



Applying Critical Success Factors to Predict
Failure of Global ERP Programmes –
the Case of a Swiss Company
in the Pharmaceutical Sector

POGS / University of St. Gallen
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Agenda

- **Presentation of the Researcher**
- **Challenges of global ERP programmes**
- **Assessment Method**
- **The case of a Swiss company in the Pharmaceutical sector**

Presentation of the Researcher



Dr. Gunter E. Seidel has 15 years consulting experience in the IT sector

Education & Professional Organisations

- ▶ Diploma in Computer Science from TU Berlin with exchange year at the University of York
- ▶ MBA from IESE in Barcelona, including a Management of Technology certificate obtained in Berkeley, USA
- ▶ Conducted a phd thesis at University St. Gallen, topic was "Assessment Method for the Burn-out likelihood of global EPR-Programmes"
- ▶ Spokesperson of the workgroup Global Roll-out & Project Management of the German Speaking SAP User Group (DSAG)

Project Experience (selected examples)

- ▶ Program office for the set-up of an Europe-wide SAP solution over the full project life cycle including business case development, board approval, vendor selection, contract negotiation, on-boarding of system integration, blueprint, development, hosting set-up, roll-out, post-go-live support, and handover to ongoing application maintenance service
- ▶ Request for Proposal (RfP) for an SAP based business warehouse to track costs and revenues based on medical cases (DRG) rather than utilization
- ▶ Program management of an initiative to centralize the financial flows associated with the handling of direct (production) materials involving three European countries
- ▶ Review of an SAP programme in the middle of the roll-out sequence to establish an independent view on the effort to completion
- ▶ Process design work for Software Engineering, Requirements Management and CRM processes
- ▶ Interim Management position as CIO in a leading publisher

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Challenges

Results of global ERP implementations leave room for improvements

Based on classical project measures results are often unsatisfactory

- ▶ Budget overruns, mostly due to excessive scope change requests
- ▶ Missed implementation dates
- ▶ Cancelled ERP projects with substantial sunk costs

But the gap in functional requirements is often even worse

- ▶ User satisfaction drops after ERP implementation ("... we had a better (local) solution for this before ...")
- ▶ Business disruption due to insufficient testing and training
- ▶ Organizational Change resistance has not been handled at all, leading to defensiveness against the new ERP system

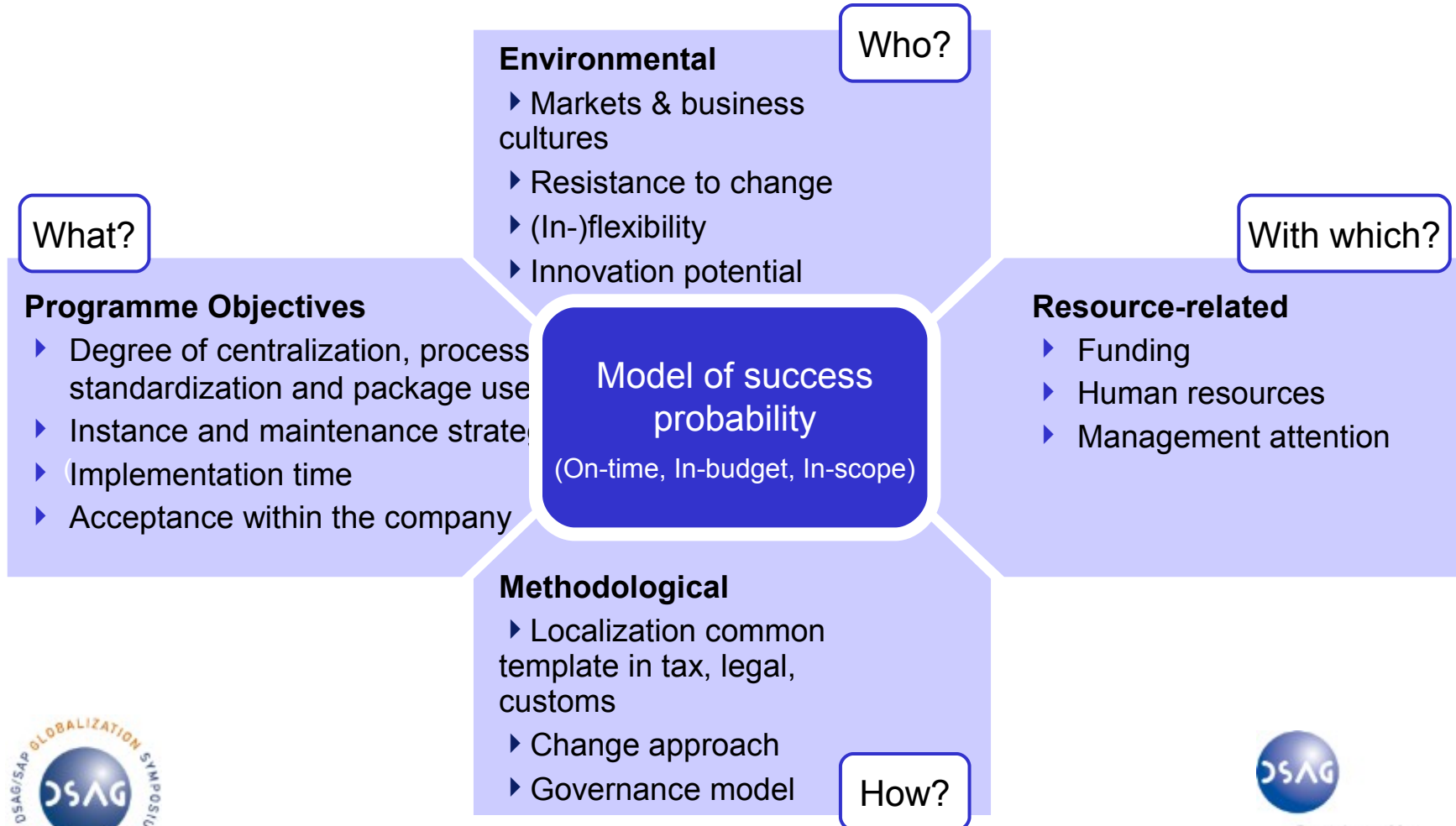
Challenges

These problems are often created from the beginning of the programme

- ▶ Many ERP programmes suffer weaknesses from the set-up of the programme onwards
- ▶ Senior Management often lack an understanding on the stress a global ERP programme puts on the organisation:
 - ▶ While financial impact can be estimated relatively accurately, the requirements on the best skilled resources and the management attention often gets underestimated
 - ▶ Organisational readiness is seldom assessed to start specific activities to prepare the organisation beyond functional trainings
 - ▶ Too much thought is spend on technical implementation questions leading to a delegation of the whole programme from a CEO to an IT level
 - ▶ The methods deployed are not aligned to project objectives, but put into the hands of system integrators or package providers
 - ▶ Objectives of the ERP project are poorly aligned to company culture and market requirements
- ▶ Only alignment of all aspects ensure proper ERP programme execution

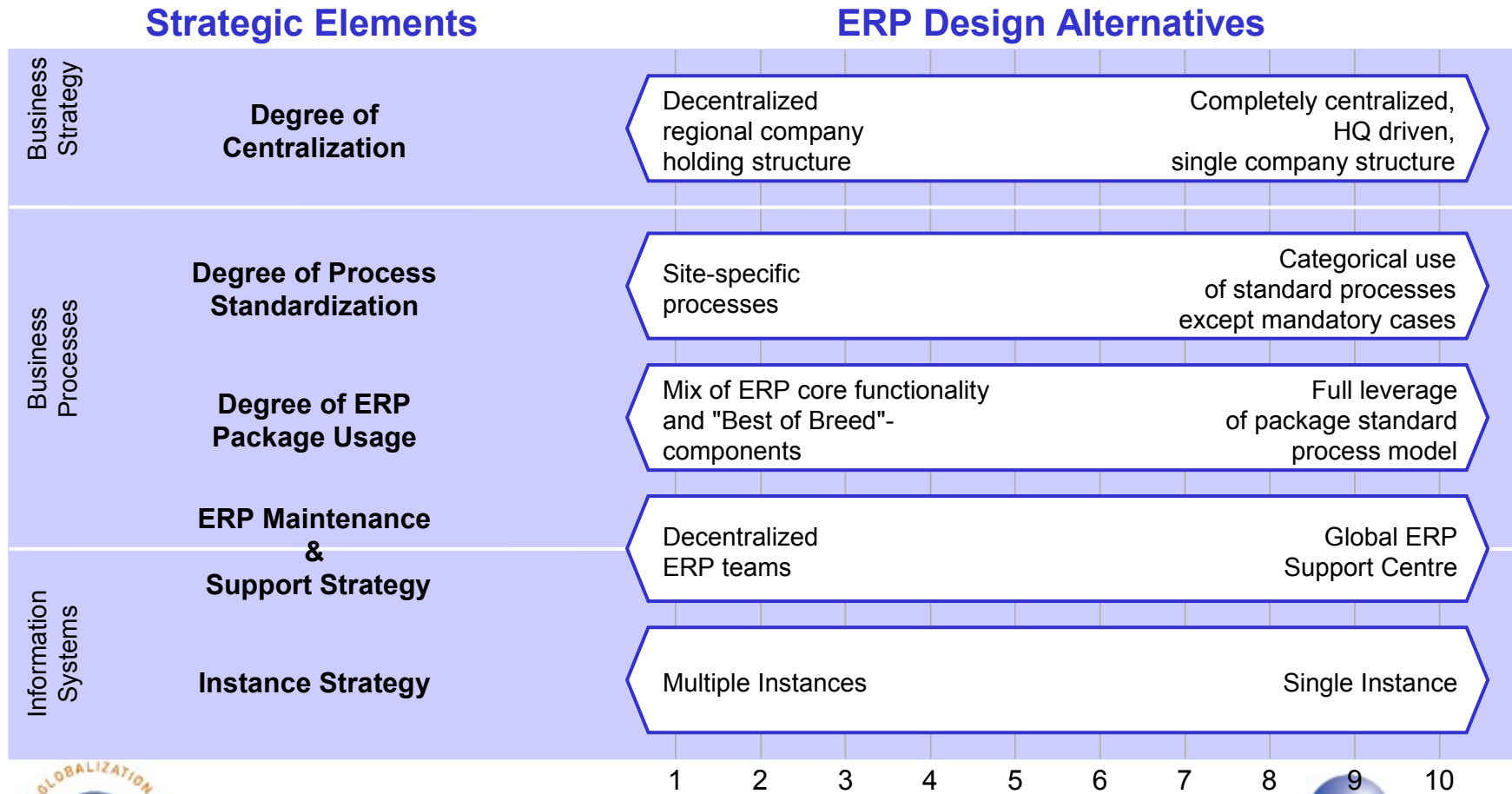
Challenges

Only when environmental, resource-related and methodological factors are aligned to objectives, ERP programmes are successful



Challenges

Clarity of the objectives drive a suitable ERP Programme set-up

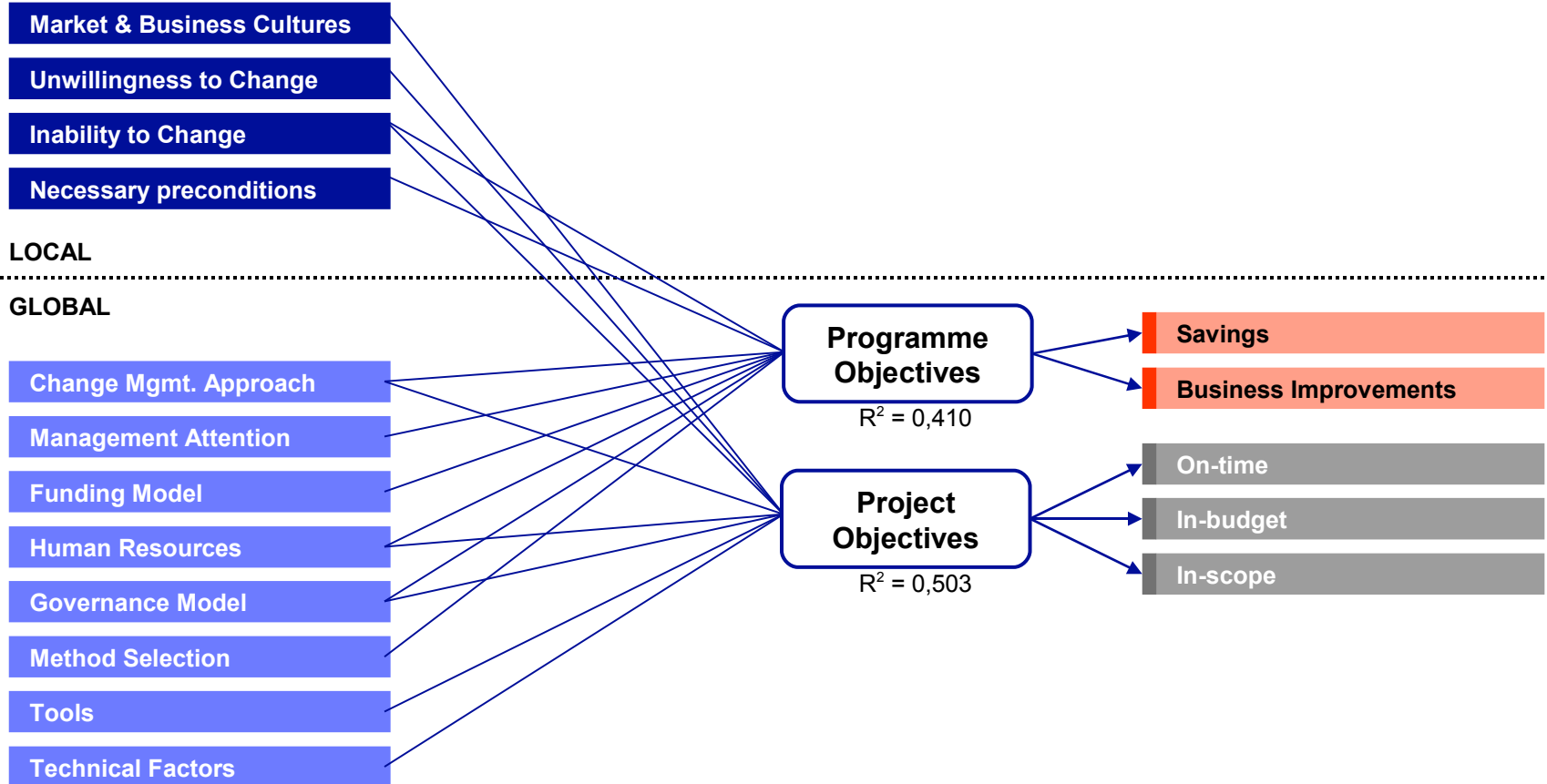


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Success Factor Model

Model validated by SEM



Quantified Impact

PARTIAL EXAMPLE

	Description	Indicators	Impact Level		
			Success Factor	Programme Objective	Project Objective
Market & Business Cultures	The impact of the local market and business culture has been handled adequately.	<ul style="list-style-type: none"> Local process requirements addressed Intercultural work aspect handled 	0,444 0,746	n/a [*]	0,040
Unwillingness to Change	Describes the initial level of resistance to change of a site and the measures addressing it.	<ul style="list-style-type: none"> Initial level is low Is handled adequately 	0,107 0,978	n/a [*]	0,179
Inability to Change	Describes limitations in the ability of people to embrace the changes.	<ul style="list-style-type: none"> Language abilities Innovation Potential Inflexibility 	0,342 0,760 0,327	0,049	0,164
Necessary preconditions	The site suitable for a roll-out.	<ul style="list-style-type: none"> Suitable size & business model Technology life cycle Resource availability 	0,438 n/a [*] 0,793	0,188	n/a [*]
Change Mgmt. Approach					
Management Attention					
Funding Model					
Human Resources					
Governance Model					
Method Selection					
Tools					
Technical Factors					

Note: (*) Data Points not admissible due to sample size constraints



Assessment Method

This forms the basis of the assessment method for global ERP programmes (value proposition)

- Empirically founded assessment method based on 80+ ERP programmes
- Predictive assessment
 - Can be used in late set-up or blueprint phase of the ERP programmes
 - Generates a forecast on programme success
- Actionable results
 - Success Probability Forecast devised on Programme Objectives (Business Improvements, Savings) and Project Objectives (On-time, In-budget, In-scope)
 - Specific recommendation on 40+ success indicators
- Applicability
 - Programmes with global foot print
 - Process driven transformation programmes based on package software as ERP

Assessment Method

This forms the basis of the assessment method for global ERP programmes (operational)

Procedure

- ▶ Analysis of the global ERP programme objectives
 - Open Senior Management interviews
 - Interviewees: CEO, CFO, CIO
 - Based on Design Alternatives
- ▶ Analysis of central project set-up
 - Closed Project Team Interviews
 - Interviewees: Project Manager, Module leader, Application Manager, Infrastructure Manager
 - Based on Questionnaire
- ▶ Analysis of top 3 – 5 roll-out locations
 - Closed Site Interviews
 - Interviewees: Site Manager, Local IT Manager, 2 – 3 functional department manager

Results

- ▶ Provides an early view on programmes in their set-up stage
- ▶ Assessment of the project specific critical ERP success factors
- ▶ Overall success prediction of the Global ERP Programme, distinguished by
 - Project success indicators (time, scope, budget)
 - Programme success (long term savings & business improvements)
 - Site readiness
- ▶ Results based on empirical research on about 80 global ERP programmes
- ▶ Recommendation for areas of improvements

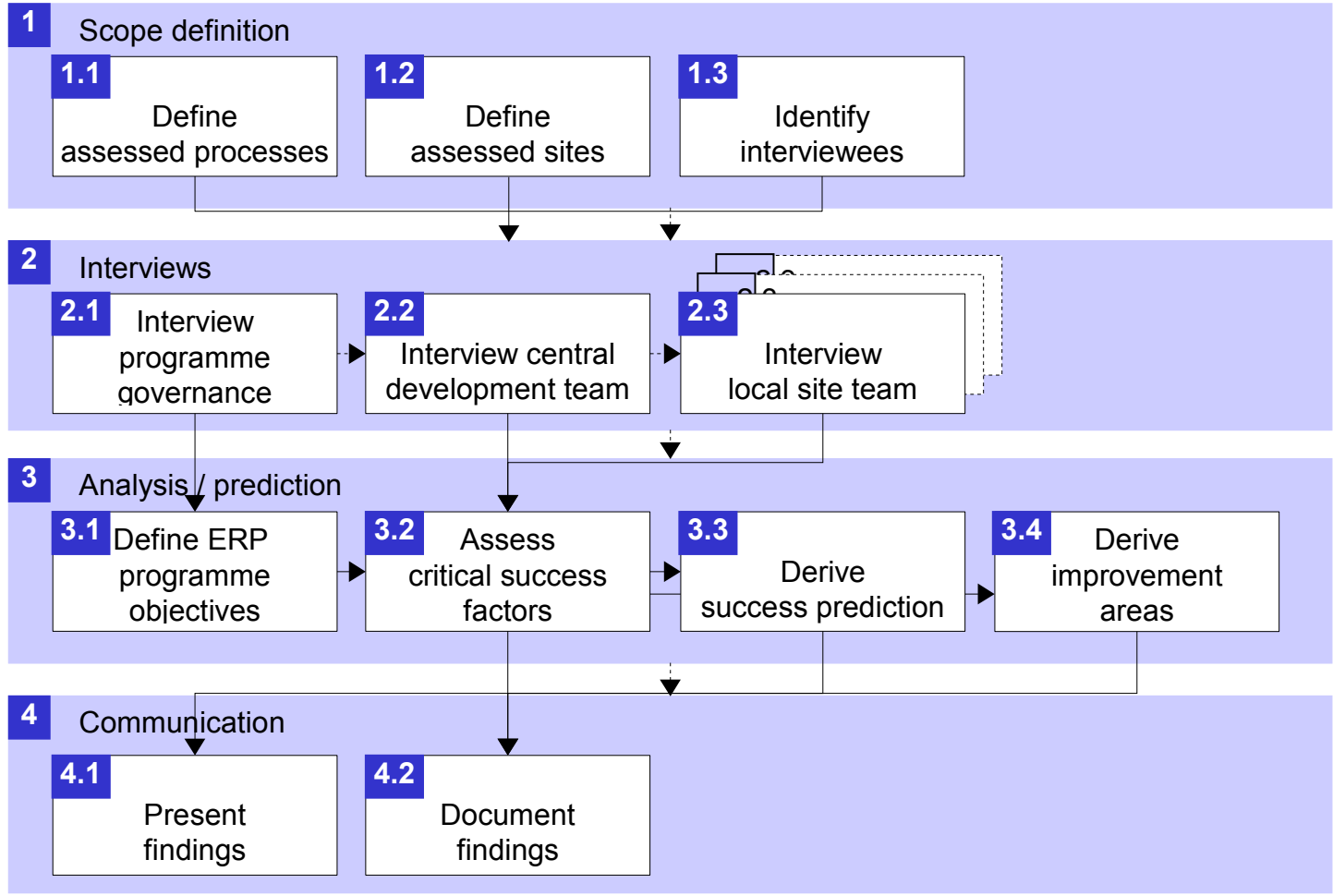


Overall effort & duration: 20 – 60 person days in 4 – 6 weeks.



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Assessment Procedure



Legend

- Phase
- Activity
- Optional Activity
- Flow of information
- Flow of time



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The Case of a Swiss Company in the Pharmaceutical Sector



Situation of the Company

- ▶ The Company is one of the pioneers in the area of clean room equipment and isolation technology for the pharmaceutical and chemical industry
- ▶ Main production facility in Switzerland and a US subsidiary registered in Colorado, USA
- ▶ The planned ERP programme aims at the replacement of an obsolete ERP based on IBM S400 systems called DIAS
- ▶ The Company was in a conceptual phase with the objective to define the implementation approach and get an investment decision

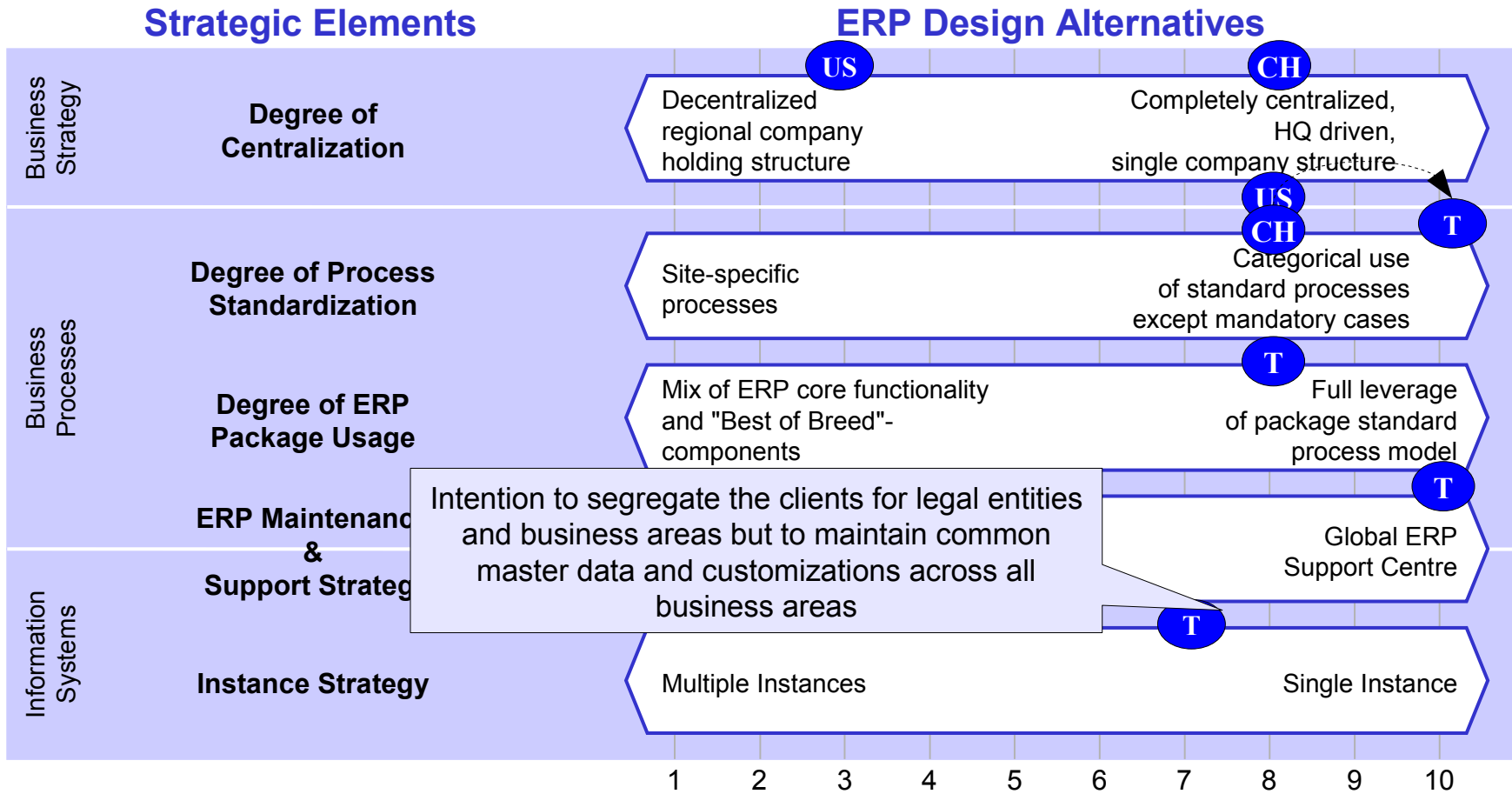
Deployment Assessment Method

- ▶ The functional scope followed the full scope of activities of the Company. This includes trade activities, small batch and individual construction, services and spare part business and supporting functions as materials management, finance and controlling.
- ▶ Interviews of senior management, central process owners and IS managers, local senior manager and process expert executed.
- ▶ Assessment of Programme Objectives, 12 Critical Success Factors and Burn-out Likelihood of Programme and Project conducted.

Results

- ▶ While some objectives as process automation and information harmonization were commonly agreed, further unconsolidated requirements were identified
- ▶ ERP design alternatives are focussed on centralization, process standardization and adherence to package standards with centralized support of a single instance
- ▶ CSF to be improved included management attention, capturing of local process requirements and efficiency gains in ERP implementation
- ▶ Specific recommendations for next steps were made

ERP Design Alternatives



HQ Switzerland



US Subsidiary



Target



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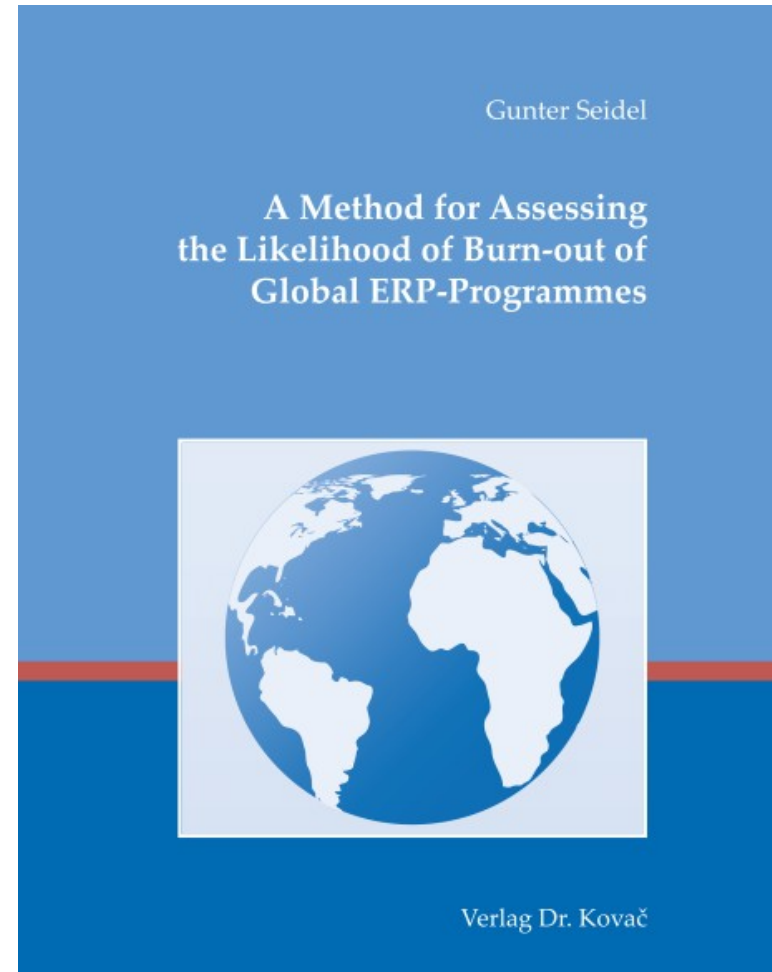
Success prediction & summary



- Overall success predictions resulted in a value for Programme Objectives of 3,428 and a value for Project Objectives of 3,567
 - These values indicate a moderate to strong prediction of success, but have limited value due to the early assessment
 - There is no discriminant value between the programme and the project, i.e. the set-up caters equally to deliver the ERP solution and generate value from it
- A few areas of concern have surfaced
 - There is no agreed definition of scope and objectives of the ERP programme
 - No structures are set-up to establish Management Attention at the beginning of the programme and maintain it throughout the lifecycle
 - Specific requirements from non-headquarters sites have not been captured, nor exist general awareness for the need of doing so
 - There are improvement opportunities in the efficiency of the ERP implementation in terms of tool support, methods employed and governance structure to be established
- The early stage of the ERP programme limits the assessment to intention in many areas

Key Take Aways

- ▶ Only when environmental, resource-related and methodological factors are aligned to objectives, ERP programmes are successful
- ▶ It has been empirically validated that results are driven by 8 programme-wide and 4 local Critical Success Factors
- ▶ Two to seven Management Actions to drive each success factor have been empirically established and their impact quantified
- ▶ The results are operationalized by an assessment method of success likelihood for global ERP programmes in early phases
- ▶ Results are published as a book
<http://www.verlagdrkovac.de/978-3-8300-4597-7>



Your Turn: Questions?

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