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‘Echoes from the Field’

A Study Outcome and Discussion:
Reflections on Software Systems
Engineering Practice

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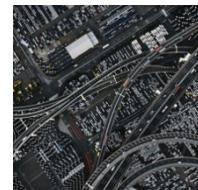
Wed 20th July 2016

Research

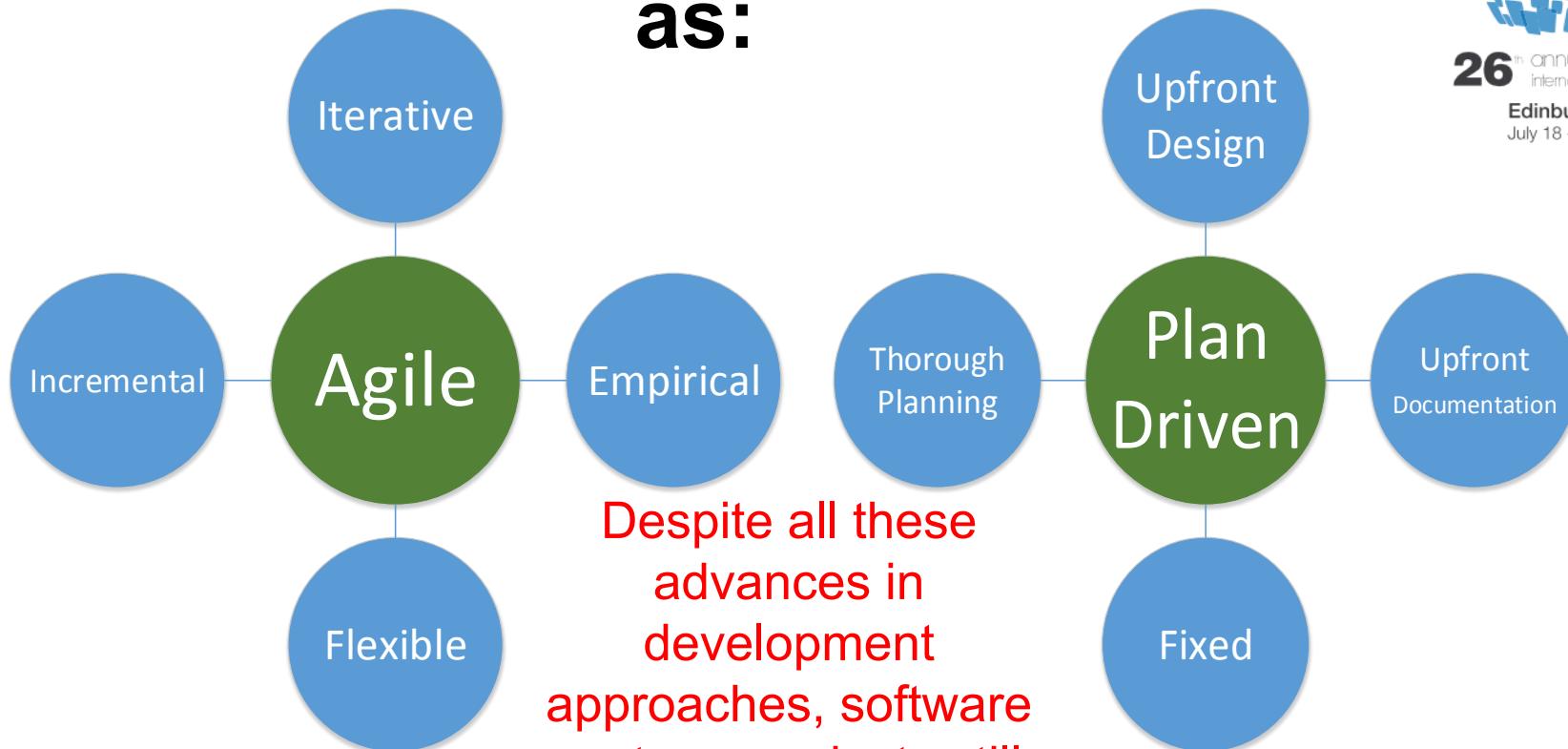
- Investigating the reality of software development practices in industry
- Based on observations of software engineers perception, experiences, and opinions

Background

The current state of software engineering is creation of systems needing a level of maintenance and support that would be considered totally unacceptable in other engineering fields.



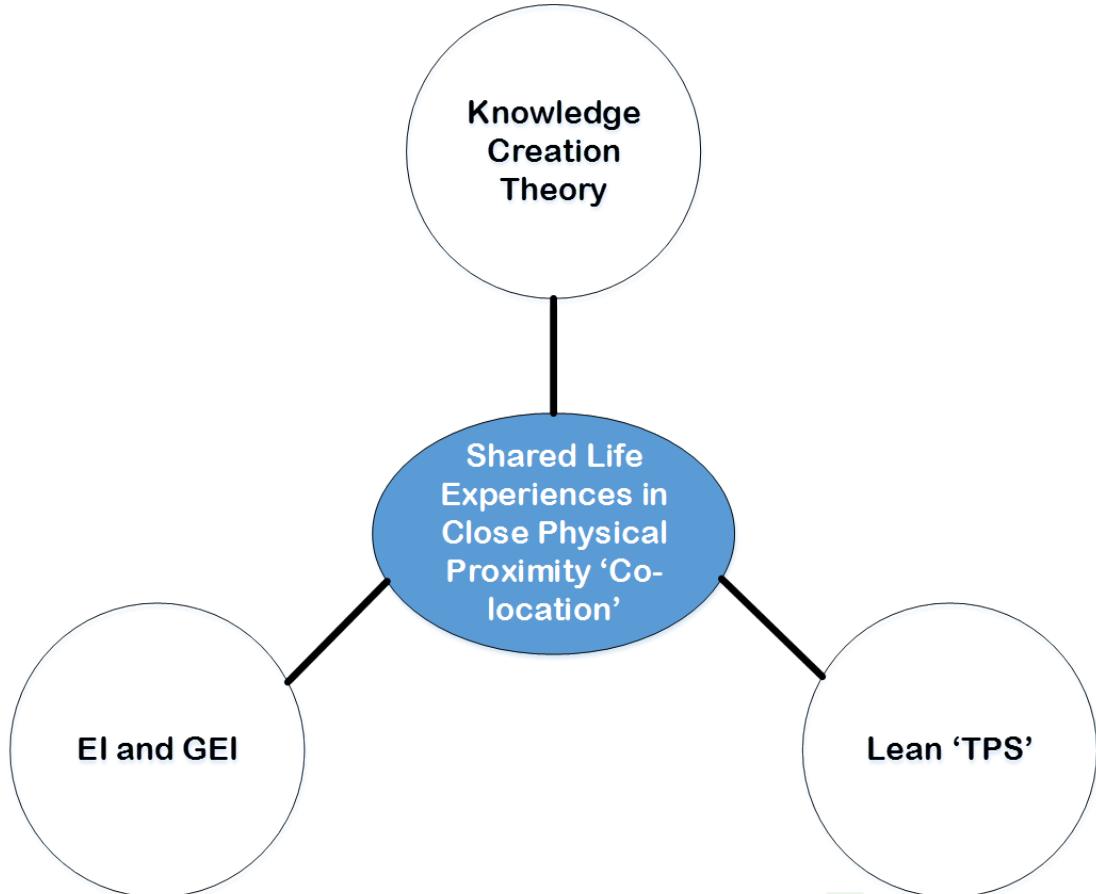
Software development can be grouped as:



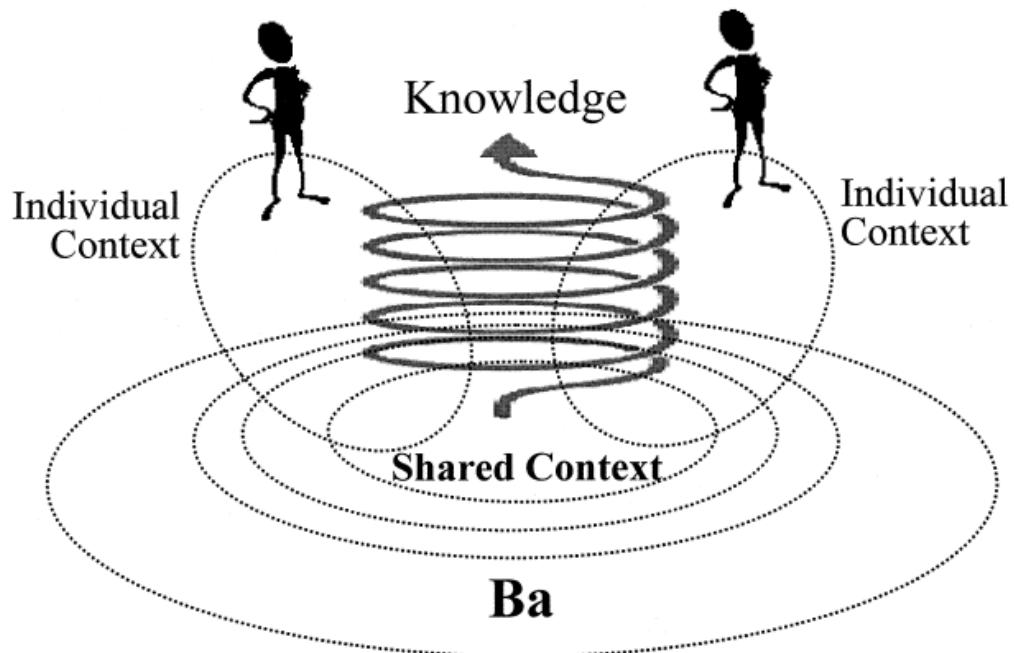
Despite all these advances in development approaches, software systems projects still fail!

Key Findings



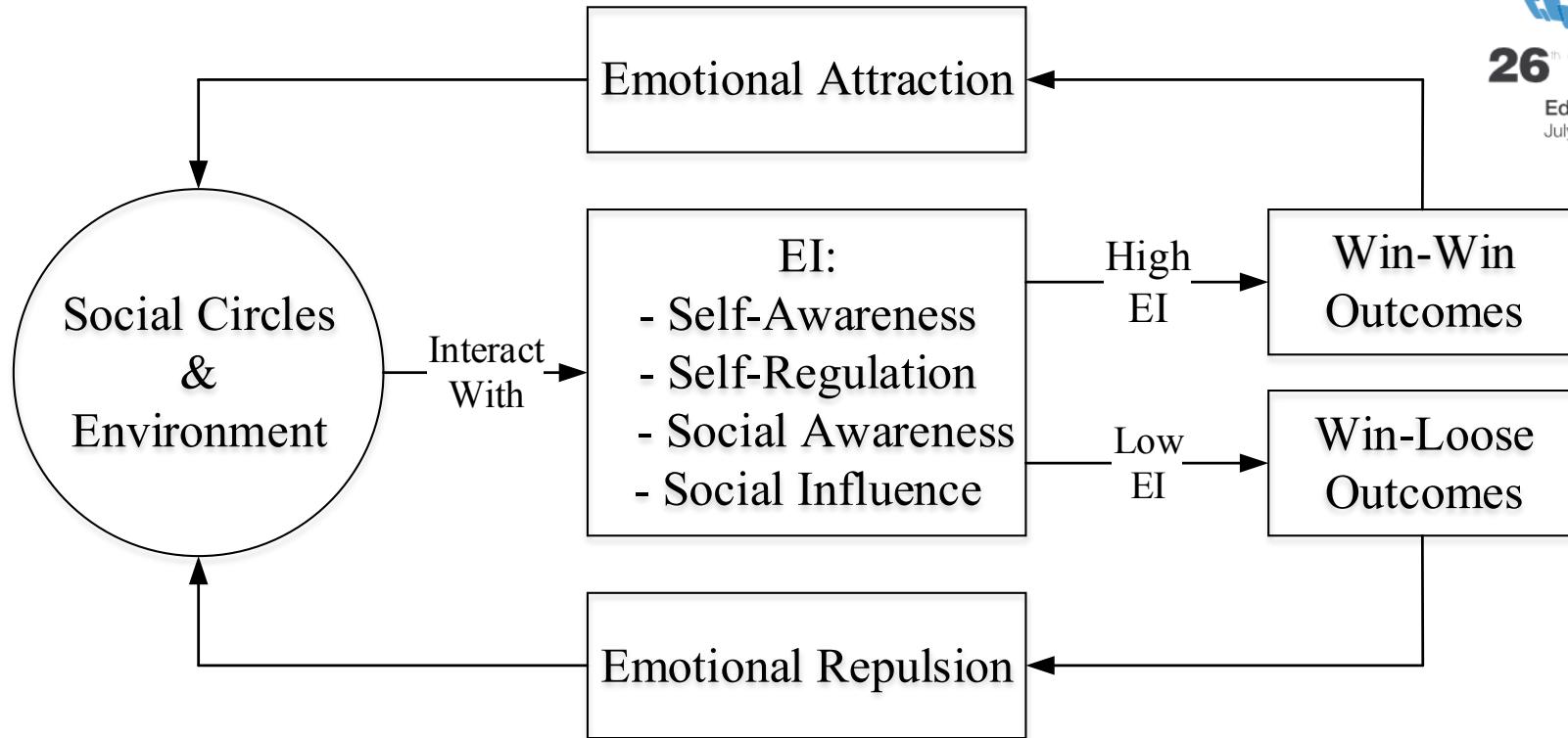


**‘Ba’ (場) is a Japanese word that means
‘shared context-in-motion’.**



Source: Nonaka et. al. 2000

Emotional Intelligence (EI)



EI and Social Interaction. Source (Kunnanatt, 2004 p.490 & 2008 p.617)

Reflections



- Perceptions about technical-debt
- Non-technical obligations placed upon the teams that have technical consequences
- Co-location definition and sharing life experiences in a close physical proximity
- Standardising then stabilising practice across teams in the organisation

Conclusion

- Software systems craftsmanship is heavily relying on human-dynamics
- Current software engineering approaches pay inadequate attention to the human-element
- Current practice is trying to fit mechanical solutions to non-mechanical human-dynamics related issues will result in failure



Thank you!

To Be Continued...

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