Test Manager

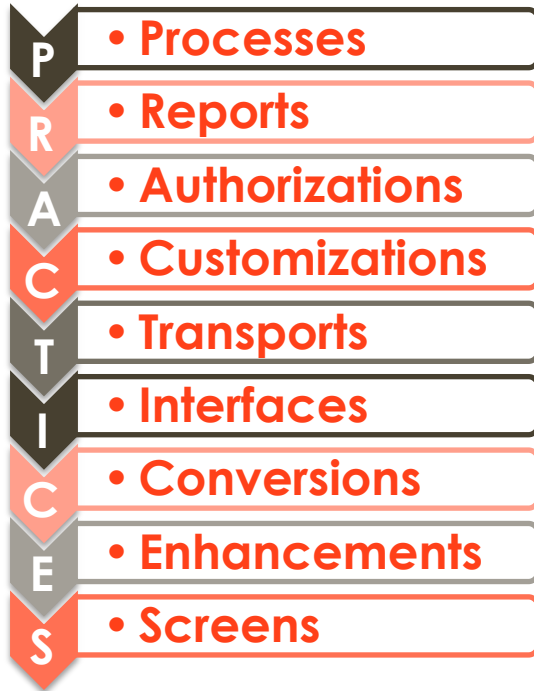
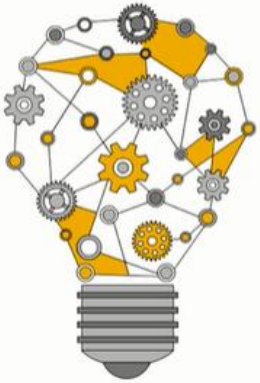


# SAP Process Risk Analyses - Rating Guide

Process Complexity		Business Criticality	
1	Very simple process, main flow + max 2 alternate flows visible to the user (less than 3 Tcodes)	1	Limited impact (may be caught up or corrected without impacting related business processes)
2	Simple process, max 6 alternate flows, max 10 data tables involved (4 to 6 Tcodes)	2	Errors will induce significant hours to be spent on internal corrections or rework Primary business process not affected
3	Medium complex algorithm, max 6 alternate flows, max 10 data tables involved (7 to 10 Tcodes)	3	Errors are likely to affect primary business processes (e.g. standstill or under performance) but impact will be local and have no external visibility Or are likely to have internal financial impact, but financial impact limited to single transactions
4	Complex algorithms: Multiple decisions or many dependencies or complex computations (11 to 15 Tcodes)	4	Errors may lead to significant financial losses (normally on local scale) Or may have external visibility
5	Very complex (combination of complexity factors above) (more than 16 Tcodes)	5	Errors may have structural negative impact on profitability or company image
Technical Impact		Frequency of use	
1	Standard SAP, simple parameterizations only	1	Used incidentally / on a monthly basis or less
2	Standard SAP, extensive parameterizations	2	Used on Weekly basis Or monthly basis and over 10% of all users involved
3	Enhancement, simple ABAP, simple parameterizations and no interfaces Or data setup that has significant impact on processing (e.g. basic reference model setup)	3	Normal use is on a daily basis
4	Enhancement, simple ABAP, average parameterizations and a few interfaces Or processing significant data setup	4	Used continually (during office hours or normal productive hours)
5	Enhancement, complex ABAP, A lot of parameterizations and a lot of interfaces Or high impact (master ) data setup	5	Heavy duty: continual usage by a significant number of users

# What is PRACTICES

SAP specific characteristics classified to points of interest



Relation with:

- Quality Attributes
- Test base
- Test phase (and environment)
- Test specification technique

**PRACTICES**  
“Successful SAP test  
Approach”

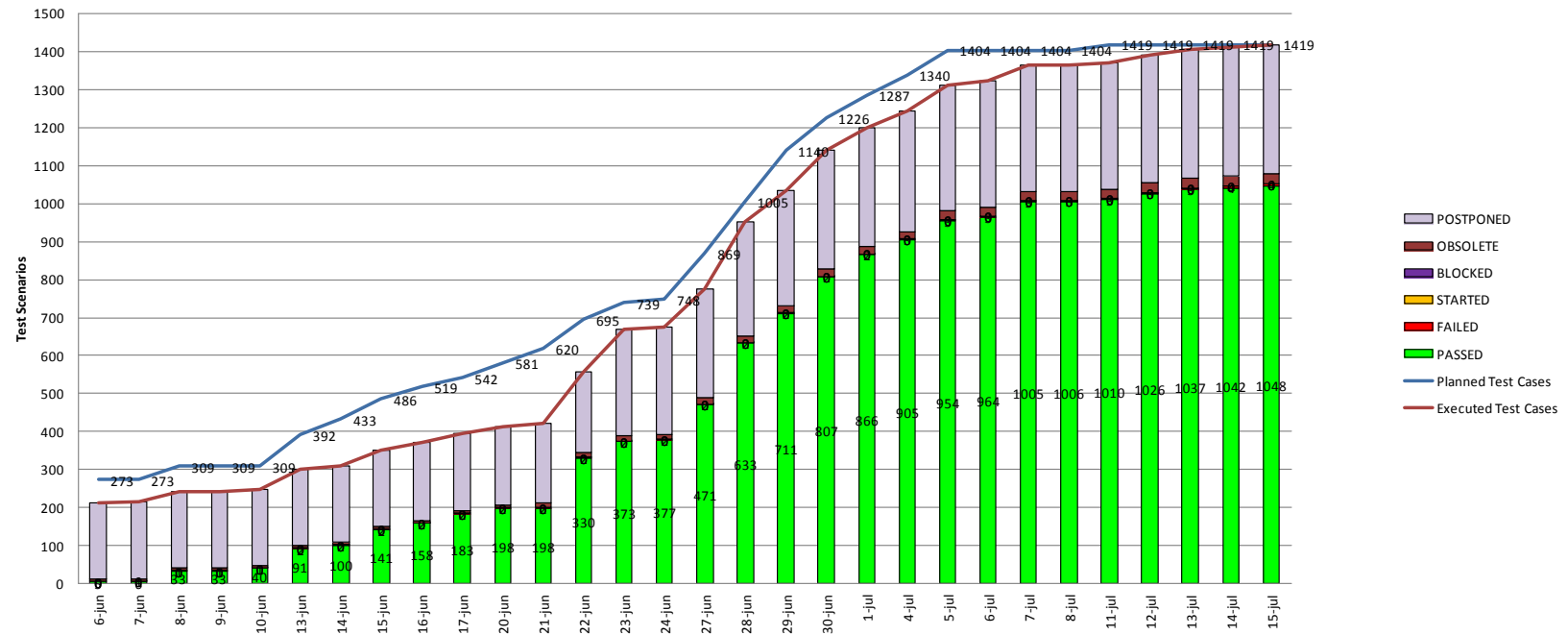
# PRACTICES “Successful SAP test approach”

	Motivation	Preventive Measures (Static Testing)	Quality Attribute	Test Base	Where	Coverage Based (Formal)	Experienced Based (Informal)
Processes	Business processes are leading!	Review Requirements, Process flows, Use cases	Functionality Continuity	Business Blue Print Process Models Functional Design	FAT/ UAT / RT	Process Cycle Test Data Comb. Test	Error guessing Exploratory testing
Reports	Everything that is being sent of the customer has to be 100% OK	Review Requirements	Functionality Performance	Functional Design	UT/ SIT / FAT/ UAT/ PAT	Data Comb. Test	Error guessing Exploratory testing Check list
Authorizations	Authorizations have a important role in SAP process handling	Review Business Blue Print, Authorization matrix	Security Suitability	Business Blue Print Authorization matrix	FAT/ UAT / PAT	Process Cycle Test	Error guessing Exploratory testing Check list
Customizing	Understand the intended behavior that is achieved through customizing	Review Business Blue Print, Installation doc	Functionality	BBP & BPM Installation doc	UT/ SIT / FAT/ UAT / PAT	Process Cycle Test Data Comb. Test	Error guessing Exploratory testing
Transports	A mistake in a transport can cause serious issues	Review naming convention for transports	Functionality	Functional Design	UT/ SIT / FAT/ UAT/ PAT		Error guessing Exploratory testing Check list
Interfaces	Testing interfaces is a multi discipline activity	Review func. & technical design, Interface doc	Functionality Connectivity	Functional Design Interface doc	UT/ SIT / FAT/ UAT/ PAT	Process Cycle Test Data Comb. Test	Error guessing Exploratory testing Check list
Conversions	Verify (early) if the processes can handle the converted data	Review func. & technical design	Functionality	Functional Design Technical Design	SIT / FAT/ UAT / PAT	Data Comb. Test	Check list
Enhancements	Enhancements require extra test attention and effort	Review func. & technical design	Functionality Suitability	Functional Design Technical Design	UT/ SIT / FAT/ UAT/ PAT	Process Cycle Test Data Comb. Test	Error guessing Exploratory testing Check list
Screens	SAP Screens can be heavily modified	Review func. & technical design	User-Friendliness	Functional Design Technical Design	SIT / FAT/ UAT		Check list





### Test Case Execution Plan vs Actuals

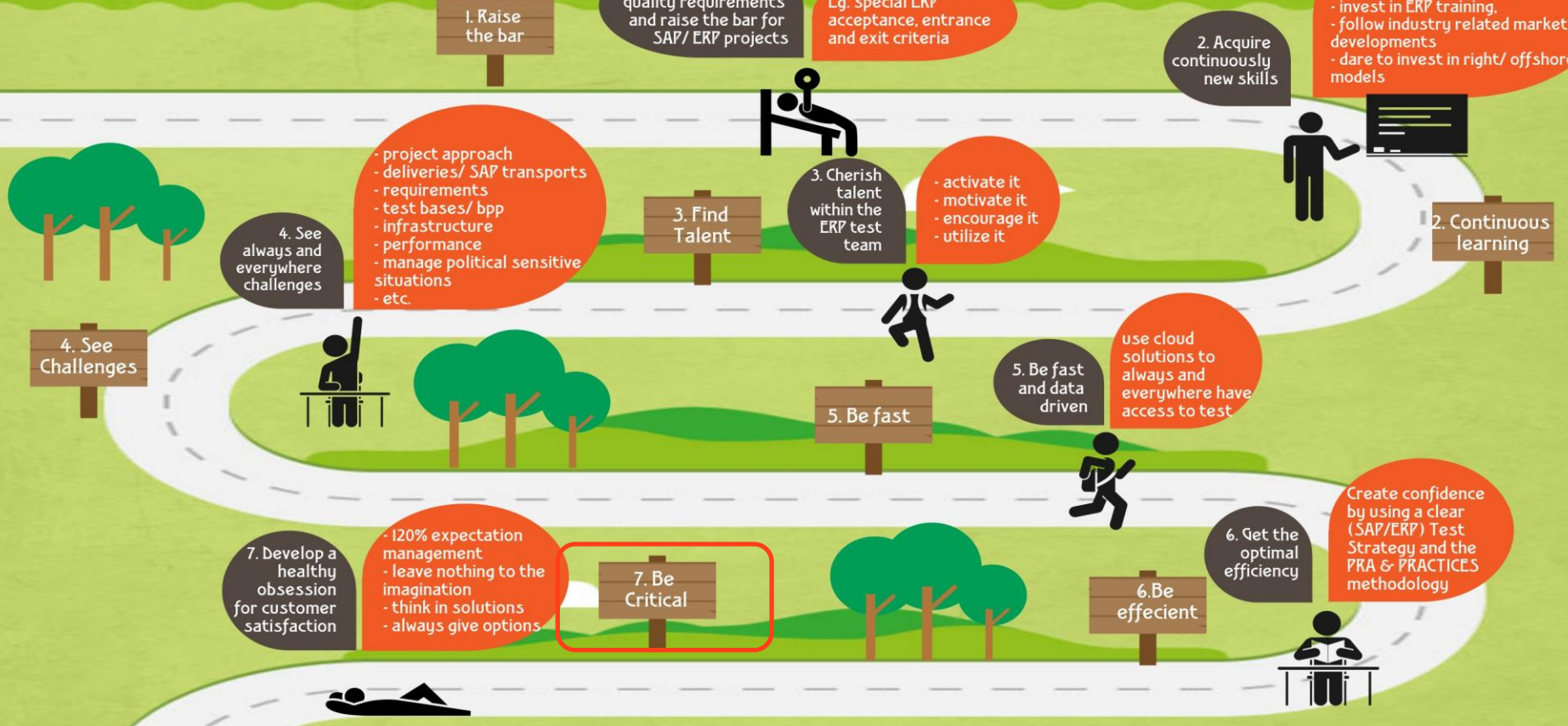


% Critical
38%
35%
00%
00%
50%
00%



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# Tips for tomorrow



## Summary

1. Raise the bar
2. Continuous learning
3. Find talent
4. Always see challenges
5. Be fast
6. Be efficient
7. Be critical

When you master the hard skills in combination with the soft skill, you master the testing game. And as soon as you master the game, the stakeholders are changing the rules

## Looking Ahead

- ▶ Implement a SAP Product Risk Analysis (PRA)
- ▶ Use the right expertise and methodology (PRACTICES)
  - ▶ HANA migration – Custom code and integration
  - ▶ Cloud migration – Integration
- ▶ SAP Stakeholder management
  - ▶ Choice the battles you want to win
- ▶ Reduce resource costs and increase productivity using different testing models



**Professional SAP testing....  
....our expertise !**

**Thank You**