

Online Resource 1

Article Title: From Shadow IT to Business-managed IT: A Qualitative Comparative Analysis to Determine Configurations for Successful Management of IT by Business Entities

Interview Guide

		+ Positive cases	- Negative cases
Description and measures for each considered positive or negative case			
Description			
Context	• Short qualitative description of the case: ...		
Effects	• Positive for IT and / or business: ... • Negative for IT and / or business: ...		
Causes	• Identified causes for the case considered: ...		
Measures	Level	Guiding questions for measures of case considered	
	Organizational	Identification	• How was the Shadow IT solution discovered (e.g., network monitoring, helpdesk queries, etc.)?
		Timeframe	• When was the Shadow IT solution created, when was it discovered?
		Stakeholders	• Which and how many persons / roles were involved (team size / organization, external versus internal, technical skills, etc.)?
		Approach with Shadow IT	• How has been dealt with the discovered Shadow IT solution?
		Organizational support	• Was there implementation support from the IT department? If yes, which (e.g., in-house consultants)?
	Technical	Development approach	• Development approach for Shadow IT development: Linear (e.g., waterfall) or iterative (e.g., scrum)?
		Technical support	• Was there any tool- or infrastructure support (e.g. DevOps environment, development platform, etc.) from the IT department?
		System architecture	• Shadow IT architecture: On-premise or SaaS? How integrated into official IT?
	General	System quality	• What is the system quality of the Shadow IT solution (with regard to development process, business processing, etc.)?
		Requirements stability	• How stable are / were the requirements for the Shadow IT solution?
		Criticality / relevance	• How critical / relevant is the application for with regard to company strategy, security, compliance, etc.?
		Scope	• How narrow / broad is the scope of the solution?

Fig. A1 Guiding Questions for Measures of Positive/Negative Cases Discussed in Interviews

Data Matrix

Case	Outcome			Conditions (incl. measures)												
	Positive (case)	Distinct (pos. case)	General (pos. case)	Aligned	Approved / agreed	Org. split	Tech. split	Local	Specific	Standalone	Simple	Low-risk	Low-complexity	Volatile	Provisional	Ambiguous
P01-A	1	1		0	0	0	0	1	1	1	1		1	1	1	
P01-B	0	0		0	0	0	0	0		0	0		0	0	0	
P01-C	1		1	1	1	1		1		1	1		1	1	1	1
P02-A	1		1	1	1	1		1	1	1	0		0	0	0	
P02-B	1	1		1	1			1	1	1	0		0	0	0	
P03-A	1	1		0	0		(1)	1	1		0		0	0		0
P03-B	0		0	0	0			0	0		1	(0)	1	0	0	
P03-C	0	0		0	0			0	0		1		1	0	0	
P04-A	1		1	1	1	1		1	1		0		0	0	0	
P05-A	0	0		0	0			1	1		0	0	(1)	0	0	
P05-B	1	1		1	1	1	1	1	1	1	1	1	1	1	1	
P06-A	1	1		1	1	1	1	0	0		1	1	1	0	0	
P06-B	0	0		0	0			0	0	0	0	0	0	0	0	
P06-C	1	1		1	1	1	1	1	1		1	1		0	0	
P07-A	1		1	1	1	1		1	1	1	1	1		1		1
P08	-			-				-			-			-		
P09	-			-				-			-			-		
P10	-			-				-			-			-		
P11-A	1	1		1	1	1	1	0	0	0	1		1	0	0	
P12-A	1	1		1	1	1		1	1	1	1		1	1		1
P12-B	0	0		0		0		0	0	0	0	0	0	0	0	
P13-A	0	0		0	0			0	0	0	1		1	0	0	
P13-B	1		1	1	1			1	1	1	1		1	1	1	
P14-A	0	0		0	0		0	0	0		1		1	0	0	
P15-A	1	1		1	1	1	1	1	1		0		0	0	0	
P15-B	0	0		0	0	(1)		0		0	0		0	0	0	
P15-C	1		1	1	1	1		1	1	1	1		1	1		1
P16-A	1	1		1	1	1	1	1	1		1		1	1	1	
P16-B	0	0		0	0			1	1		1		1	0	0	
P16-C	1		1	1	1	1	1	1	1		1	1		1		1
P16-D	1		1	1	1	1		1	1		1		1	0	0	
P17-A	1		1	1	1	1		1	1		0	0		0	0	
P18-A	0	0		0	0			1	1		1		1	0	0	
P18-B	0	0		0	0			1	1		0		0	0	0	
P19-A	1		1	1	1	1		1	1		0		0	0	0	
P20	-			-				-			-			-		
P21-A	1	1		1	1	1		1	1		1		1	0	0	
P22	-			-				-			-			-		
P23-A	1		1	1	1	1		1	1	1	0	0	0	0	0	
P23-B	1	1		1	1		1	1	1		0	0		0	0	
P23-C	1		1	1	1			1		1	1	1		1		1
P23-D	1	1		1	1	1	1	1	1		0		0	0	0	
P24-A	1		1	1	1			1	1		0		0	0	0	
P25	-			-				-			-			-		
P26-A	0	0		0	0			1		1	1		1	0	0	
P26-B	1	1		1		1		1	1	1	1		1	1		1
P27-A	1		1	1	1	1		1	1	1	0		0	1		1
P28	-			-				-			-			-		
P29-A	1		1	1	1			1		1	1		1	1	1	1

Fig. B1 Data Matrix (Including Measures and the Aggregated Conditions/Outcome)