



Explorative Process Design Patterns

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Virtual Lecture Series on BPM

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Queensland University of Technology - QUT



QUT Centre for Future Enterprise / myself



Director, Centre for Future Enterprise

Shape future enterprises via applied research

Themes of the Centre

- Entrepreneurial enterprise
- Digital enterprise
- Social-purpose enterprise
- Robust enterprise

Personal research interest:

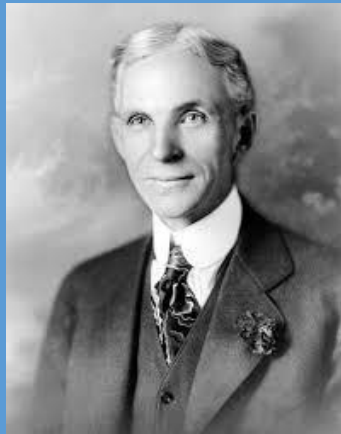
- Innovation systems
- Business process management
- Trust management



Key Perspectives on Organisational Improvement



Resources



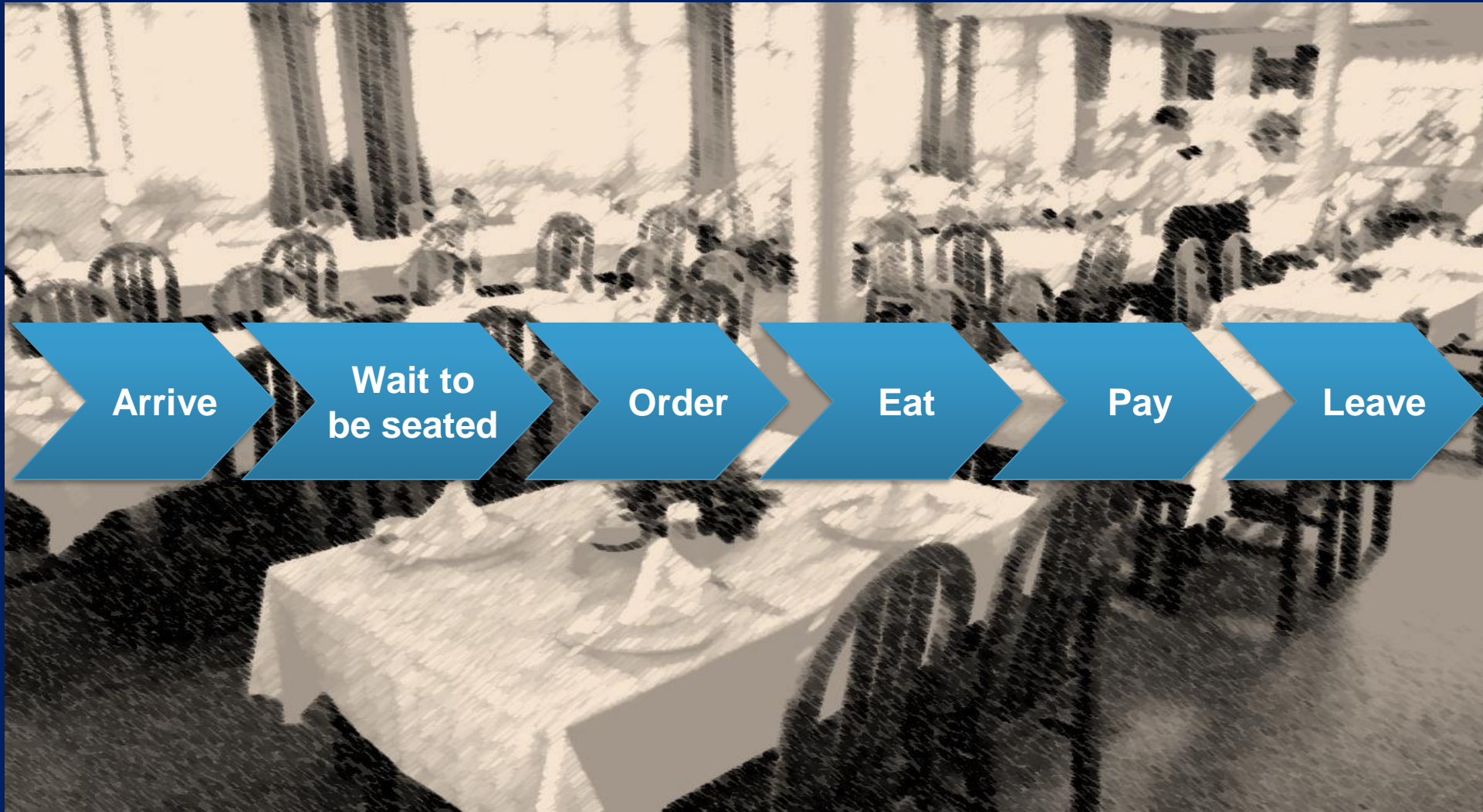
*As long as
it is black*

Processes

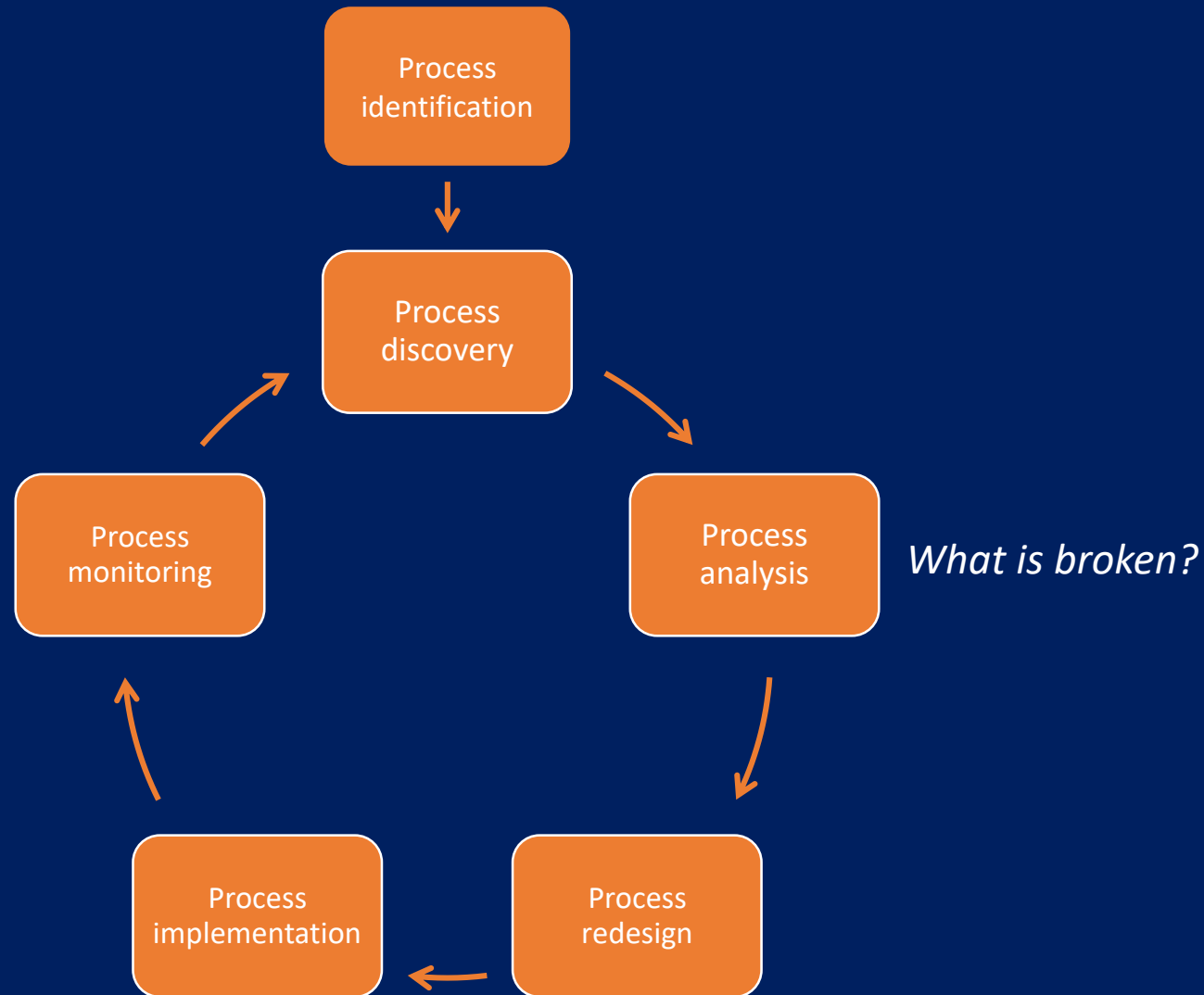


*Every process
can be improved*

The Dominating BPM Approach



Key Assumptions of the Process Lifecycle Model



Typical Approaches



- Waste (Lean Management)
- Variation (Six Sigma)
- Human Labour (Robotic Process Automation)



What are the limitations of reactive process improvement approaches?

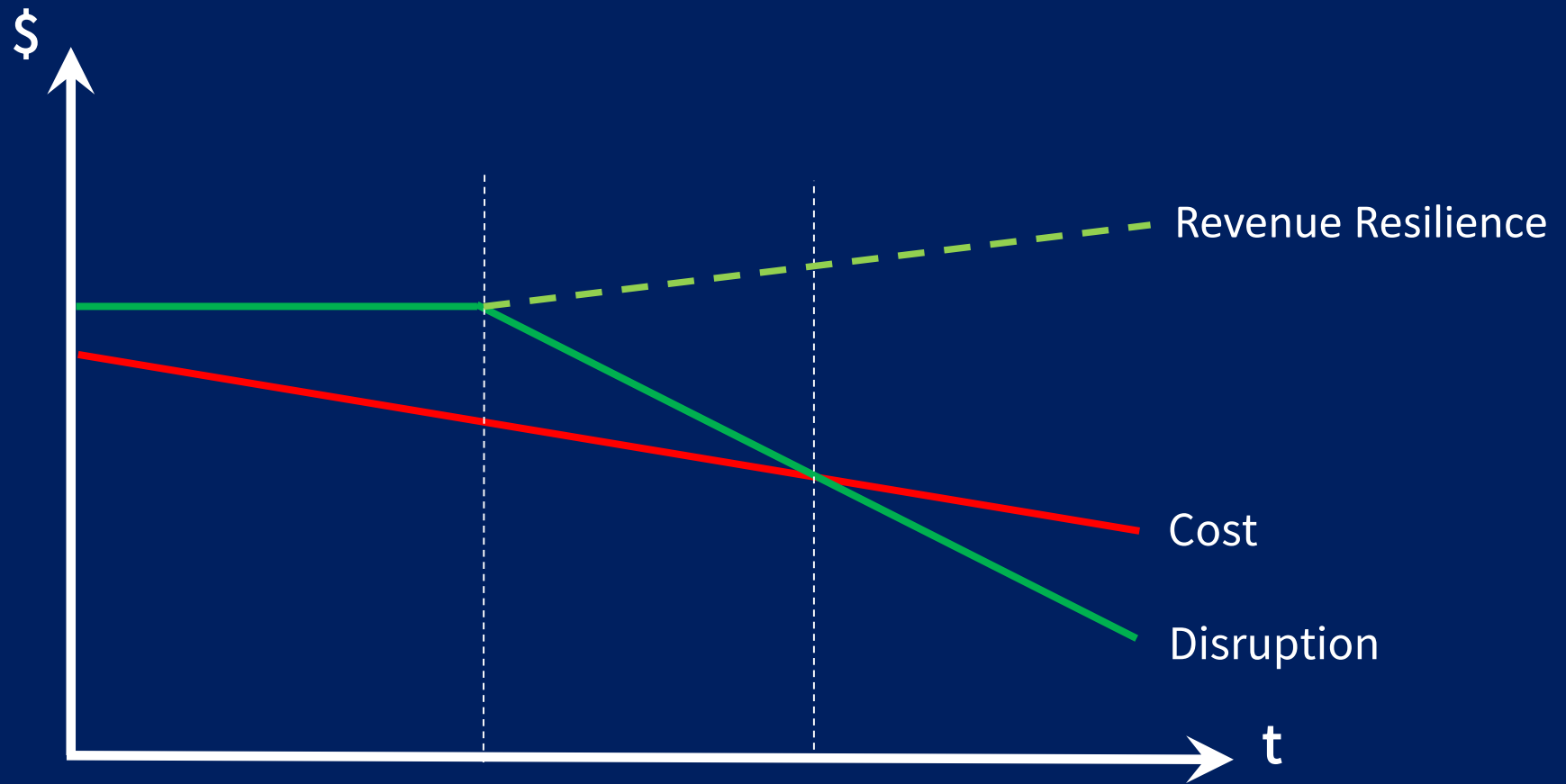
Limitations of Process Improvement



- Can only shrink to 0
- Predictable, common outcome
- Cultural impact
- Efficient, but non-relevant?



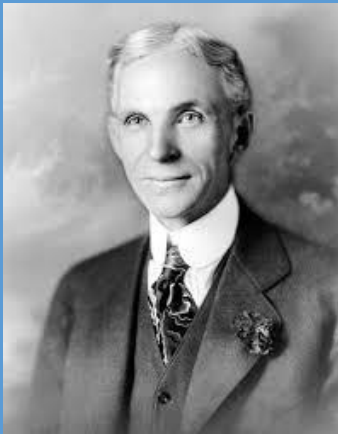
Revenue Resilience



Key Perspectives on Organisational Improvement



Resources



*As long as
it is black*

Processes



*Every process
can be improved*

Customers



*What is the
job to be done?*

Typical Approaches



- Customer journey mapping
- Design thinking
- Service blueprinting

See also lecture 3 in this series

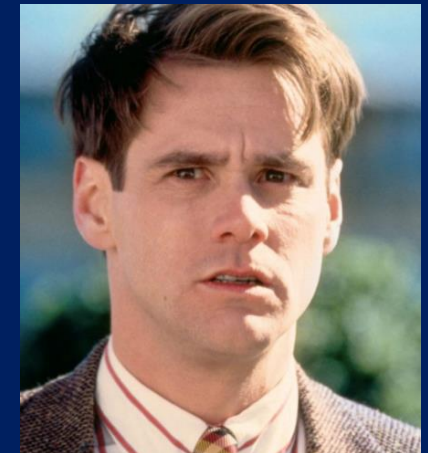


What are the limitations of customer-centric process improvement approaches?

The Limitations of Customer Centricity



- Exclusivity of access to customers
- Existing versus new customers?
- Unconscious incompetence
- Problems, Expectations, Aspirations



The Unconscious Incompetence of Customers



RETAIL

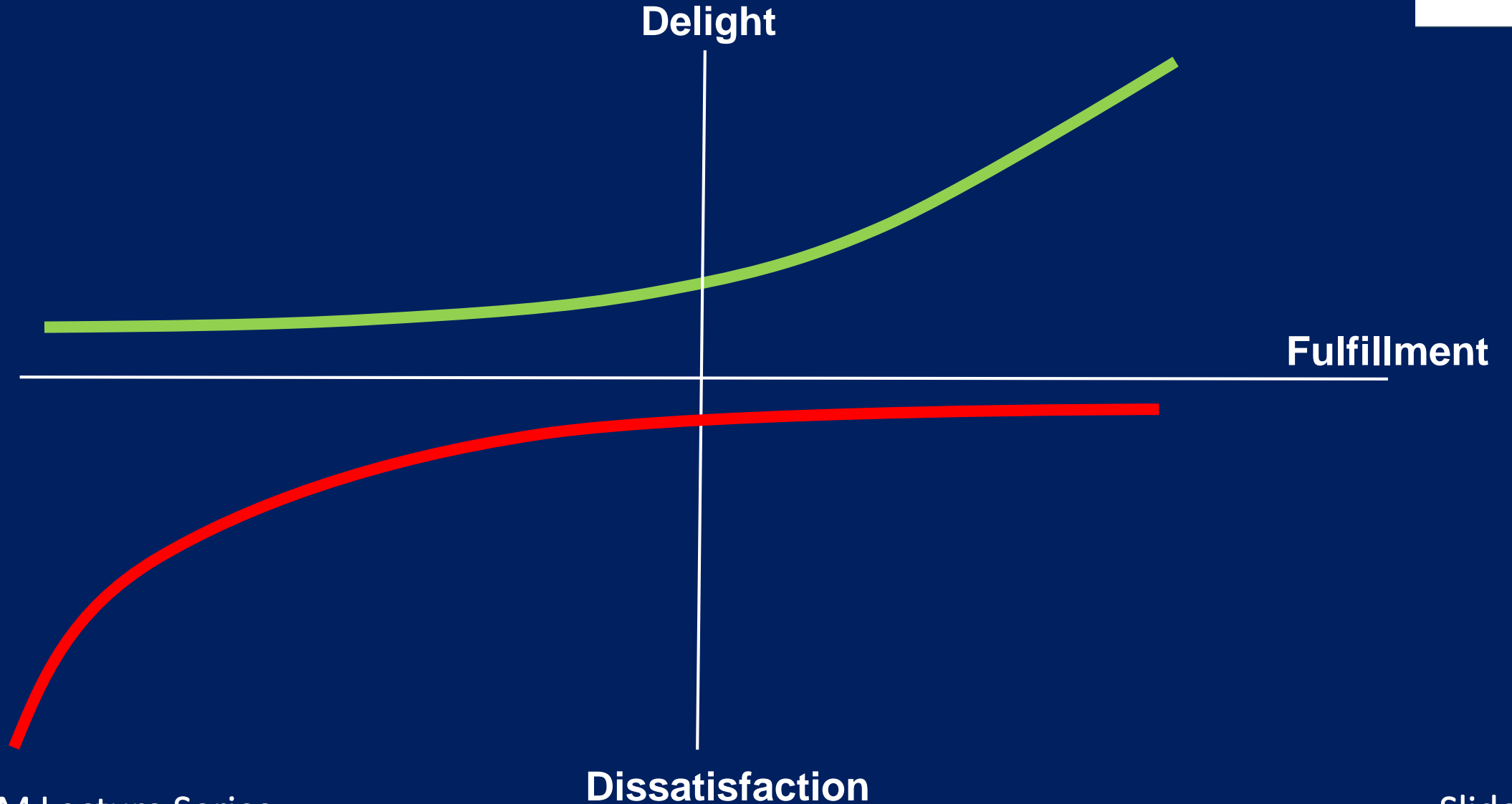
Why did Shoes of Prey fail? Because it listened to customers

BRI WILLIAMS MARCH 18, 2019



SHOES OF PREY CO-FOUNDER JODIE FOX.

Ambidextrous Business Process Management



Ambidextrous Business Process Management



Exploitative BPM	Explorative BPM
Dominance of the as-is	Dominance of the to-be
What is broken? (problems)	What is possible? (opportunities)
Analysis-intensive	Design-intensive
Within existing hypothesis	Creating new hypothesis
Efficiency (time, cost, quality)	Effectiveness (experience, new value, revenue)
Reductionist (towards the 'perfect process')	Constructionist (within a growing design space)

The Rapid Redesign Method NESTT

- How to work in the second half of the room?



Key Perspectives on Organisational Improvement

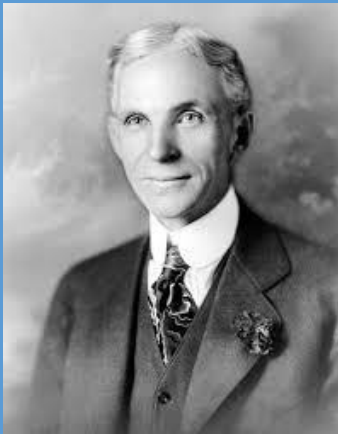


Resources

Processes

Customers

Opportunities



*As long as
it is black*



*Every process
can be improved*



*What is the
job to be done?*



*What is
possible?*

The Question Today



What are the explorative process design patterns that help creating new process value?

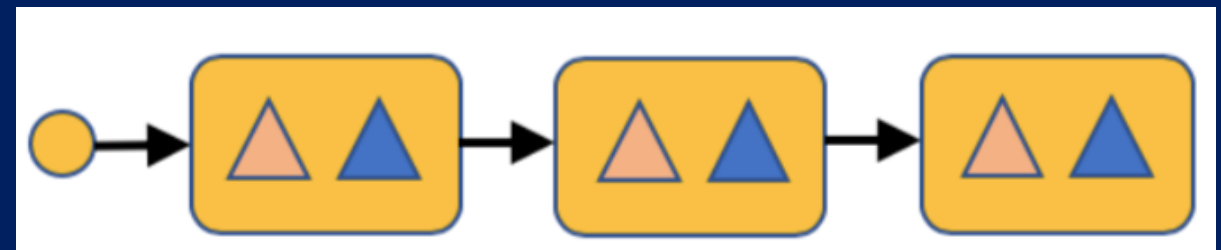
Explorative Process Design Patterns



Attribute	Meaning
Context	Dominating exploitative view, motivation
Definition	Description of pattern
Value	Type of value monetization (e.g., new product revenue)
Pattern	Semi-formalization
Example	Selected cases (post-action coding)
Guideline	For the application of the design pattern

1 - Process Generalization

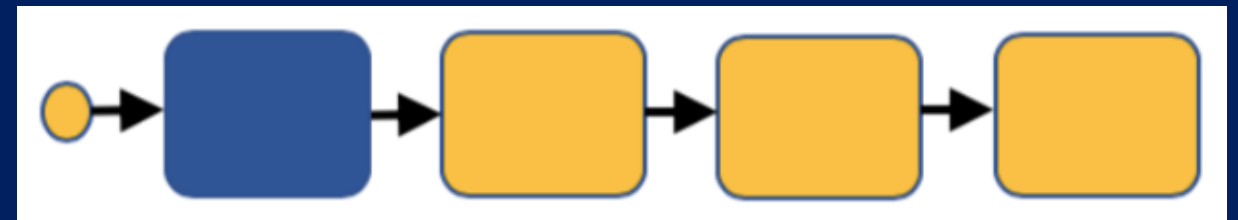
- Explore using process capability for new products/services (tokens)
- Uber continues to generalize its mobility process
 - People (Uber)
 - Pizza (UberEats)
 - Passengers (Qantas)
 - Patients (US Health)
 - Pets (Uber Pets)
 - Pet Food (Petbarn)
 - Parcels (Uber Connect)
 - Potatoes (Uber Direct)



2 - Process Expansion



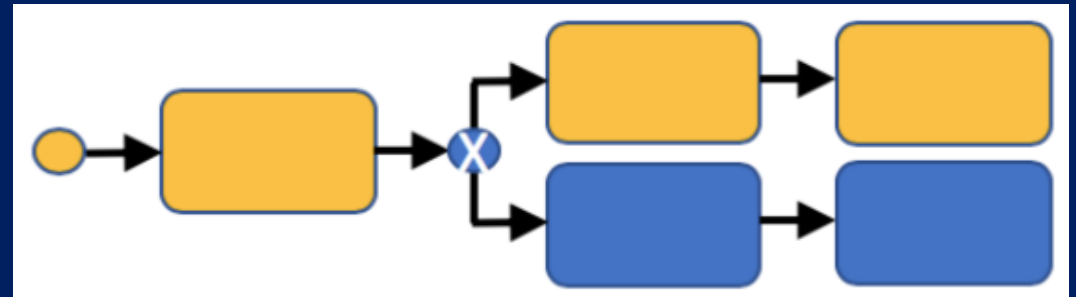
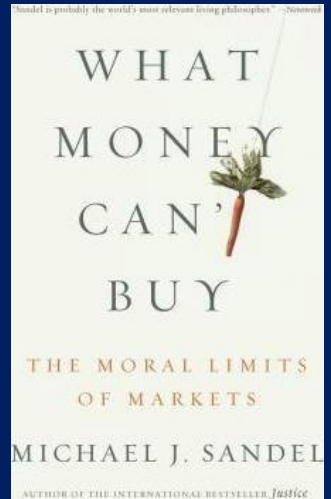
- Explore extending the process scope
- Pre-process:
 - Food delivery companies open dark kitchens informed by purchase orders
- Post-process:
 - Tesla offers a make-to-evolve product ('continuous connectivity')



3 - Process Differentiation



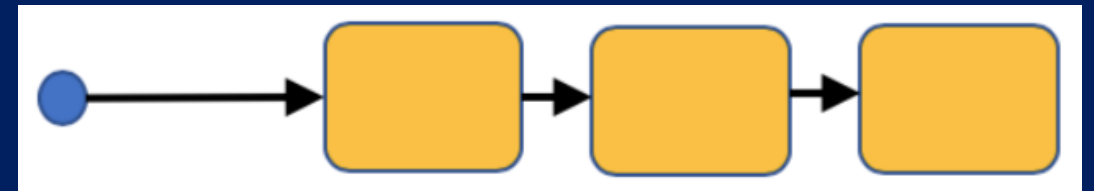
- Explore a fee-for-process-convenience model
- Payment for time saving
 - Theme parks, ATMs, security checks, electronics repair
 - Premium models (e.g., airports)



4 - Process Initiation



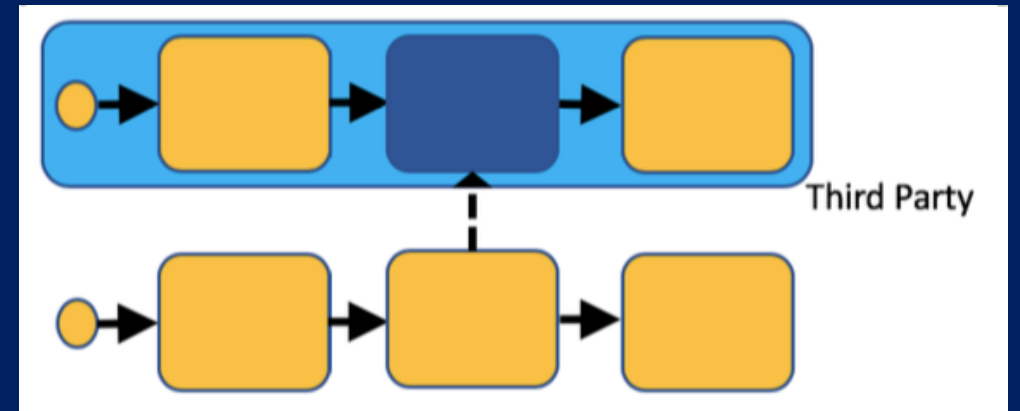
- Explore how new data sources can reduce process latency, i.e. time-to-process
- Predictive maintenance, voice-enabled orders, context awareness
- Amazon Dash Replenishment



5 - Process Commercialisation



- Explore, if there is a market for the process, or parts of it, as a service
- Dynamic pricing, fraud detection, printing, open banking



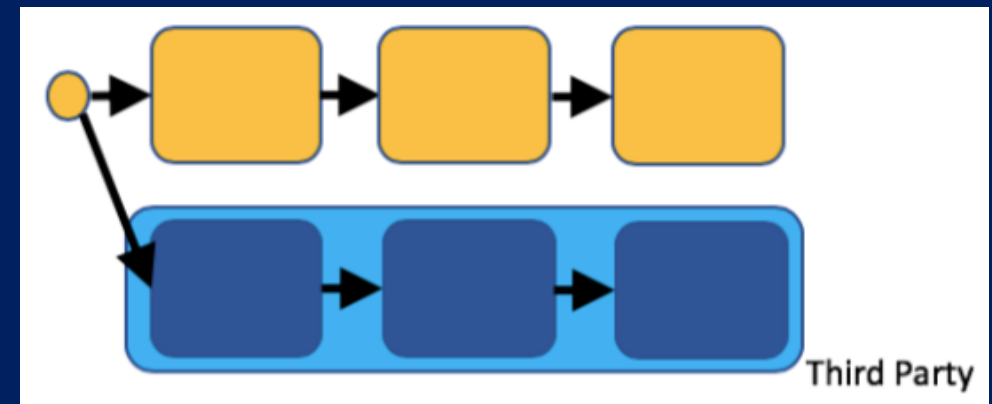
6 - Process Integration



- Explore, if events under the control of the process are of interest to third parties
- Qantas and Mad Paws /Uber

Qantas Pet Sitting

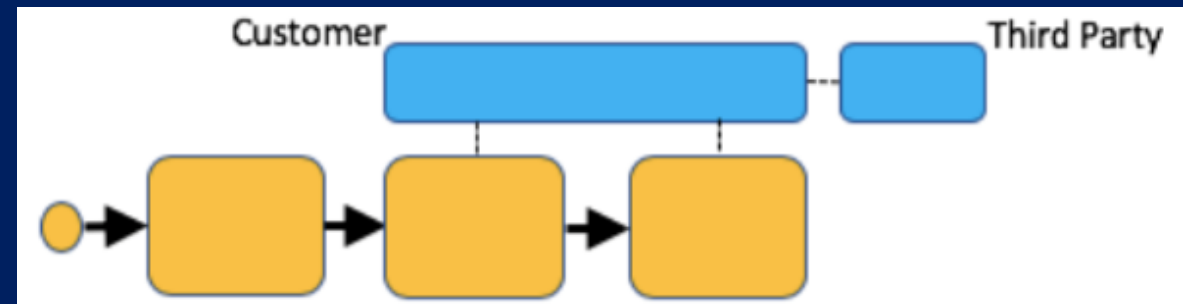
Need someone to love your pet while you're away? We've partnered with Mad Paws to connect you with one of over 14,000 trusted, local and insured pet sitters.



7 - Process Attention



- Explore, if attention to a process could be monetized
- Domina's Pizza Tracker
- FreeATM (New York)



Design Patterns Comparison



Pattern	Addition	Third Party?	Revenue Model
Process Generalization	New product	No	New product offering
Process Expansion	New activity	No	New margin grounded in new value-adding activity
Process Differentiation	New variant	No	New margin grounded in tailored provision of alternative process performances
Process Initiation	New (start) event	No	New customers because of earlier process provision
Process Commercialization	New customer for activity	Yes	License for use (e.g., per-per-use)
Process Integration	New customer for event	Yes	Commission model (e.g., pay-per-event or conversion)
Process Attention	New customer for attention	Yes	Commission model (e.g., pay-per-click or time)

So what about our restaurant?



No	Design Pattern	Exploration	Idea
1	Process Generalization	Can we use our process for different products?	
2	Process Expansion	Can we expand up/down-stream?	
3	Process Differentiation	Can we add a process variant?	
4	Process Initiation	Can we initiate our process earlier?	
5	Process Commercialisation	Can we offer our (sub)process to a third party?	
6	Process Integration	Can we offer our start events to a third party?	
7	Process Attention	Can we offer the attention to a third party?	

Limitations



- Lack of primary data and no comprehensive secondary data analysis – limited insight and validity
- No formalization of patterns
- Limited contextualization of the pattern, i.e. context factor, capabilities needed, implications

References



Related reading

- M. Rosemann: Explorative Process Design Patterns. Proceedings of the 18th International Conference on Business Process Management (BPM 2020), eds. D. Fahland, C. Ghidini, J. Becker and M. Dumas, Sevilla, Spain, 13-18 September 2020. Springer, pp. 349-367.

Further references

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