



Management of Complexity in Early Planning Stage of projects

Walt Lipke Awards Session - PGCS - Canberra

21 Aug 2019

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Introduction

- ▶ *Research Background*
- ▶ *Complexity in Portfolios and Single Projects*
- ▶ *Means of managing complexity*
- ▶ *An example of application : EAC categorisation model*
- ▶ *Discussion*



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Research background

- ▶ To understand gaps in decision making between theory and practice when decision makers are exposed to unexpected events
- ▶ Drawing on our observations in workplaces which created an initial query about how senior managers could lose their pipeline works when they face complexity
- ▶ A strong discipline of PPM and PM across an organisation, coupled with a lack of common understating about implementation - particularly in uncertain conditions - indicated this area needs research attention



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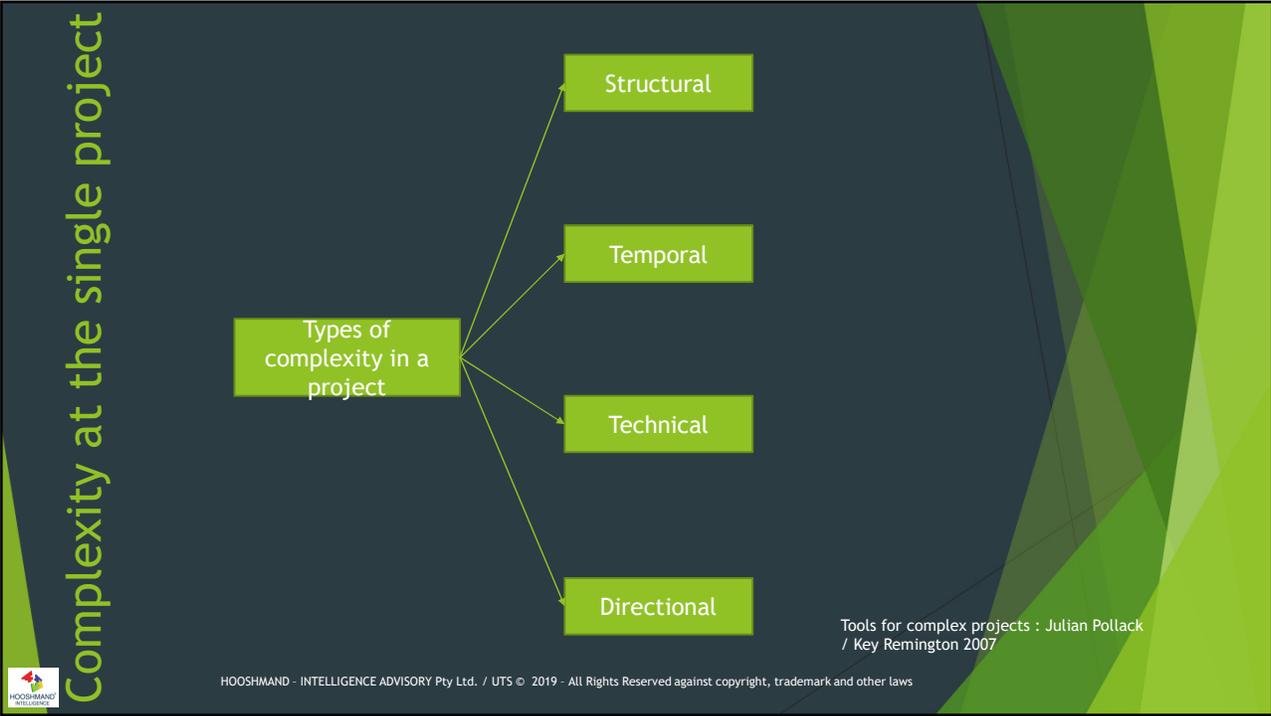
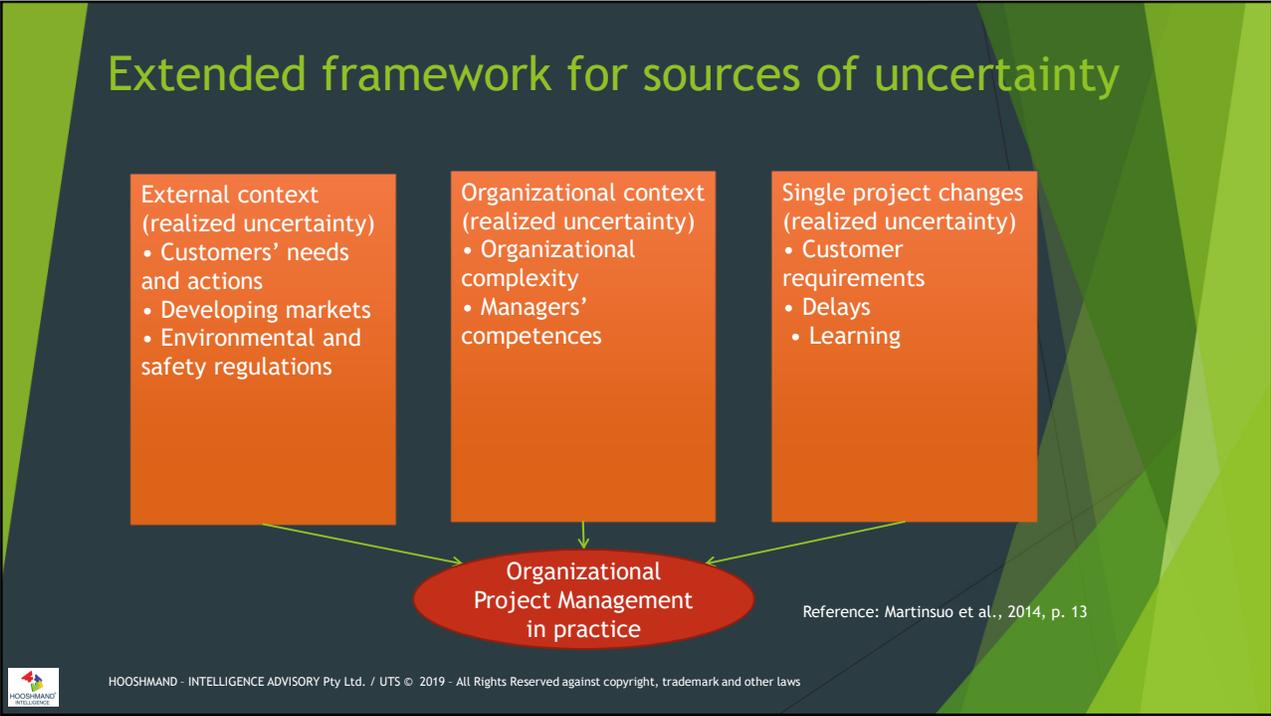
Complexity in projects and portfolios

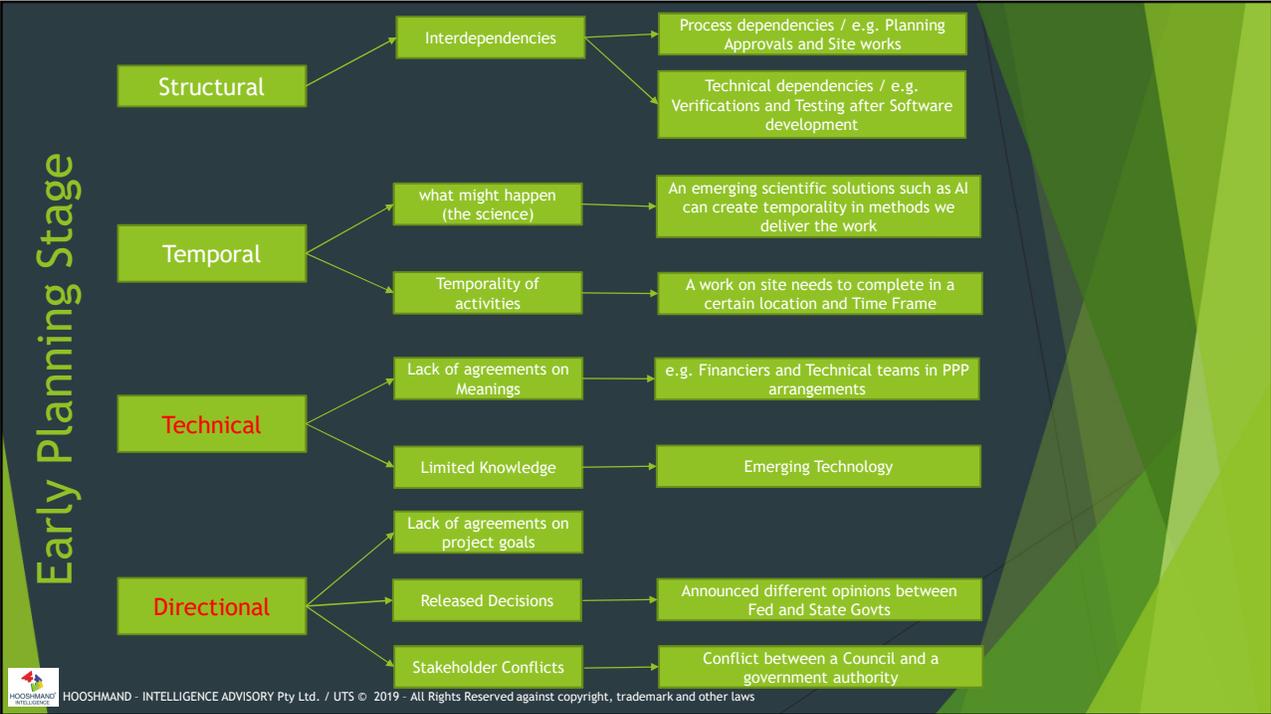
- ▶ There is no doubt that the work of project management is complicated:* and often complex.
- ▶ An organization's work is always complicated—what will make it complex is the combination of *technical complexity*, the *specific selection* and management of projects, and the *relationships with the stakeholder* community in the *environment of unpredictability*.
- ▶ *Complexity born by unpredictability affect performance of implementing projects*

Reference: Levin, G. and Wyzalek, J., 2015



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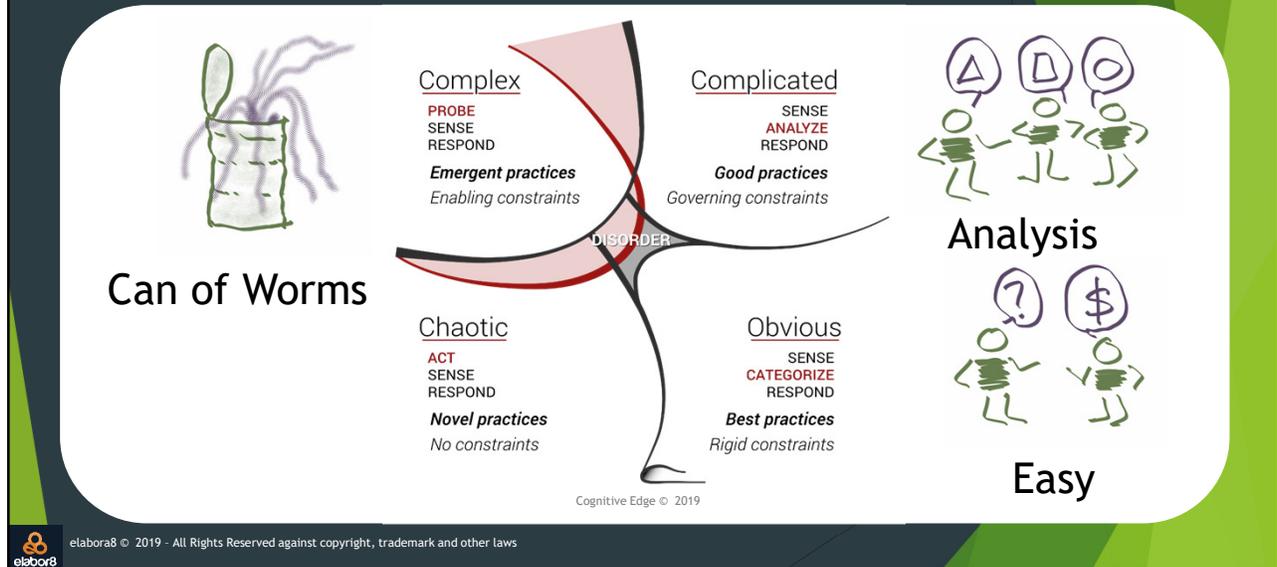




Observation of an ICT Project

Application of EAC Model

Easy, Analysis, Can of Worms



Easy

- Name the person
- Answer in less than 20 minutes

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Analysis

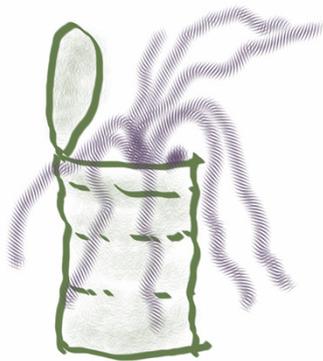


- Name the experts
- 2-3 Hour workshop
- Defined analytical task



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Can of Worms



- Does not fit into Easy or Analysis

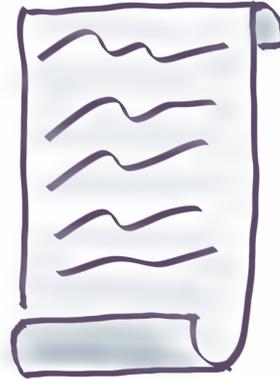


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Aging Technology Stack



24 x 7 Mission Critical



Architectural White Paper



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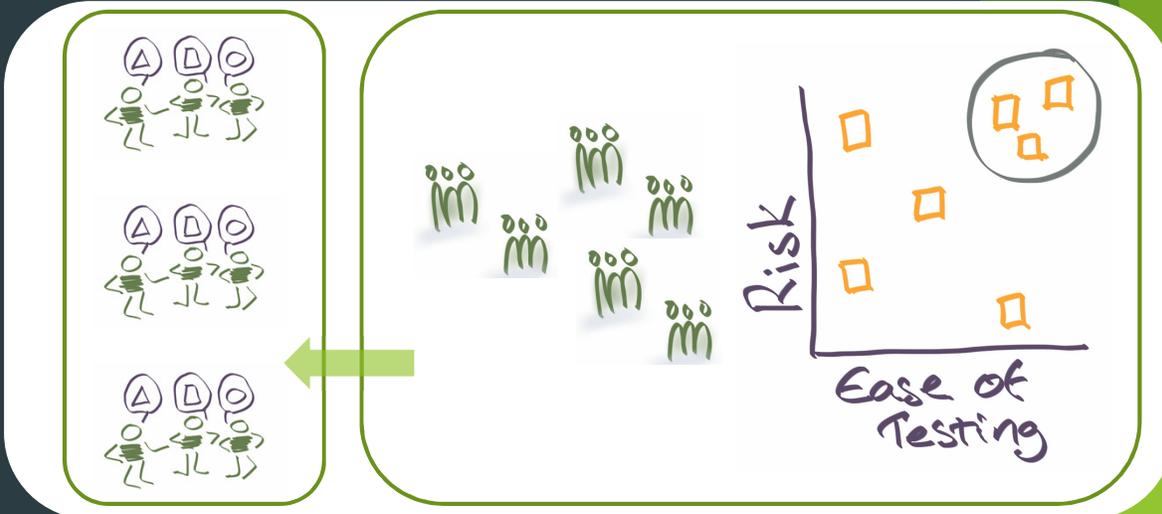
140 Technology Questions

Item	EAC	Notes
One?	Easy	e.g. Windows or Linux?
Two?	Analysis	Experts could answer in less than 1 hour
Three?	Can of Worms	'I think...'
Four?	Analysis	
Five?	Can of Worms	



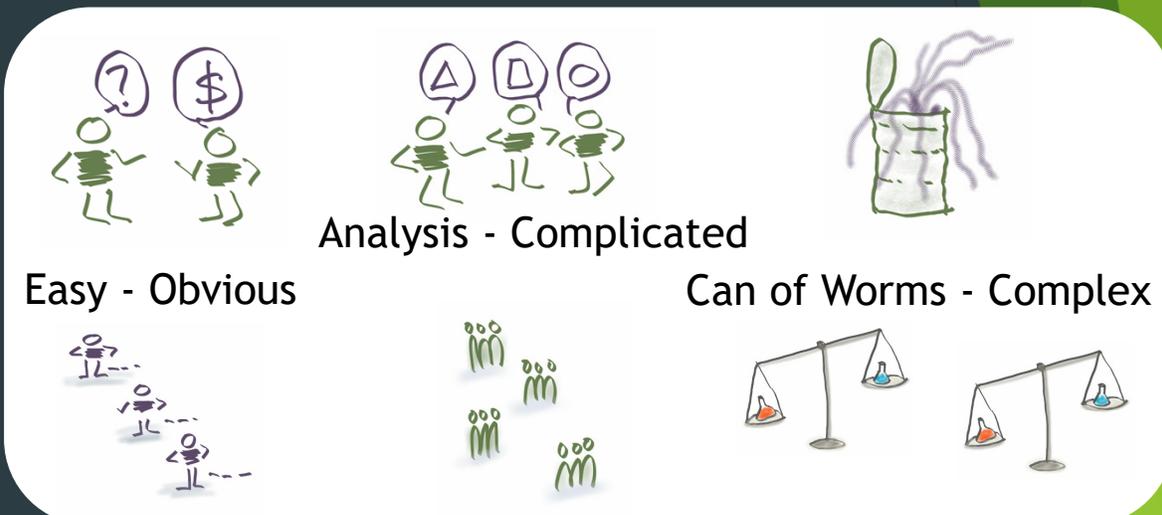
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Two-Day Workshop



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Typical Actions



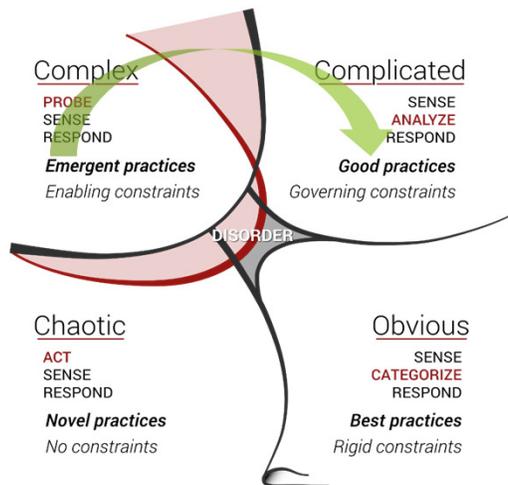
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Risk - Workshops Derailed



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Movement on the Cynefin Framework

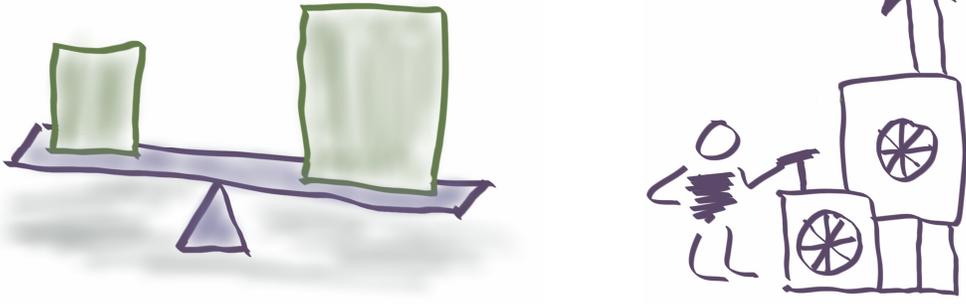


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Types of Uncertainty

Complex inter-related decisions



Meaning/Ambiguity - insufficient experience

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Discussion and Conclusions

Means of managing complexity - Early Stage Planning

- ▶ Frameworks for decision making in dynamic condition e.g. Cynefin™ (Kurtz and Snowden 2003)
- ▶ Categorisation of decisions over time (Early Stage, Procurement , Delivery, Operations)
- ▶ Agile delivery - promoting responsiveness which is appropriate for each stage of project life cycle



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Frameworks for Early Planning

- ▶ Cynefin framework provides theory to support classification and categorisation techniques such as EAC model in practice of project decision making
- ▶ We have identified Categorisation frameworks which links to the early planning phase of projects raised by French (1995) and Van Putten (2013)



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Agility of decision making

- ▶ Agility and responsiveness has been at the centre of attention for researchers and practitioners in delivery of projects
- ▶ The EAC model has proved to help with time reduction and agile decision making in the ICT project



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Easy Analysis Can of Worms Categorisation - Early Planning

- ▶ Created common words and rituals among project teams
- ▶ Promoted collaboration on areas of business case with high level of complexity
- ▶ Our initial results from a single project data collected in an ICT project shows we have observed findings which can be extended into next stage of research where we factor in outcomes of using EAC in projects



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Business Case Framework

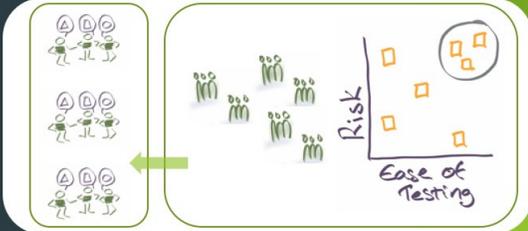
Van Putten (2013)



Stakeholders opinions

Clarifying reasoning

Two-Day Workshop



Information Sources

Item	EAC	Notes
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Next Steps

- ▶ Apply EAC Model in other projects and measure the outcomes on pilot projects for next research paper
- ▶ EAC model can be further developed to provide support for agile innovation project management where management between chaos and complicated becomes crucial essence of success



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Presenters' Profile and Contacts

Kim

- ▶ Kim Ballestrin is a passionate and highly skilled Principal Consultant at Elabor8 working on the Agile transformations of large enterprises. With over 20 years of diverse management (IT) experience, helping some of Australia's most prominent organisations on their Agile change journey.

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Saeed

Dr Saeed Shalbafan is an academic, researcher and industry advisor. He is national sector director for PMO services in ONTOIT Global. He has worked as one of key leaders in most complex mega infrastructure projects in Australia. He also pursue his passion in project portfolio management in HOOSHMAND-INTELLIGENCE and UTS.

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