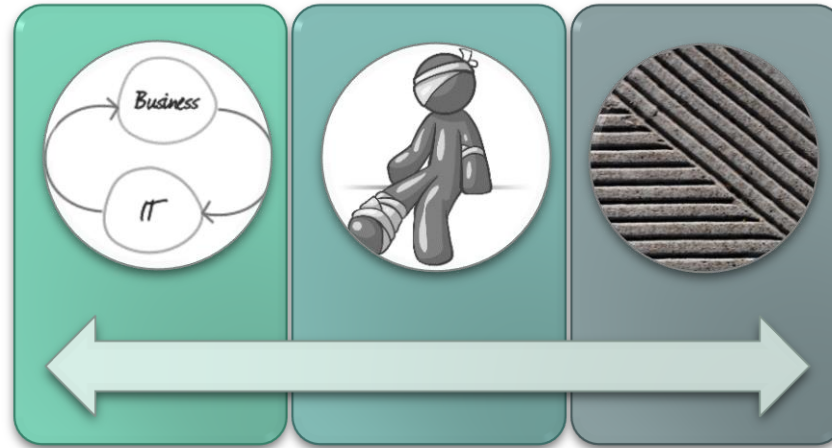
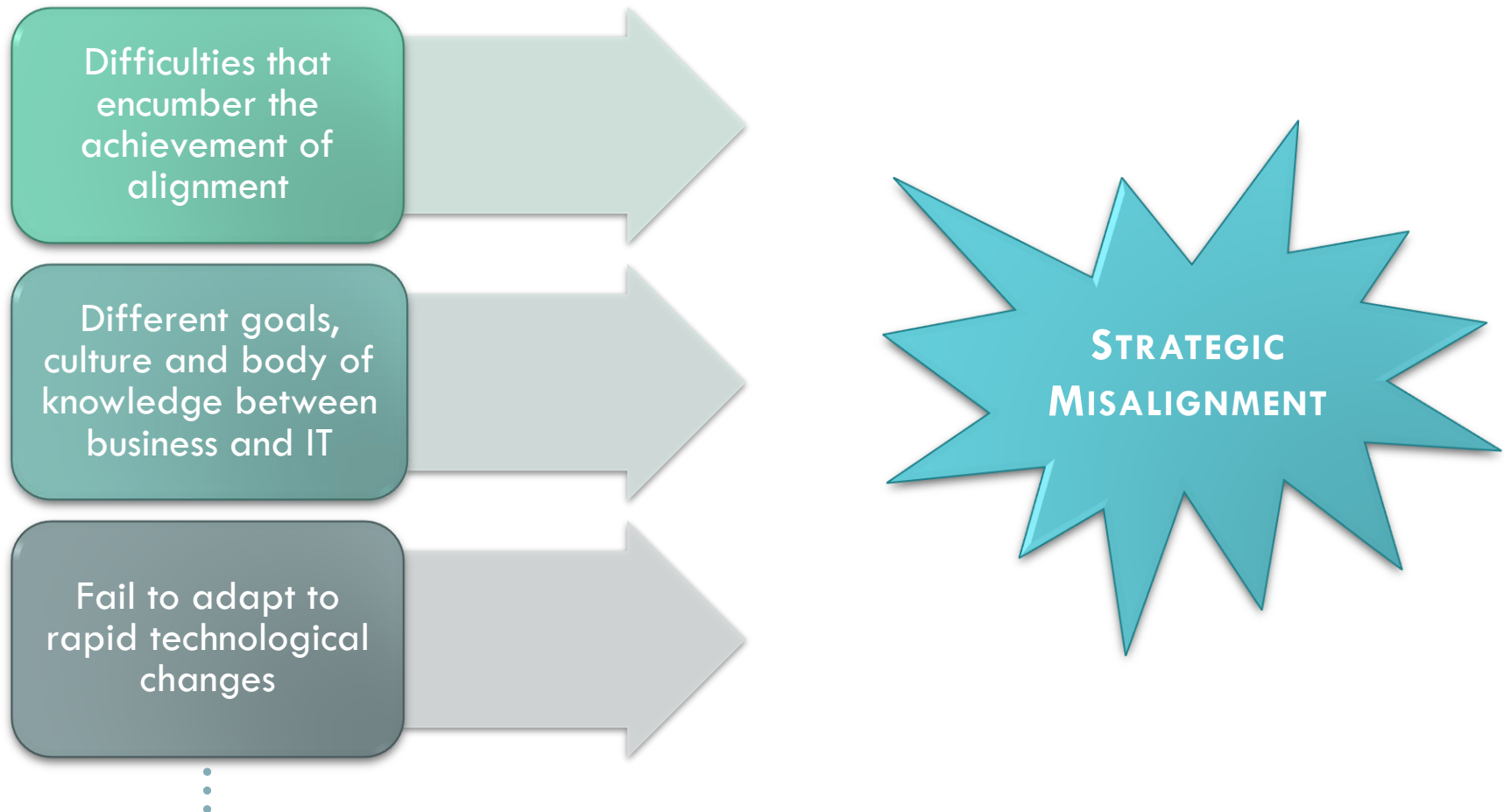


AN ARTIFACT-BASED FRAMEWORK for Business-IT Misalignment Symptom Detection (Extended Abstract)



Dóra Óri

MOTIVATION ALIGNMENT – MISALIGNMENT CONTINUUM



MOTIVATION MISALIGNMENT ASSESSMENT

MISALIGNMENT CLASSIFICATION



☐ Organ

☒ **Symptom**

☐ Sign

☐ Syndrome

☐ Etiology

MISALIGNMENT MANAGEMENT



☒ **Diagnosis (detection)**

☐ Therapy (correction)

☐ Prophylaxis (prevention)

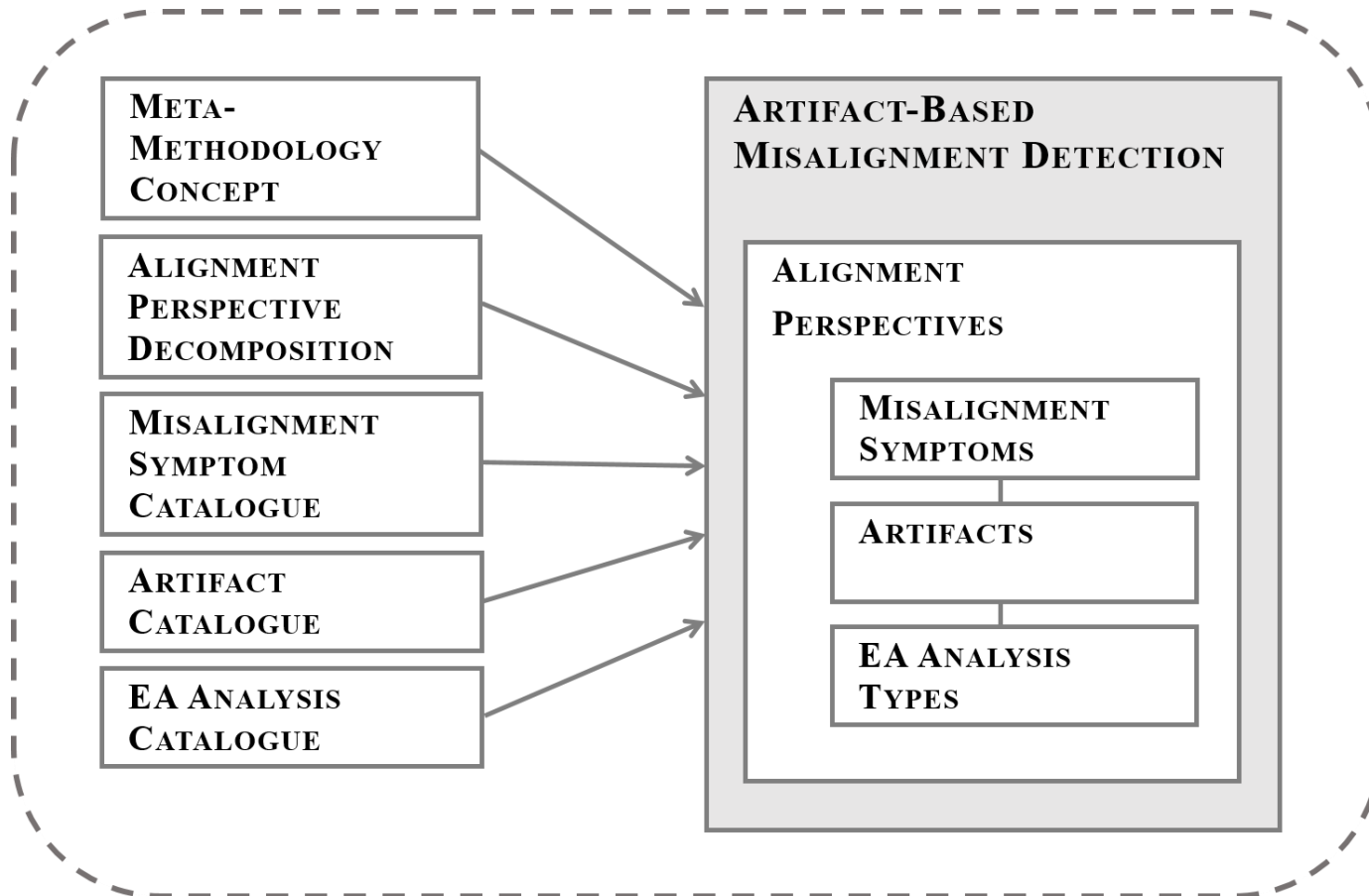
RESEARCH FRAMEWORK

EA-BASED MISALIGNMENT ASSESSMENT



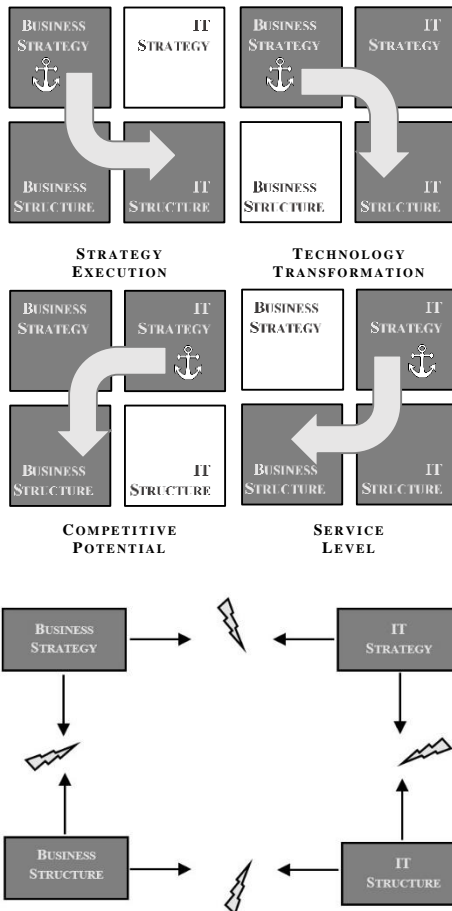
RESEARCH FRAMEWORK

EA-BASED MISALIGNMENT ASSESSMENT



OPERATION OF THE FRAMEWORK

ALIGNMENT PERSPECTIVE DECOMPOSITION



CODE	ALIGNMENT PERSPECTIVE	PERSPECTIVE COMPONENT
P.1.1	Strategy Execution	Matching of Business Strategy and Business Structure domains
P.1.2	Strategy Execution	Matching of Business Structure and IT Structure domains
P.2.1	Technology Transformation	Matching of Business Strategy and IT Strategy domains
P.2.2	Technology Transformation	Matching of IT Strategy and IT Structure domains
P.3.1	Competitive Potential	Matching of IT Strategy and Business Strategy domains
P.3.2	Competitive Potential	Matching of Business Strategy and Business Structure domains
P.4.1	Service Level	Matching of IT Strategy and IT Structure domains
P.4.2	Service Level	Matching of IT Structure and Business Structure domains

OPERATION OF THE FRAMEWORK

MISALIGNMENT SYMPTOM CATALOGUE (EXCERPT)

CODE	MISALIGNMENT SYMPTOM
S.01	Undefined organizational mission, strategy and goals
S.02	Undefined business process goals, business process owners
S.03	Lack of relation between process goals and organizational goals
S.04	Undefined business roles or responsibilities
S.05	Undefined or multiple hierarchy or lines of reporting
S.06	Application functionality does not support at least one business process activity
S.07	Business process task supported by more than one application
S.08	Critical business process does not depend on scalable and available applications
S.09	Inappropriate application functionality
S.10	Insufficient IT resources
S.11	Lack of IT skills and competencies
S.12	Lack of skills to develop or innovate certain types of products
S.13	Poor IT planning and portfolio management
S.14	Under capacity infrastructure
S.15	Lack or poor systems performance monitoring
S.16	Out of date technological infrastructure

OPERATION OF THE FRAMEWORK

ARTIFACT CATALOGUE (EXCERPT)

CODE	ARTIFACT	BRIEF CONTENT	TOGAF ADM PHASE
AF.01	Driver/Goal/Objective Catalogue	A breakdown of drivers, goals, and objectives to provide a cross-organizational reference of driver fulfilment.	Phase B
AF.02	Role Catalogue	A list of all authorization levels of an organization.	Phase B
AF.03	Business Service/Function Catalogue	A functional decomposition to identify capabilities of an organization.	Phase B
AF.04	Contract/Measure Catalogue	The master list of all agreed service contracts (and contract measures) within an organization.	Phase B
AF.05	Actor/Role Matrix	A matrix to show which actors perform which roles.	Phase B
AF.06	Business Footprint Diagram	A mapping of business goals, organizational units, business functions, business services, and delivering technical components.	Phase B

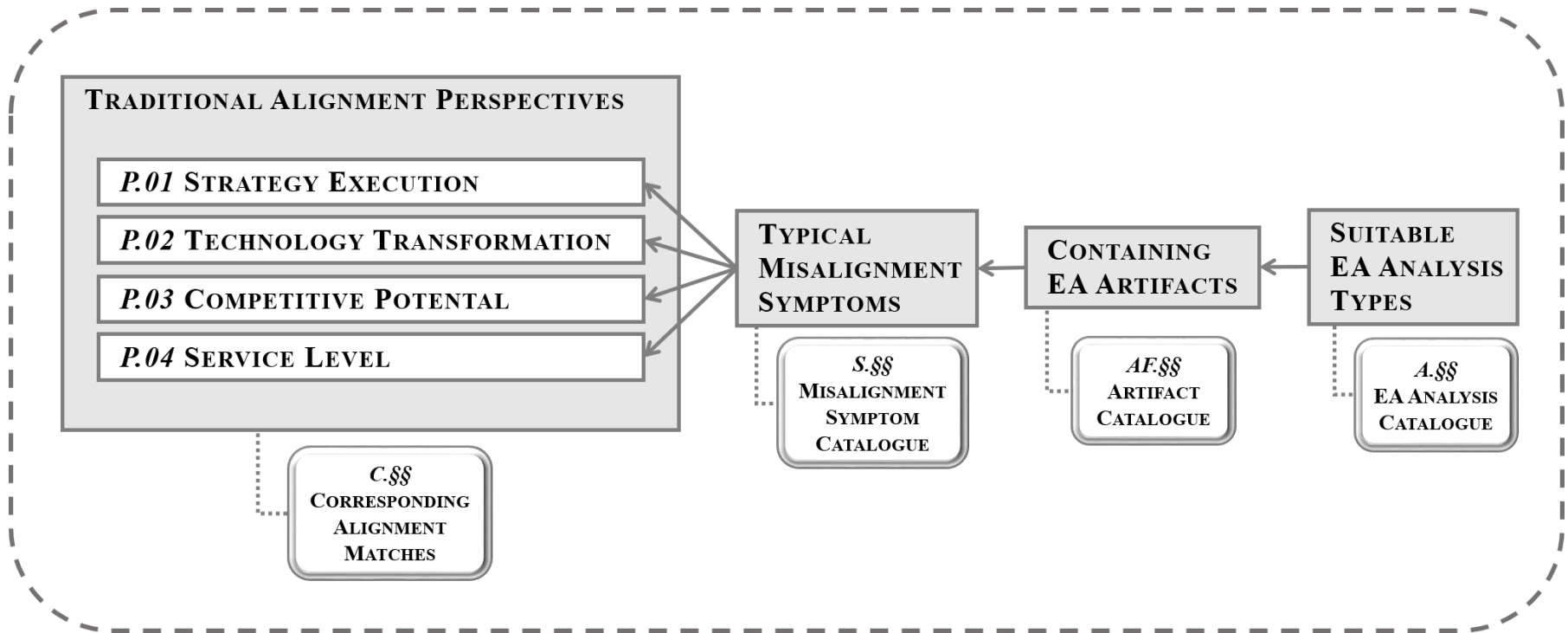
OPERATION OF THE FRAMEWORK

EA ANALYSIS TYPES

CODE	EA ANALYSIS TYPE	BRIEF CONTENT
A.01	Dependency analysis	Analysis of directly or indirectly linked EA entities, relationship analysis and impact analysis.
A.02	Network analysis	Analysis of EA model network elements and EA domain networks.
A.03	Coverage analysis	Analysis of business structure coverage (by supportive application systems).
A.04	Interface analysis	Analysis of interfaces between application systems.
A.05	Complexity analysis	Analysis of architecture complexity by architecture components and relationships.
A.06	Enterprise interoperability assessment	Analysis of interoperability between architecture entities and architecture domains.
A.07	Enterprise coherence assessment	Analysis of coherence between architecture entities.
A.08	Heterogeneity analysis	Analysis of IT assets heterogeneity.

OPERATION OF THE FRAMEWORK

COLLABORATION OF RESEARCH CONSTRUCTS



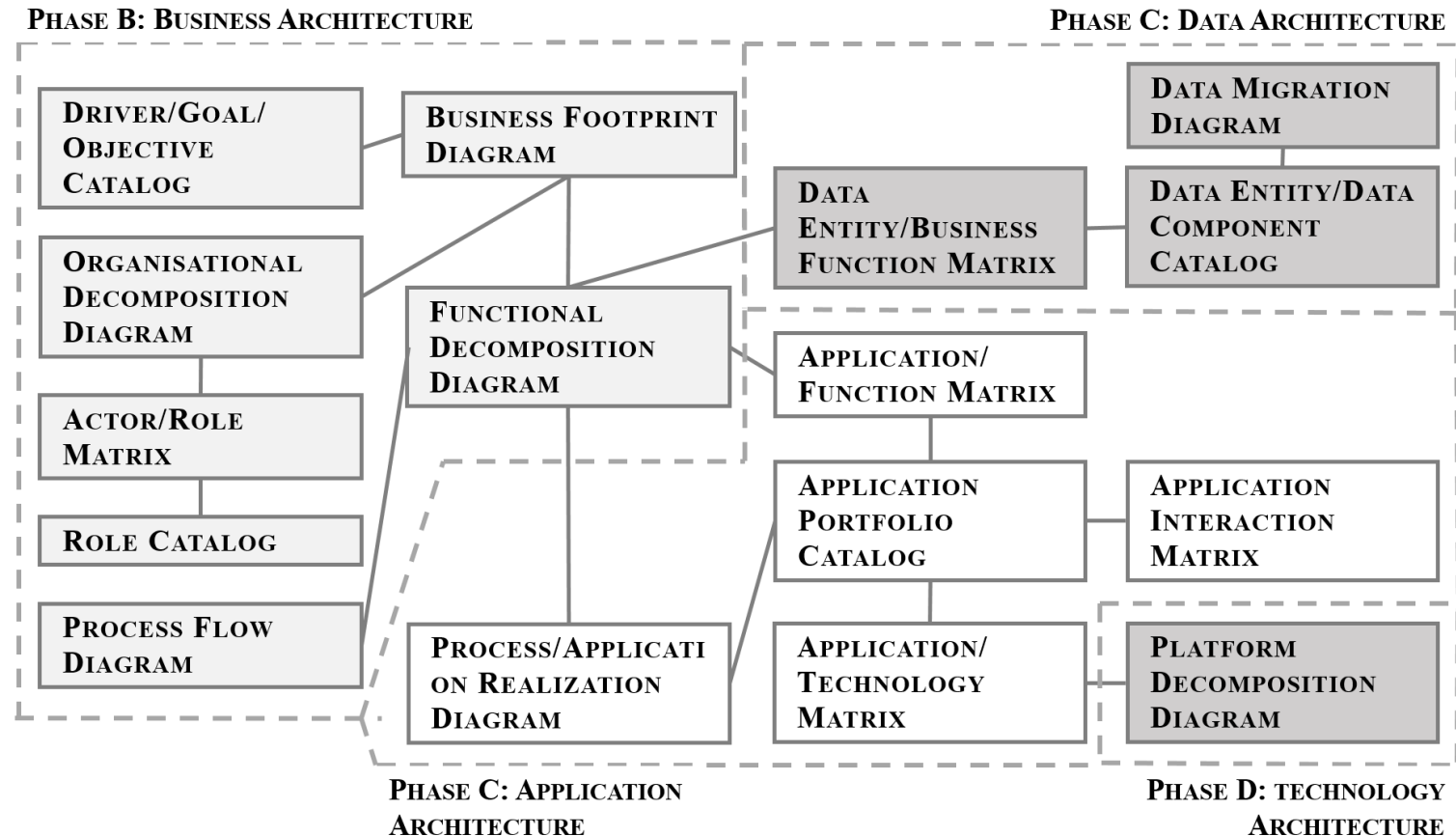
RESEARCH RESULTS (EXCERPT)

STRATEGY EXECUTION PERSPECTIVE

PERSPECTIVE COMPONENT	MISALIGNMENT SYMPTOM	CONTAINING ARTIFACT	RELATED EA ANALYSIS TYPE
C.01 BUSINESS STRATEGY AND BUSINESS STRUCTURE MATCHING	S.01 Undefined organizational mission, strategy and goals	AF.01 Driver/Goal/Objective Catalogue AF.06 Business Footprint Diagram	A.03 Coverage analysis
	S.03 Lack of relation between process goals and organizational goals	AF.06 Business Footprint Diagram AF.08 Goal/Objective/Service Diagram	A.01 Dependency analysis
C.02 BUSINESS STRUCTURE AND IT STRUCTURE MATCHING	S.07 Business process task supported by more than one application	AF.15 Application Portfolio Catalogue AF.16 Application/ Function Matrix	A.01 Dependency analysis
	S.09 Inappropriate application functionality	AF.19 Application Use-Case Diagram AF.20 Process/Application Realization Diagram	A.03 Coverage analysis

CASE STUDY

EA MODEL STRUCTURE



CASE STUDY




EXAMPLE OF EA ANALYSIS

APPLICATION							
BUSINESS PROCESS TASK	EASYWAY	INFOPULT	ERP	KOMVIR	SPREADSHEET	SHAREPOINT	OKA2000
ADMINISTRATING ROAD CONTROL TASKS			•		•		
FORWARDING INFORMATION	•	•					
INFORMATION RECORDING AND CONSOLIDATION				•			
RECEIVING NOTIFICATION						•	
ROAD CONTROL PLAN PREPARATION					•	•	•
ROAD CONTROL PLAN VERIFICATION					•		

CASE STUDY

FRAMEWORK VALIDATION

ALIGNMENT PERSPECTIVE	PERSPECTIVE COMPONENT	MISALIGNMENT SYMPTOM	CONTAINING ARTIFACT	RELATED EA ANALYSIS TYPE
P.01 STRATEGY EXECUTION	C.02 Business Structure and IT Structure matching	S.07 Business process task supported by more than one application	AF.15 Application Portfolio Catalogue AF.16 Application/ Function Matrix	A.01 Dependency analysis

APPLICATION		EASYWAY	INFOPULT	ERP	KOMVIR	SPREADSHEET	SHAREPOINT	OKA2000
BUSINESS PROCESS TASK								
	ADMINISTRATING ROAD CONTROL TASKS			•		•		
	FORWARDING INFORMATION	•	•					
	INFORMATION RECORDING AND CONSOLIDATION				•			
	RECEIVING NOTIFICATION						•	
	ROAD CONTROL PLAN PREPARATION					•	•	•
	ROAD CONTROL PLAN VERIFICATION					•		

CASE STUDY

FRAMEWORK VALIDATION

ALIGNMENT PERSPECTIVE	PERSPECTIVE COMPONENT	MISALIGNMENT SYMPTOM	CONTAINING ARTIFACT	RELATED EA ANALYSIS TYPE
P.01 STRATEGY EXECUTION	C.02 Business Structure and IT Structure matching	S.06 Application functionality does not support at least one business process task.	AF.16 Application/Function Matrix	A.01 Dependency analysis

APPLICATION	EASYWAY	INFOPULT	ERP	KOMVIR	SPREADSHEET	SHAREPOINT	OKA2000
BUSINESS PROCESS TASK							
ADMINISTRATING ROAD CONTROL TASKS			•		•		
FORWARDING INFORMATION	•	•					
INFORMATION RECORDING AND CONSOLIDATION				•			
RECEIVING NOTIFICATION						•	
ROAD CONTROL PLAN PREPARATION					•	•	•
ROAD CONTROL PLAN VERIFICATION					•		

CONCLUSION & OUTLOOK

CONTRIBUTION

A framework for EA-based misalignment assessment

Collecting typical misalignment symptoms along the traditional alignment perspectives

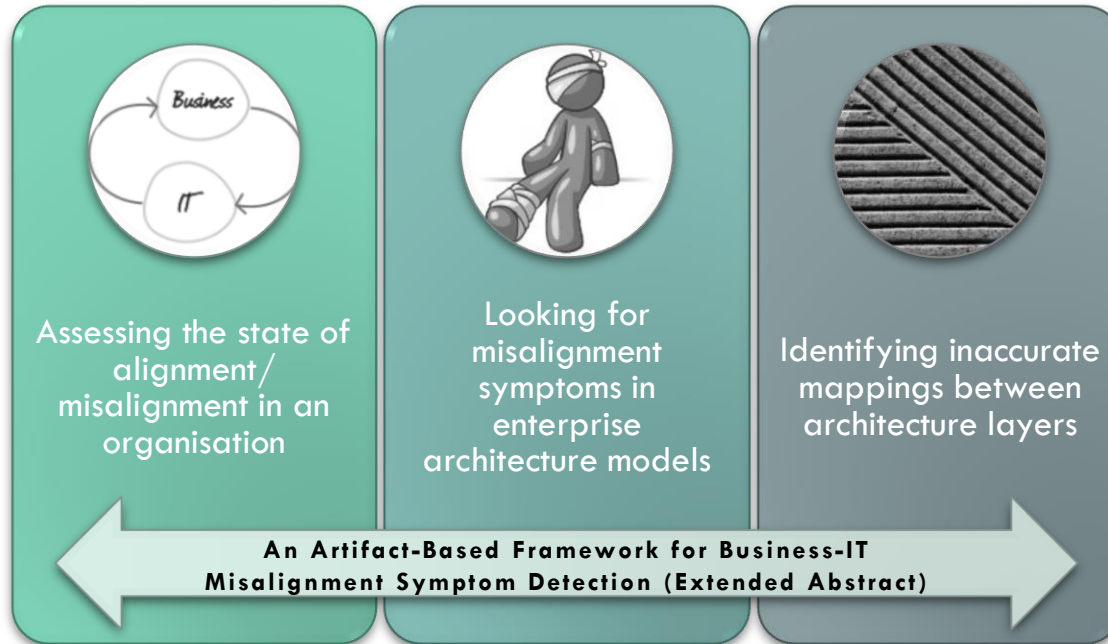
Recommending relevant EA analysis types to each misalignment symptom

FUTURE WORK

Evaluation against testable criteria

Framework validation with case study generation

Refinements by additional perspectives/symptoms/EA analysis types



THANK YOU FOR YOUR ATTENTION!

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