AGILE HYBRID PROJECT PORTFOLIO MANAGEMENT: RETHINKING ITS PARADOXES

Agile Hybrid Project Portfolio Management: Rethinking Its Paradoxes

THE AUTHORS

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WHO AM I

Educations & Certification
- PhD in Information Systems, Aalborg University
- M.Sc. in Social science (Cand.soc), Aalborg University
- Certified Project Manager (PRINCE2, MS Project, IPMA)

Experience
- Started at Aarhus University 1. Oct. 2017
- External lector at ITU
- Municipality of Copenhagen
- Projectum
- Økonomi- og Erhvervsministeriet

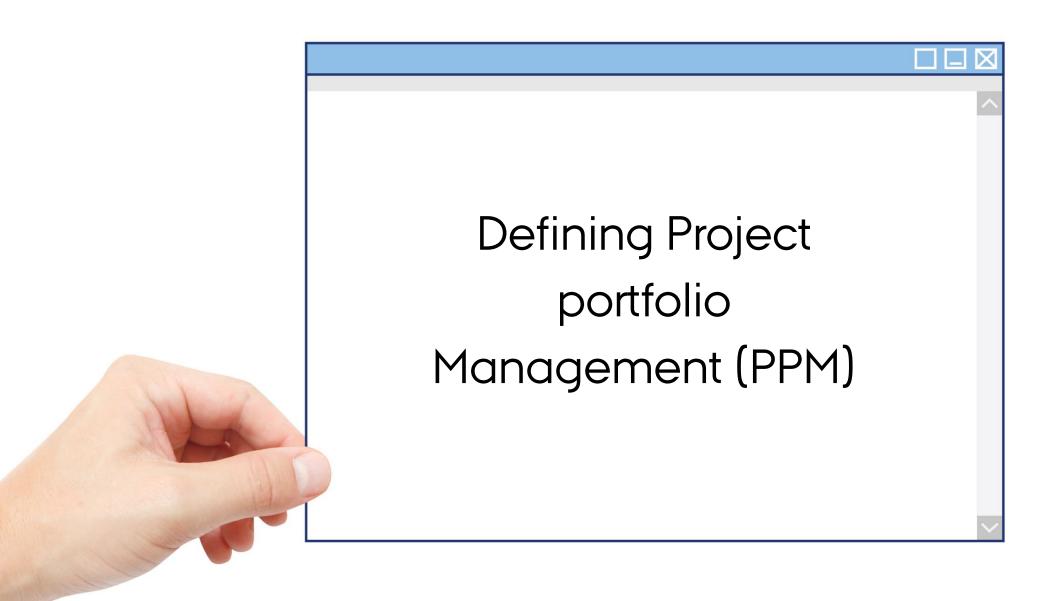- *15 years experience in project and portfolio management*

Teaching
- IT projects and portfolio management
- IS strategy and management
- Project management and business development
- Agile portfolio management
- IS Philosophy of Science and Research

Research Areas
- Rethinking project portfolio management
- Agile and adaptive project portfolio management

Defining Project portfolio Management (PPM)

The overall organizational ability to manage project portfolios strategically and holistically to support the success of the organization
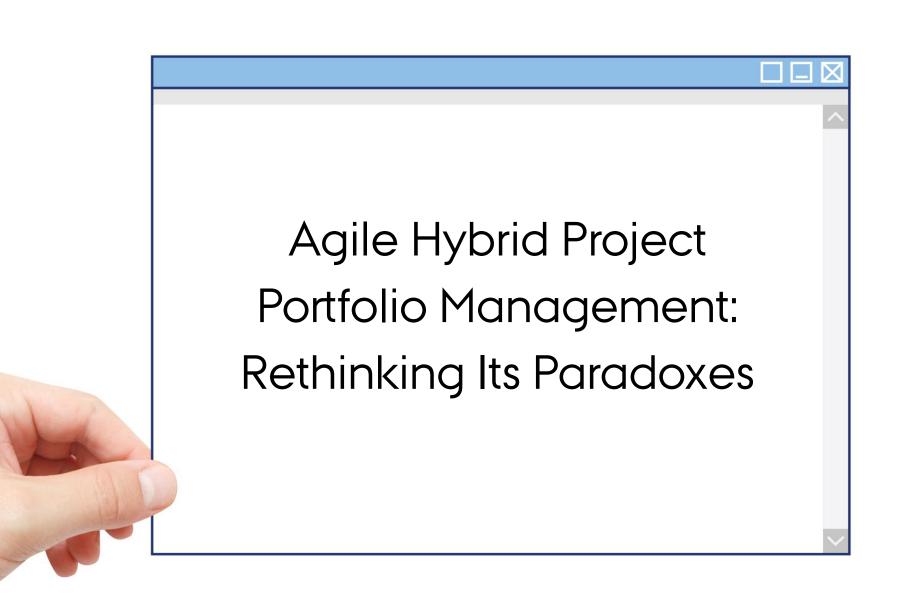
(Clegg et al., 2018)

Strategies
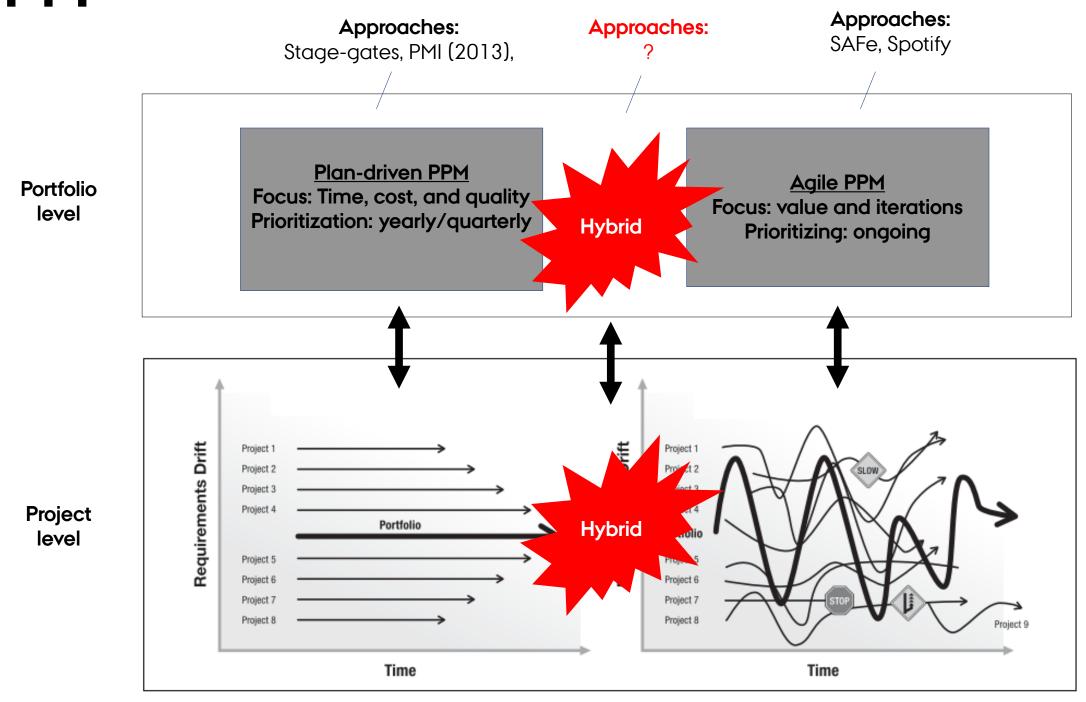
Misalignment

Failures

How can we bridge this gap?

Resource

crunch

Projects

Adopted from
Catherine Killen

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HYBRIDS OF PLAN-DRIVEN AND AGILE PPM

Adapted from
Sweetman and Conboy (2018)

9

WHAT IS A HYBRID?

- A "hybrid" is something of a mixed character (Bick et al., 2018).
- Hybrid approaches potentially extract the advantages of different approaches (Bianchi et al., 2021) but often contain contradictory elements (Hoffmann et al., 2020).

Hyundai Tucsun Plug-in Hybrid

RESEARCH SITE: FOUR CASES WITH HYBRID PPM

	Alpha	Beta	Epsilon	Gamma
Industry	Food	Information technology.	Energy	Electronics
Years in business	100+ years	50+ years	A merger of two organizations each in business for more than 50 years	100+ years
Annual revenue	Over €8 billion	Over €200 million	Over €50 billion	Over €200 million
Type of portfolio	IT and business development	IT and business development	IT and business development	Research and development
Yearly portfolio cash flow	Over €50 million	Over €40 million	Over €50 million	Over €30 million
Project and portfolio methodologies	SAFe	SAFe, Nexus, and Kanban	Internally developed, inspired by Spotify's scaling model	Half-double methodology and stage gate
Started scaling agile practices	2016	2015	2016	2018

OUR RESEARCH PROCESS
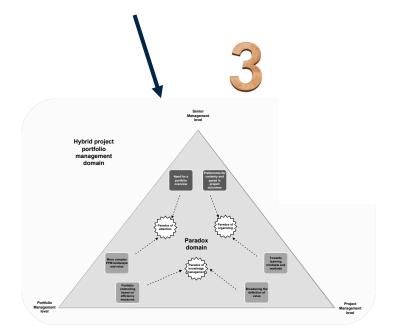
	First-order analysis	Second-order analysis	Third-order analysis
What did we do with our data?	Deconstructing data in thinking elements. Each element can be associated with either a Classical- or a Rethinking perspective	Gathering thinking elements in 10 themes	Identifying three paradoxes across hierarchical levels
What theory did we use?	Rethinking project management (Svejvig and Andersen, 2016)	Thematic analysis (Braun and Clarke, 2006)	"Organizational paradoxes" (Smith and Beretta, 2020)

FIRST-ORDER ANALYSIS

Perspective	Element	Codes (instances)	Example from data
Classical	Controllability	37	Agile ceremonies visualizing the performance of the portfolio for management
	Linearity and simplicity	25	Stage-gate processes to "specify the expected quality and completeness level of a given deliverable."
	Executability	20	Aim to boost time to market
	Instrumentality	16	Use of advanced methods to calculate profit margins, costs, etc., for instance, by using a Monte Carlo simulation.
	Temporarity, tasks	12	Defining portfolio (activities) as temporary features, these can be broken down into smaller entities (tasks), e.g., going from epics, features, and user stories.
	Total classical	110	
Rethinking	Valuability	65	Desire to leave financial business cases, e.g., Net Present Value (NPV), and Retur on Investment product development ROI, but this leaves a vacuum in terms of how to assess the benefits of a project.
	Complexity	58	Planning between programs is a complex interplay between many actors.
	Learnability	45	Use of Prof of Concept (POC) provides a way to learn about the potential and limitations of project candidates in the pipeline of project ideas.
	Sociability	44	Scaling agility to the portfolio level is driven by visionary managers from the lower levels of the organizations.
	Uncertainty	41	The staff on the portfolio level sees scaling agile practices as creating uncertainty around their role and future in the organization.
	Multiplicity	25	A broader repertoire of the way of doing projects makes the follow-up processes conducted by the PMO staff more ambiguous.
	Temporarity, organizing	18	A portfolio organized by ongoing agile release trains can be considered a semipermanent organization.
	Total rethinking	296	
	Total	406	

Deconstructing data in 406 thinking elements

SECOND-ORDER ANALYSIS

2

Level	Group of elements	Perspective		Themes
		Classical	Rethinking	
Executive	Linearity and simplicity, executability	X		T1. Preferences for certainty and speed in project outcomes
	Controllability, instrumentatality	X		T2. Need for a portfolio overview
	Uncertainty, temporarity		X	T3. More uncertain business environment
Portfolio management	Linearity and simplicity, executability, instrumentality	X		T4. Portfolio controlling based on efficiency measures
	Complexity, multiplicity		X	T5. More complex PPM landscape and roles
	Value		X	T6. Broadening the definition of value
Project	Controllability, instrumentality	X		T7. More transparency and discipline
	Learnability		X	T8. Toward learning mindsets and methods
	Complexity, temporariness		X	T9. More complexity and diversity in project coordination
	Sociability, multiplicity		X	T10. Navigating different working styles and thinking

Gathering thinking elements in 10 themes

THIRD-ORDER ANALYSIS

Senior Management level

Hybrid project portfolio management domain

Need for a portfolio overview

Preferences for certainty and speed in project outcomes

Identifying three generic paradoxes

Paradox of attention

Paradox of organizing

Paradox domain

More complex PPM landscape and roles

Towards learning mindsets and methods

Paradox of knowledge management

Portfolio controlling based on efficiency measures

Broadening the definition of value

Portfolio Management level

Project Management level

RECOMMENDATIONS: DEALING WITH PARADOXES

Strategies for dealing with paradoxes

- Temporally separating levels
- Clarify levels
- Introducing new terms
- Understand and use it constructively

(Pool and Van de Ven, 1989)

TRADITIONAL LEADERSHIP
"Either/Or"

ASSUMPTIONS	HOW LEADERS BEHAVE
True ideas, beliefs, and identities are internally consistent and coherent.	• Make strategic choices • Forge compromises • Keep decisions consistent with the chosen strategy • Align the firm's culture • Act consistently

PARADOXICAL LEADERSHIP
"Both/And"

ASSUMPTIONS	HOW LEADERS BEHAVE
True ideas, beliefs, and identities consistently embed multiple, often inconsistent, perspectives.	• Engage conflicting strategies simultaneously • Accept and value multiple cultures • Learn from multiple perspectives • Act consistently inconsistent

(Smith et al., 2016)

PARADOXES AS A OPPORTUNITY NOT A PROBLEM

- Niels Bohr once said, "How wonderful that we have met with a paradox. Now we have some hope of making progress."
- Paradox has long been at the heart of great accomplishments—revealing profound truths and spurring creativity, e.g., Einstein's theory of relativity (Smith et al., 2016)
- Using paradoxes constructively provides an alternative to "Either/Or" thinking
- In a fast-changing world, we need a toolbox with various approaches, not a war between "agile" and "not agile." (Nieto-Rodriguez, 2021).

Model → adoption → Improvement

Prescriptive ←———→ Constructive

DIALECTIC

Thesis → Conflict → Synthesis
Antithesis →

Pluralism (Diversity)
Confrontation
Conflict

Agile Hybrid PPM: Rethinking Its Paradoxes

How can we understand and cope with paradoxes in hybrid PPM?

Research process

	First-order analysis	Second-order analysis	Third-order analysis
What did we do with our data?	Deconstructed data in thinking elements from two perspectives: Classical and Rethinking	Gathering thinking elements in 10 themes	Identified three paradoxes across hierarchical levels
What theory did we use?	Rethinking project management (Svejvig and Andersen, 2016)	Thematic analysis (Braun and Clarke, 2006)	"Organizational paradoxes" (Smith and Beretta, 2020)

1   2   3

Three main paradoxes

The paradox of attention deems from the tension between a holistic and narrow focus

The paradox of organizing stems from the tension of having autonomy while being controlled

The paradox of knowledge management stems from the tension between formalized versus informal knowledge

Ways to deal with paradoxes (Poole and Van de Ven, 1989)

Strategies for dealing with paradoxes

- Temporally separating levels
- Clarify levels
- Introducing new terms
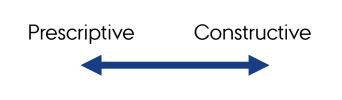- Understand and use it constructively

Pool and Van de Ven (1989)

Approaches: Stage-gates, PMI (2013),   Approaches: ?   Approaches: SAFe, Spotify

Portfolio level — Plan-driven PPM — Focus: Time, cost, and quality — Prioritization: yearly/quarterly — Hybrid — Agile PPM — Focus: value and iterations — Prioritizing: ongoing

Project level — Hybrid

Hybrid PPM

Project portfolio management (PPM)

Definition

Strategies — Misalignment — Failures — How can we bridge this gap? — Resource crunch — Projects

DIALECTIC — Thesis — Antithesis — Conflict — Synthesis — Pluralism (Diversity) Confrontation Conflict

An alternative to a "Either/Or" thinking between "agile" and "not agile."

An alternative to prescriptive organizational thinking

TRADITIONAL LEADERSHIP "Either/Or"

ASSUMPTIONS	HOW LEADERS BEHAVE
True ideas, beliefs, and identities are internally consistent and coherent.	• Make strategic choices • Forge compromises • Keep decisions consistent with the chosen strategy • Align the firm's culture • Act consistently

PARADOXICAL LEADERSHIP "Both/And"

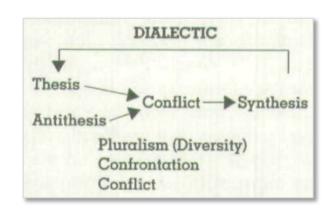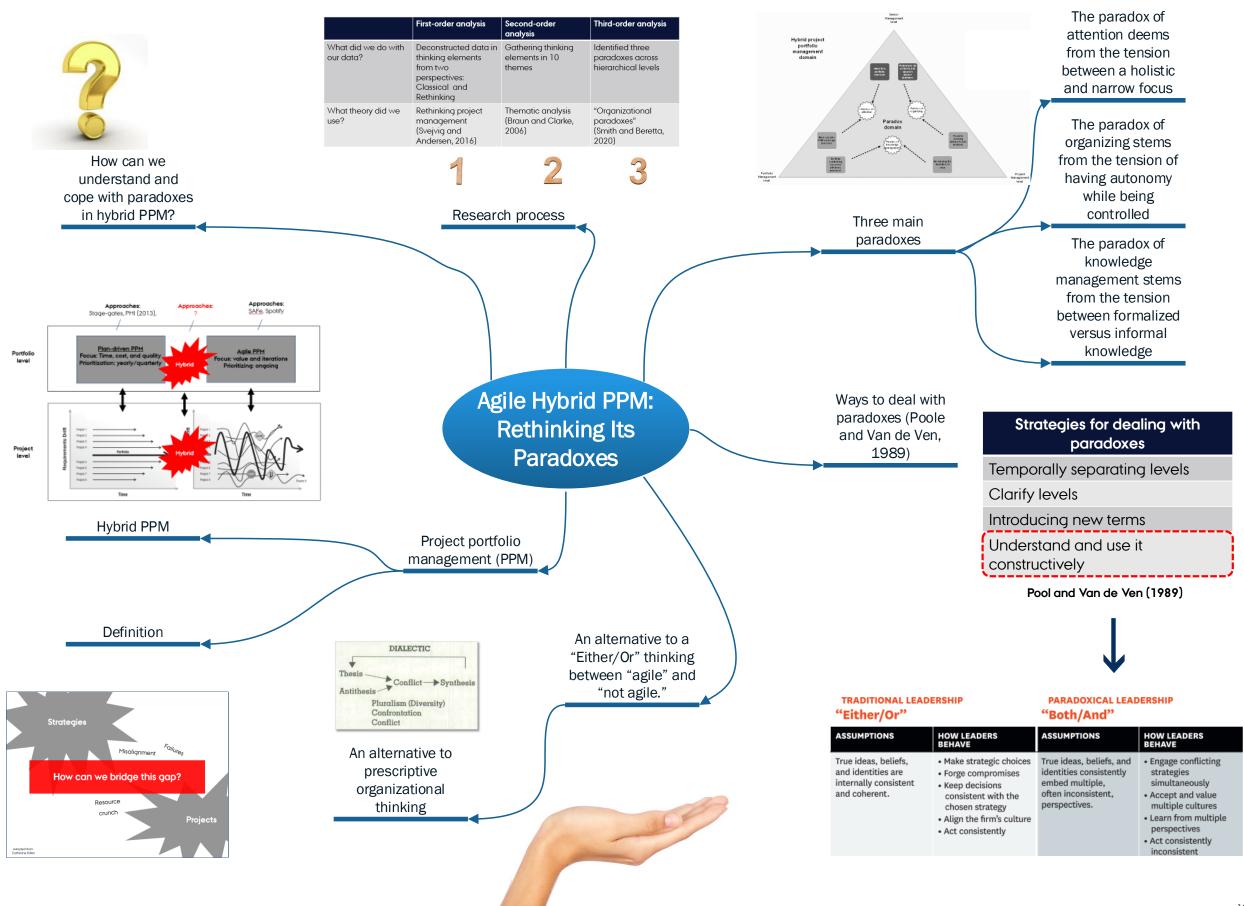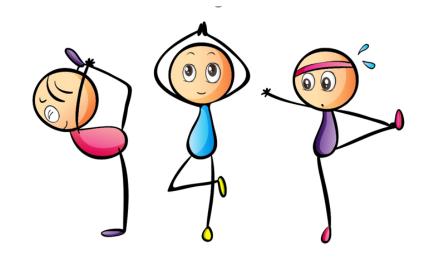| ASSUMPTIONS	HOW LEADERS BEHAVE
True ideas, beliefs, and identities consistently embed multiple, often inconsistent, perspectives.	• Engage conflicting strategies simultaneously • Accept and value multiple cultures • Learn from multiple perspectives • Act consistently inconsistent

18

GROUP EXERCISE

1) Do you think that agile transformations should be "all" or "nothing"?
2) How do you see the potential of paradoxical leadership as a driver in agile transformations?

SCALED AGILE IN DENMARK

Hybrider

- ALKA
- Bankdata
- Danske Bank
- Lego Systems A/S
- Maersk
- Nordea
- Planday
- Saxo Bank
- Siteimprove
- Widex
- WorldTicket a/s

- Systematic A/S
- Topdanmark Forsikring A/S
- Tryg
- TV 2 Danmark
- Udviklings- og Forenklingsstyrelsen
- Velliv
- Vestas Wind System A/S
- William Demant
- Ørsted

SAFe

- Arla
- ATP
- Bang & Olufsen a/s
- BEC (Bankernes EDB Central)
- DSB
- FDC
- GN Hearing
- Grundfos A/S
- Novo Nordisk A/S
- Nykredit
- Oticon A/S
- PFA
- SEGES P/S
- SimCorp A/S
- Sitecore
- Skandia

DSDM

- Københavns Kommune - Koncern IT
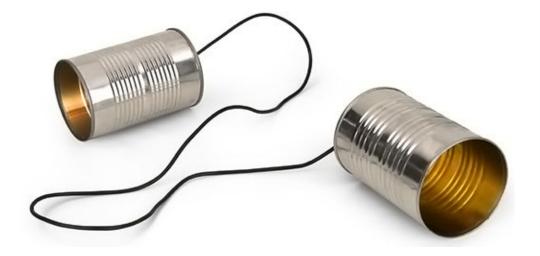
LeSS

- Scalepoint

"Spotify"

- Alm. Brand
- Nuuday

20

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THE END