

Uncertainty in servitization

Melanie Kreye

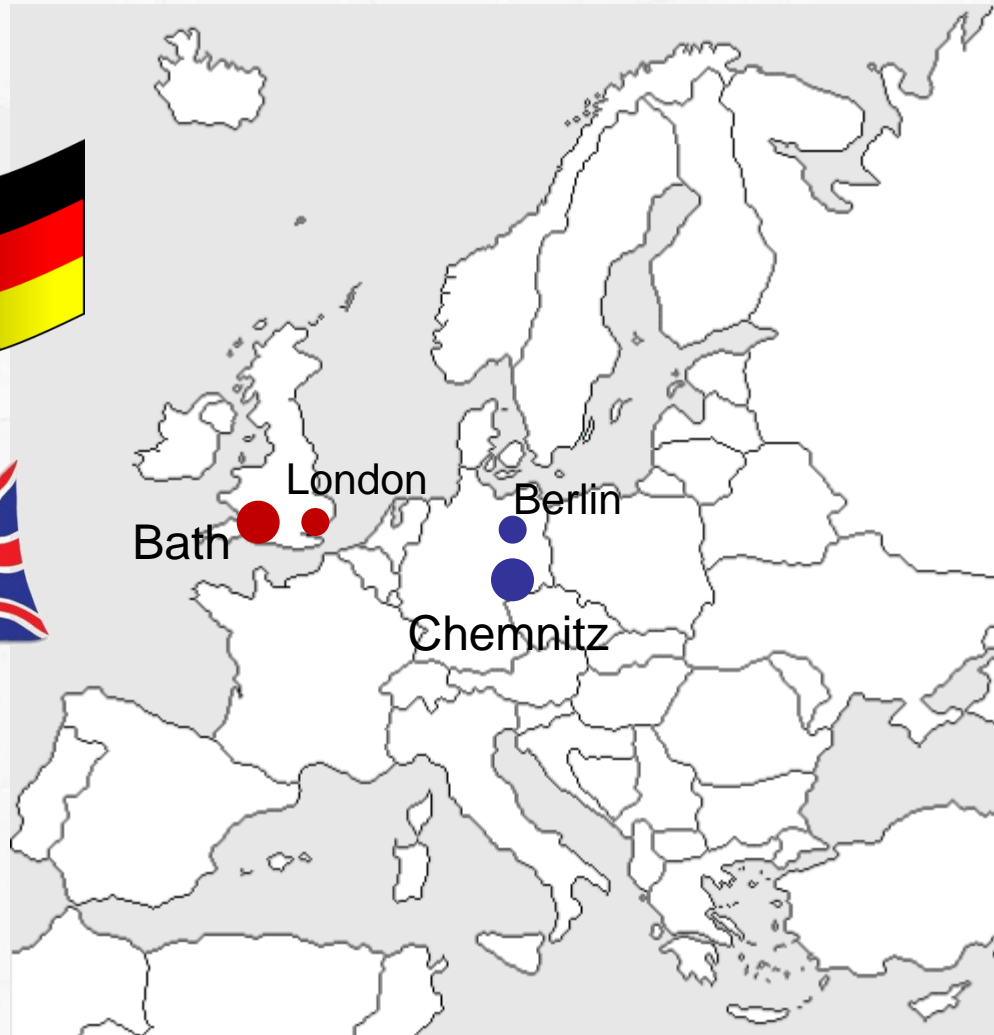
Prize Fellow

Information, Decision and Operations
(IDO)

Outline

- Personal introduction
- My research
 - Research focus
 - Method
 - Findings
 - Conclusions

Personal introduction



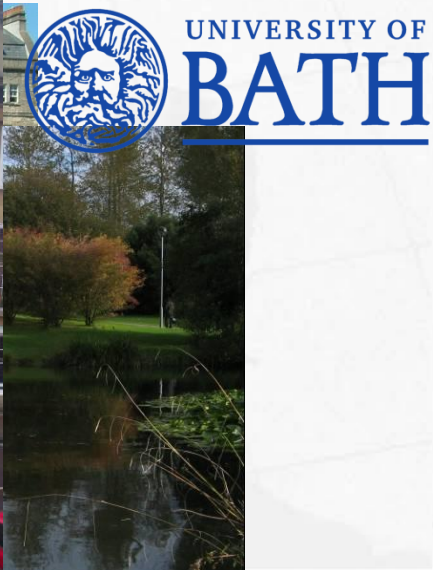
Personal introduction



WEATHER BATH
Last updated 18:17

Mon	Tue	Wed	Thu	Fri
 Min. night 2°C 7	 7°C 2°C 21	 8°C 3°C 23	 7°C 1°C 16	 7°C 4°C 11

Further ahead ▶



Research focus



The image is a collage illustrating research focus. It features a newspaper clipping from 'The Telegraph' with the following visible text:

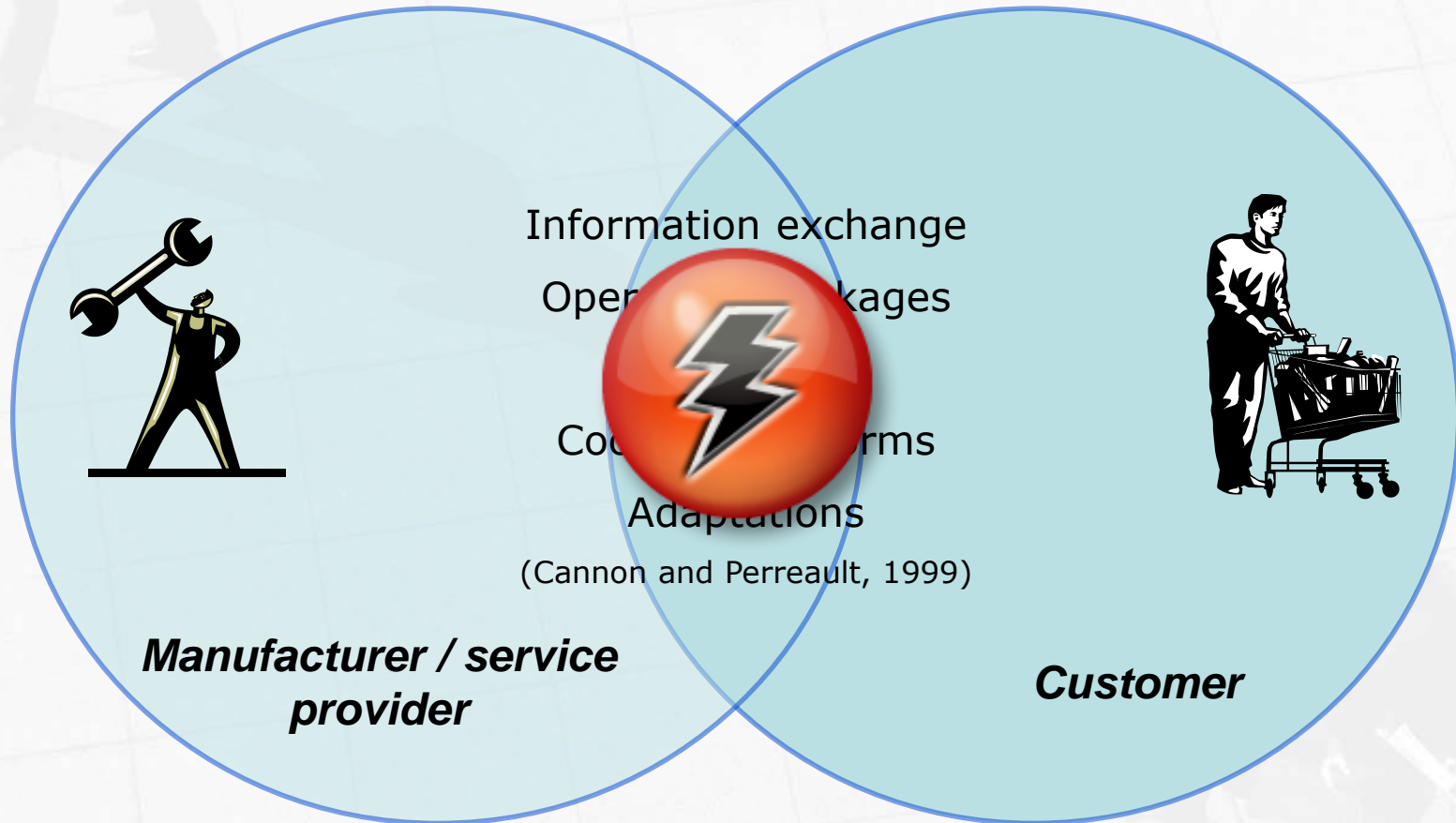
- Navigation: Home, Market, 2 Janu, UK
- Menu: News, Sport, Weather, iPlayer, TV
- Sub-menu: Wales, Business, Politics, Health, Education, Sci/E
- Share: 256 Share [Facebook icon] [Twitter icon] [Email icon]
- Headline: growing... strong
- Section: The Telegraph
- Sub-menu: World Sport Finance Comment Culture Travel Life Women Fashi
- Sub-menu: Personal Finance economies Markets Festival of business Hot
- Text: HOME >> Services sector grows every month in 2013
- Text: Index of growth declines slightly at end of year, but economy remains on track to record fastest growth since 2007

Two arrows point from the newspaper clipping to a cartoon illustration of a person working on a car:

- A red arrow labeled "Uncertainty" points from the newspaper clipping to the cartoon.
- A blue arrow labeled "Servitization" points from the newspaper clipping to the cartoon.

The cartoon illustration shows a person in a blue uniform working on a car, with a smaller version of the same illustration overlaid on the newspaper clipping.

Research focus



Research focus

Uncertainty

≠

Risk

*A potential deficiency in any phase or activity of the process, which can be characterised as not definite, not known, or not reliable.**

*The possible (positive or negative) effect of an uncertain event or situation.***

* Kreye, M.E. et al. (2012)

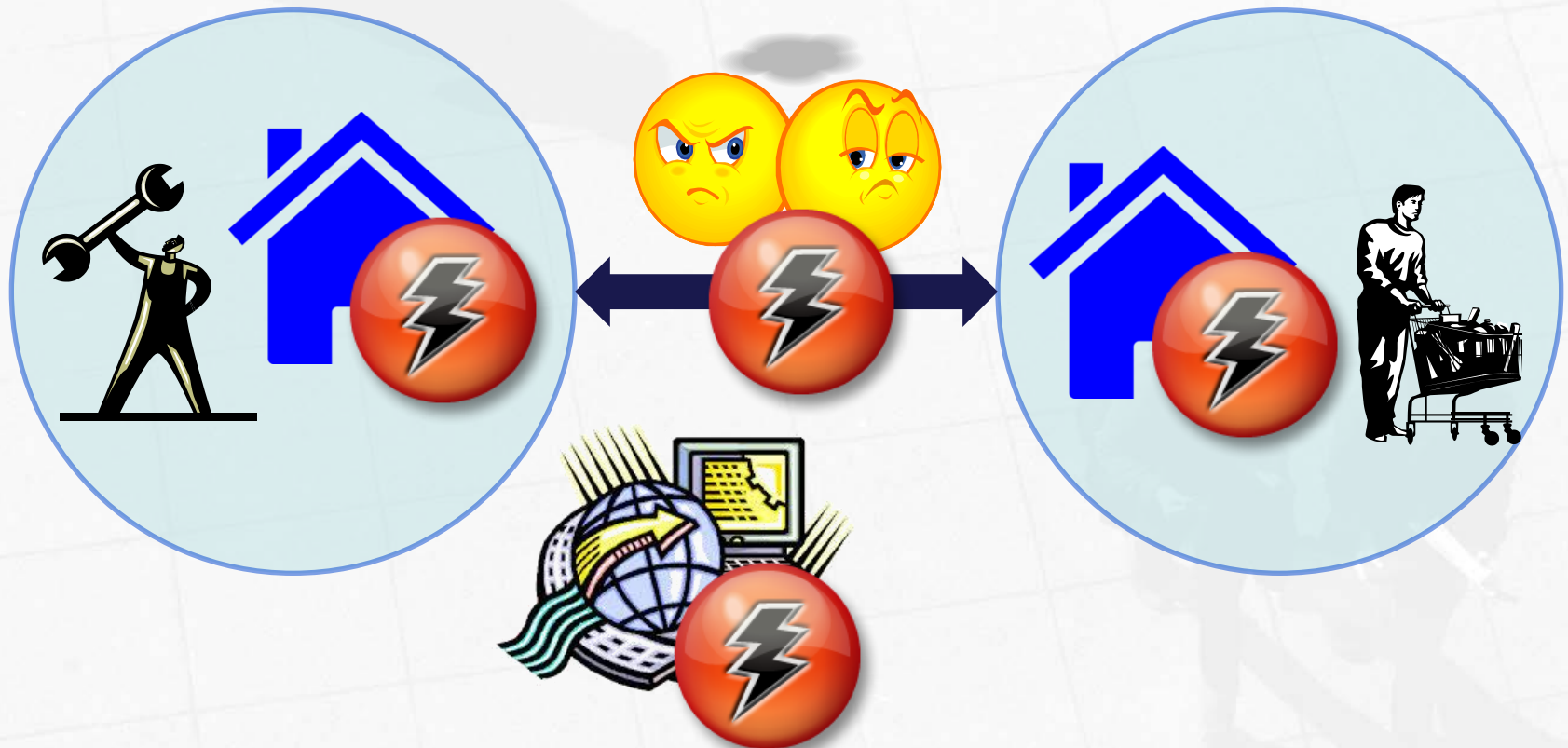
** ISO 31000 (2009)

Research focus

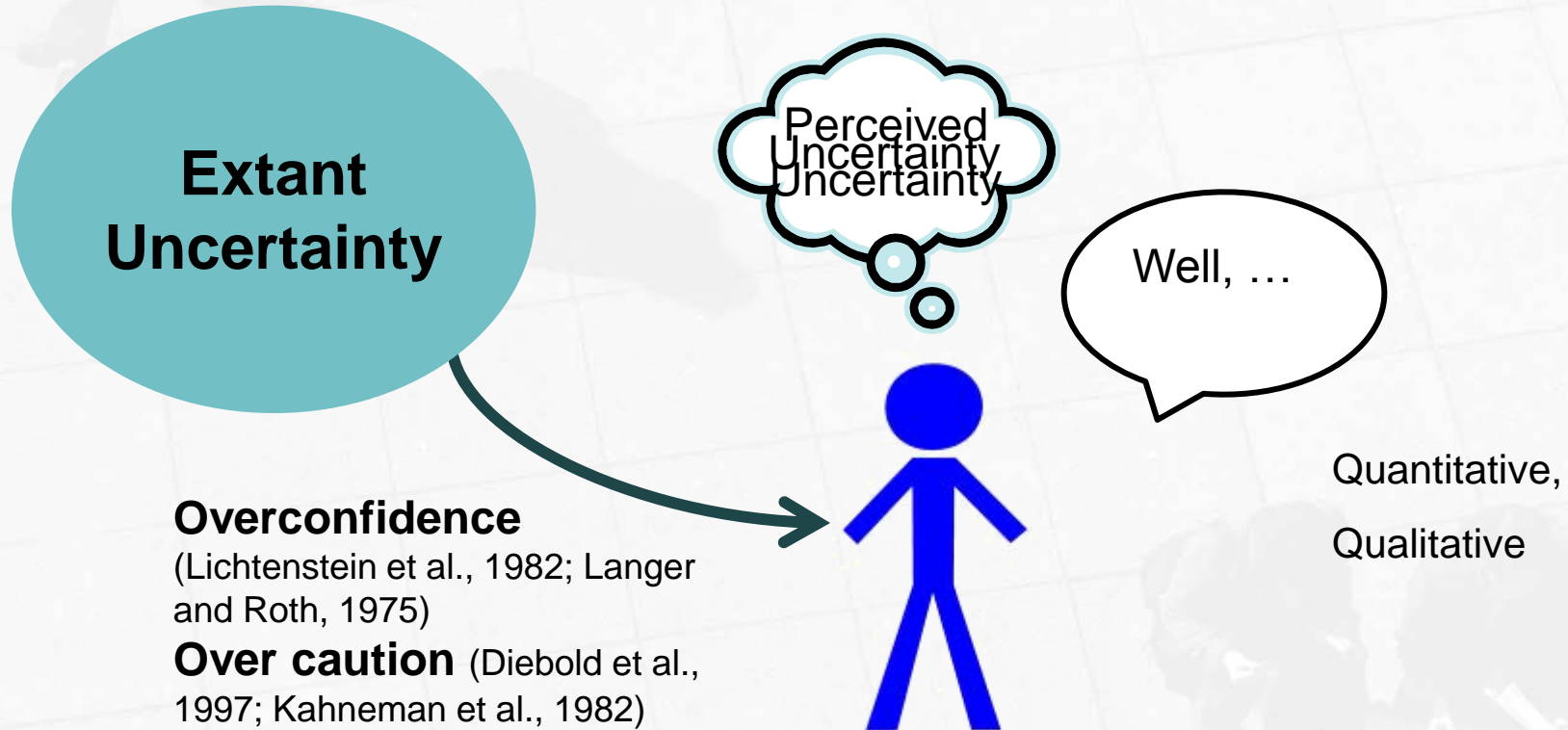
1) Environmental

2) Relational

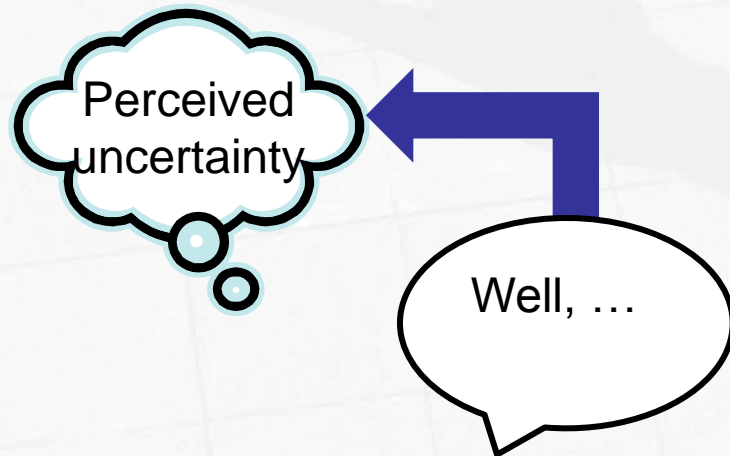
3) Organisational



Background



Background



Systems of reasoning:

Rule based or associative

Explicit:

"probable"
"chance"
"confident"
"risky"

Implicit:

"misunderstand"
"re- (reschedule,
renegotiate etc.)"
"available information"

Method

Case A

Service provider A

5 interviews



3 years

Customer A

6 interviews

Case B

Service provider B

12 interviews



6 years

Customer B

4 interviews



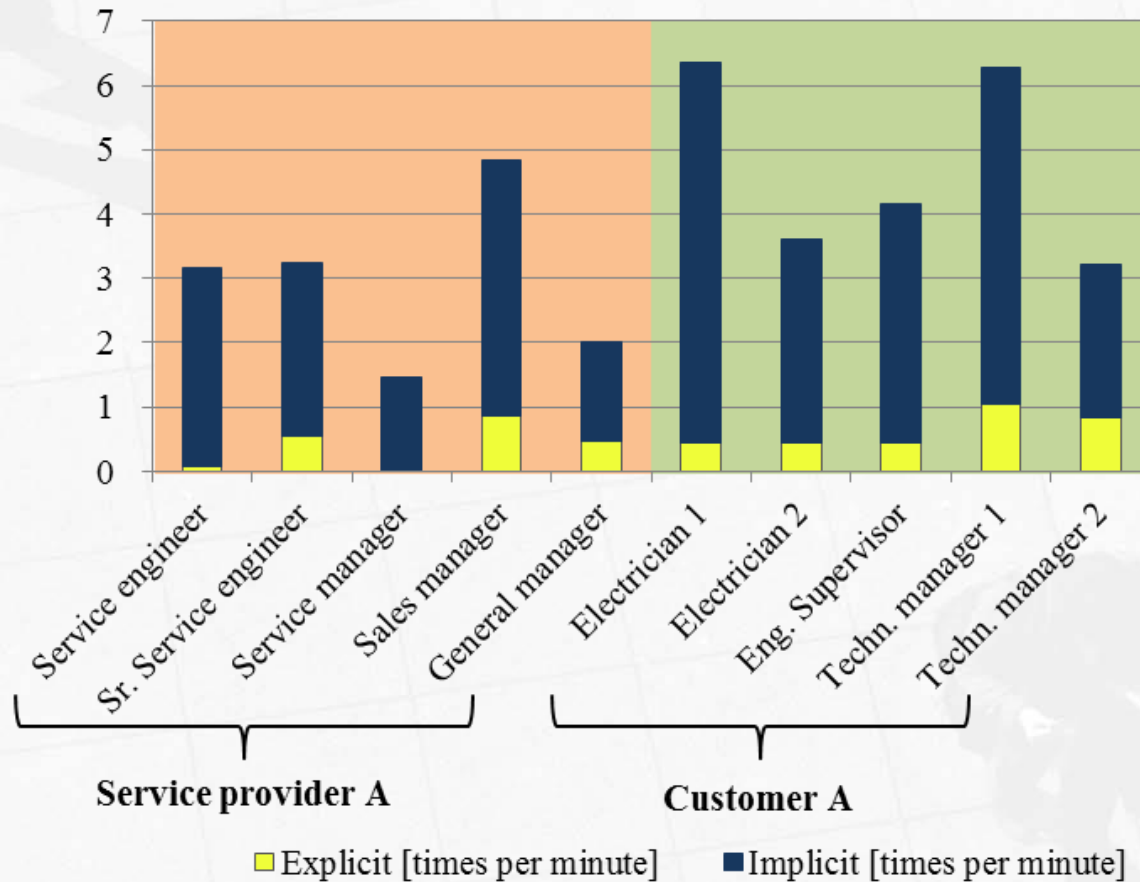
Method

- Content analysis:
 1. Key words

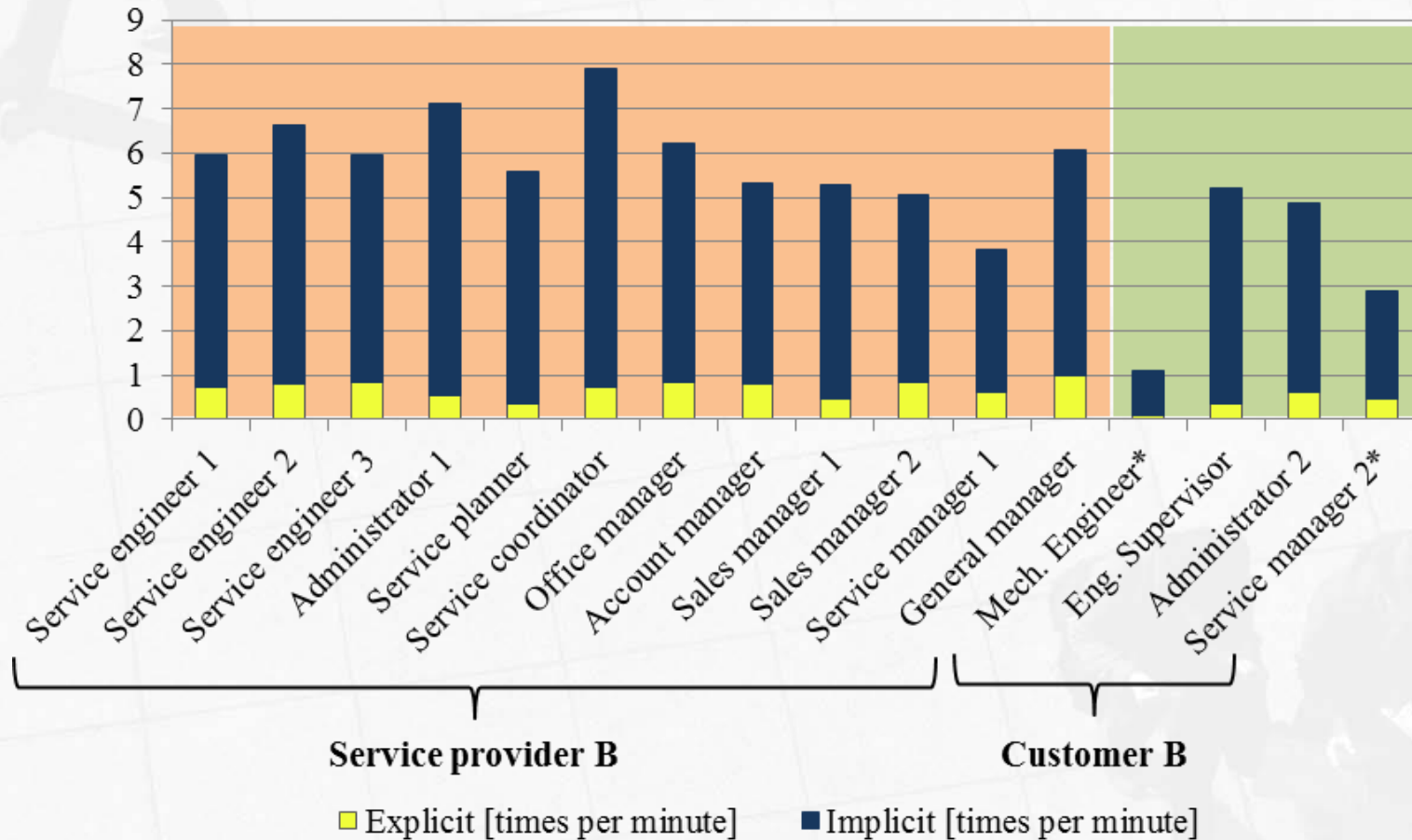
Code	Terms included with exemplar references
Explicit uncertainty	Uncertain, uncertainty; risk, risky (Bedford and Cooke, 2001); variation, vary, variable (Downey and Slocum, 1975); chance (Langer and Roth, 1975); confident, confidence, not confident (Lawrence and Makridakis, 1989); ...
Implicit uncertainty	Re- (redo, renegotiate etc) (Shafer, 1994); mis- (miscommunicate, misunderstand etc) (Grant, 2007); change, changed (Song and Montoya-Weiss, 2001); maybe, perhaps (Hurley et al., 2011); expected, expect, expectation, expectedly, unexpected (ISO, 2009); possible, impossible, not possible, possibly (Hurley et al., 2011); potential, potentially (Soanes, 2005); ...

2. Context analysis

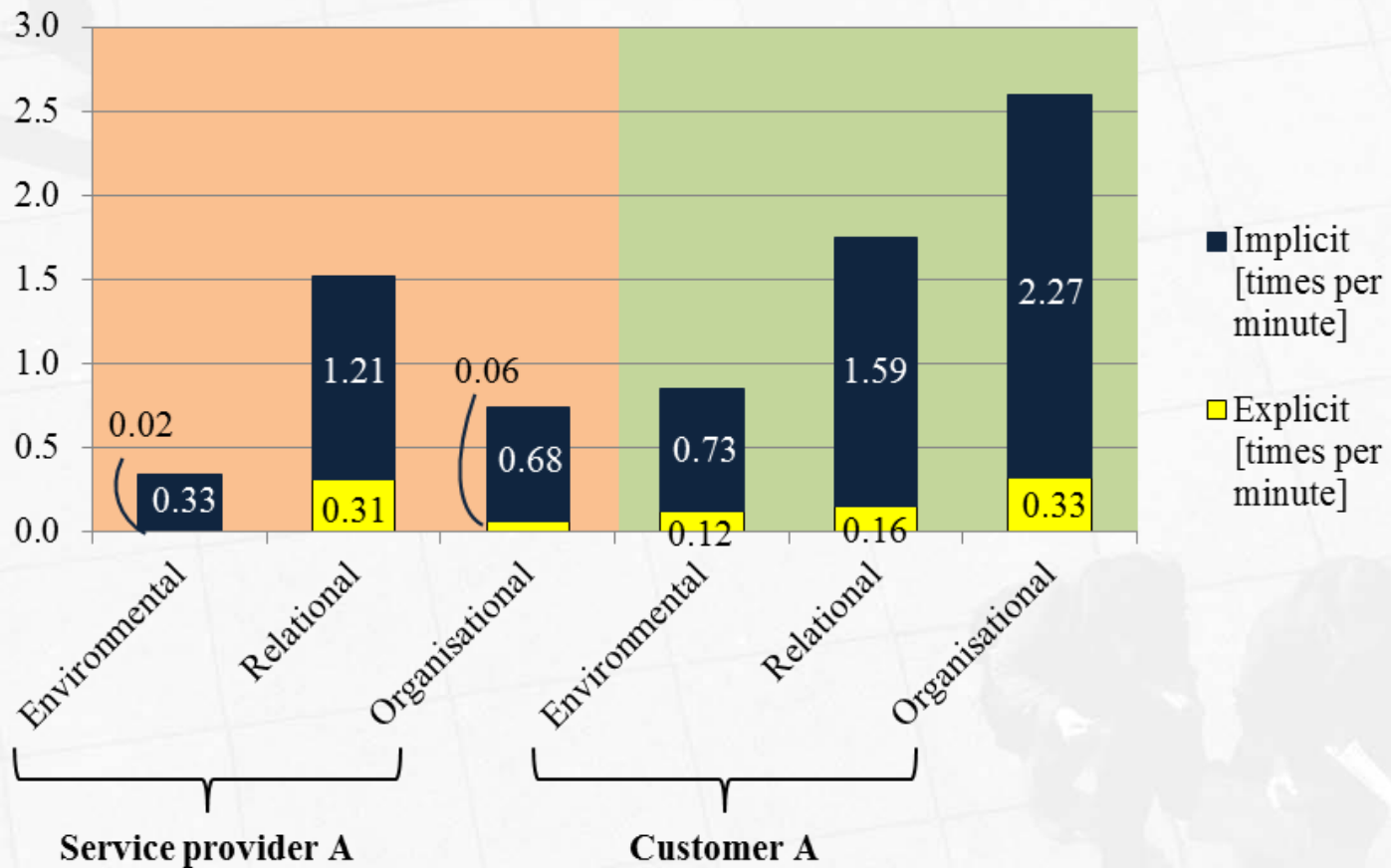
Findings



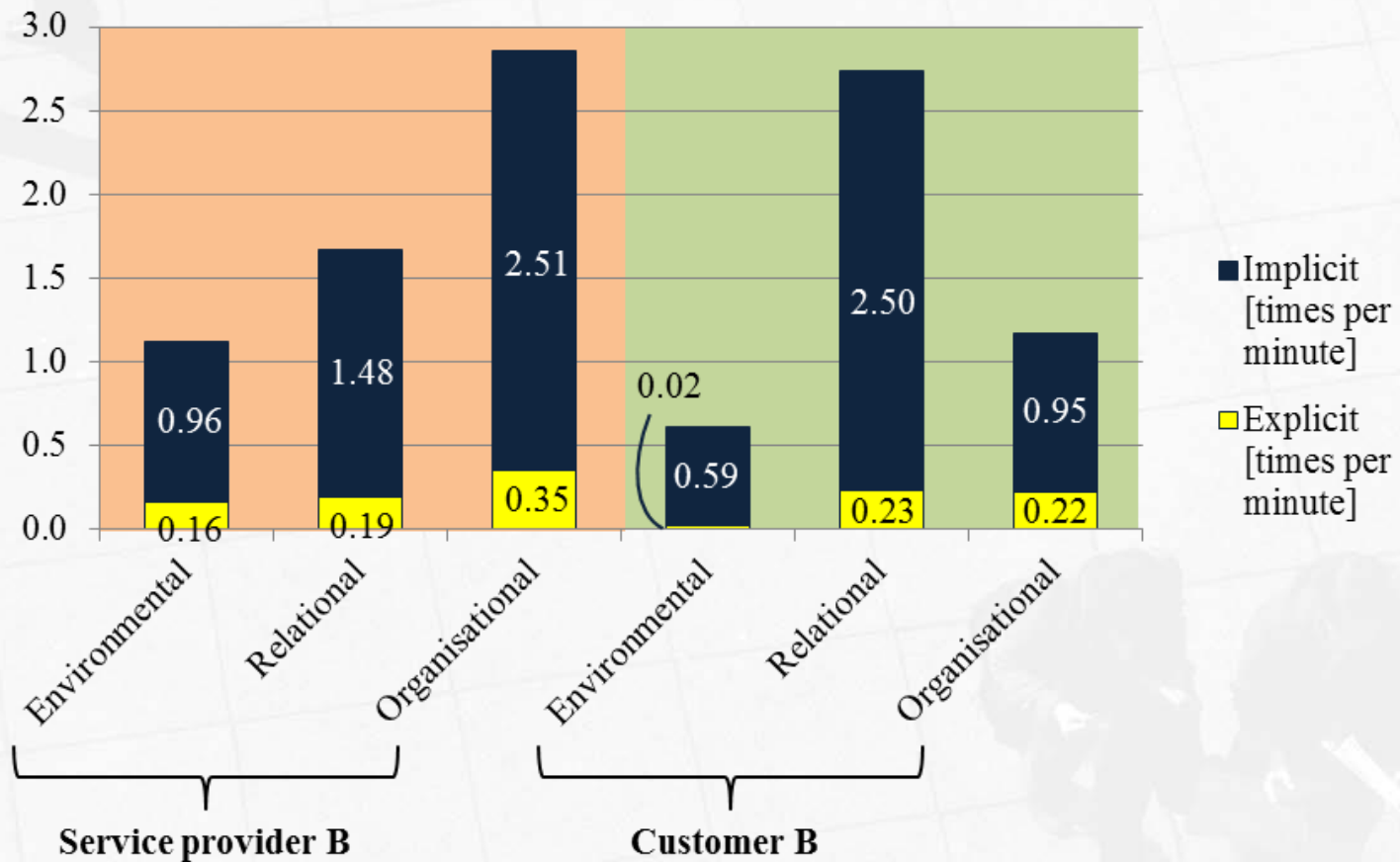
Findings



Findings



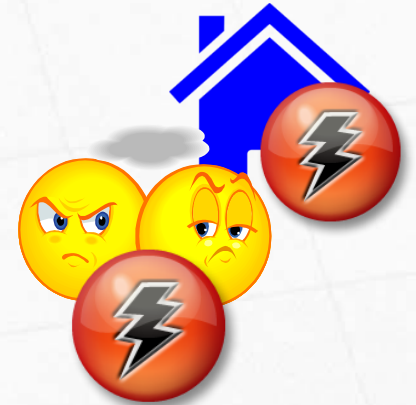
Findings



Conclusions

- **Summary:**

- Prevalence of implicit uncertainty perception
- Organisational + relational uncertainty most important
- Inter-relation between uncertainty types



- **Further work:**

- Intervention models?
- Management of uncertainty in servitization

Thank you!

Questions?

Email: M.Kreye@bath.ac.uk