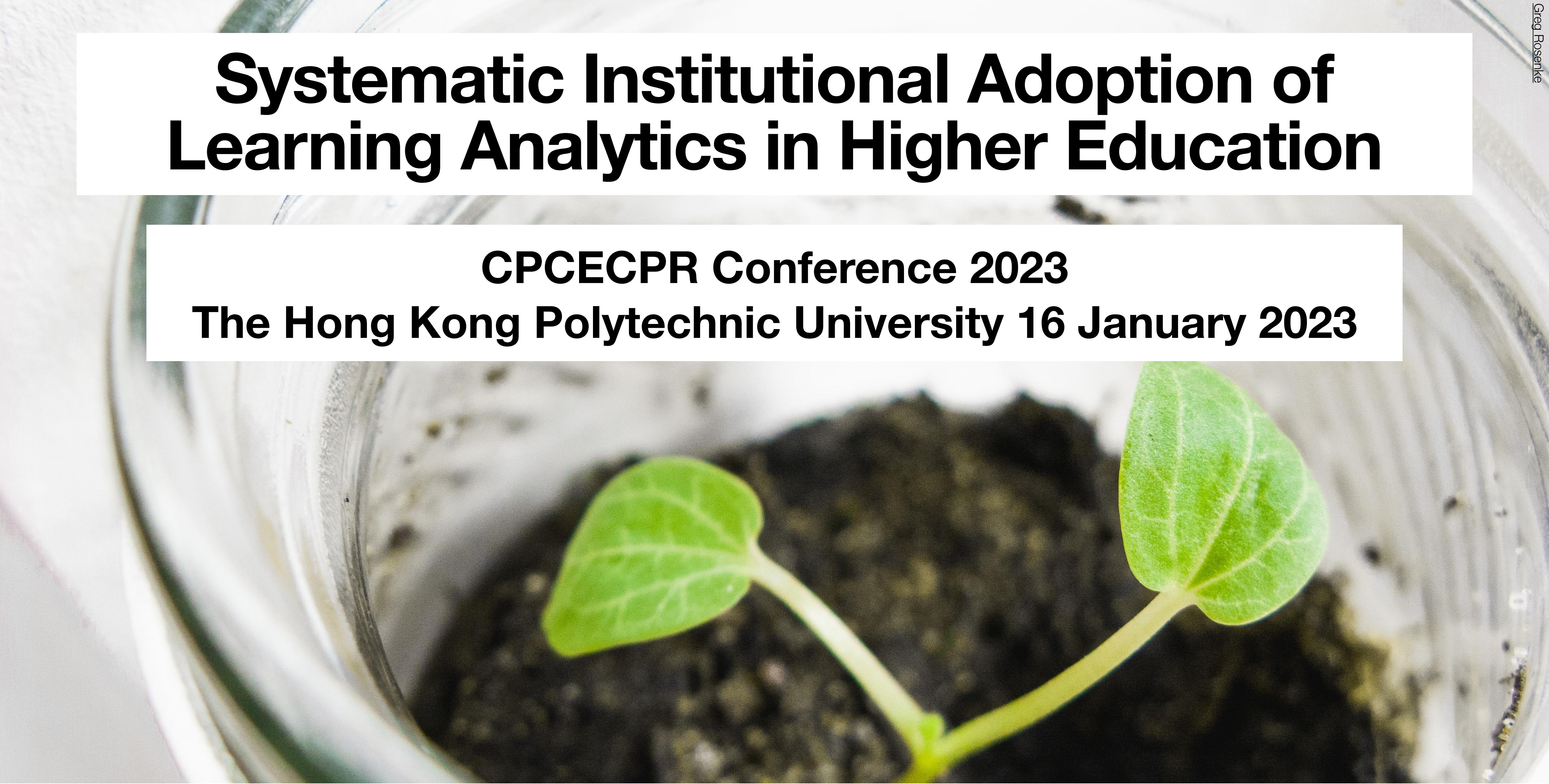


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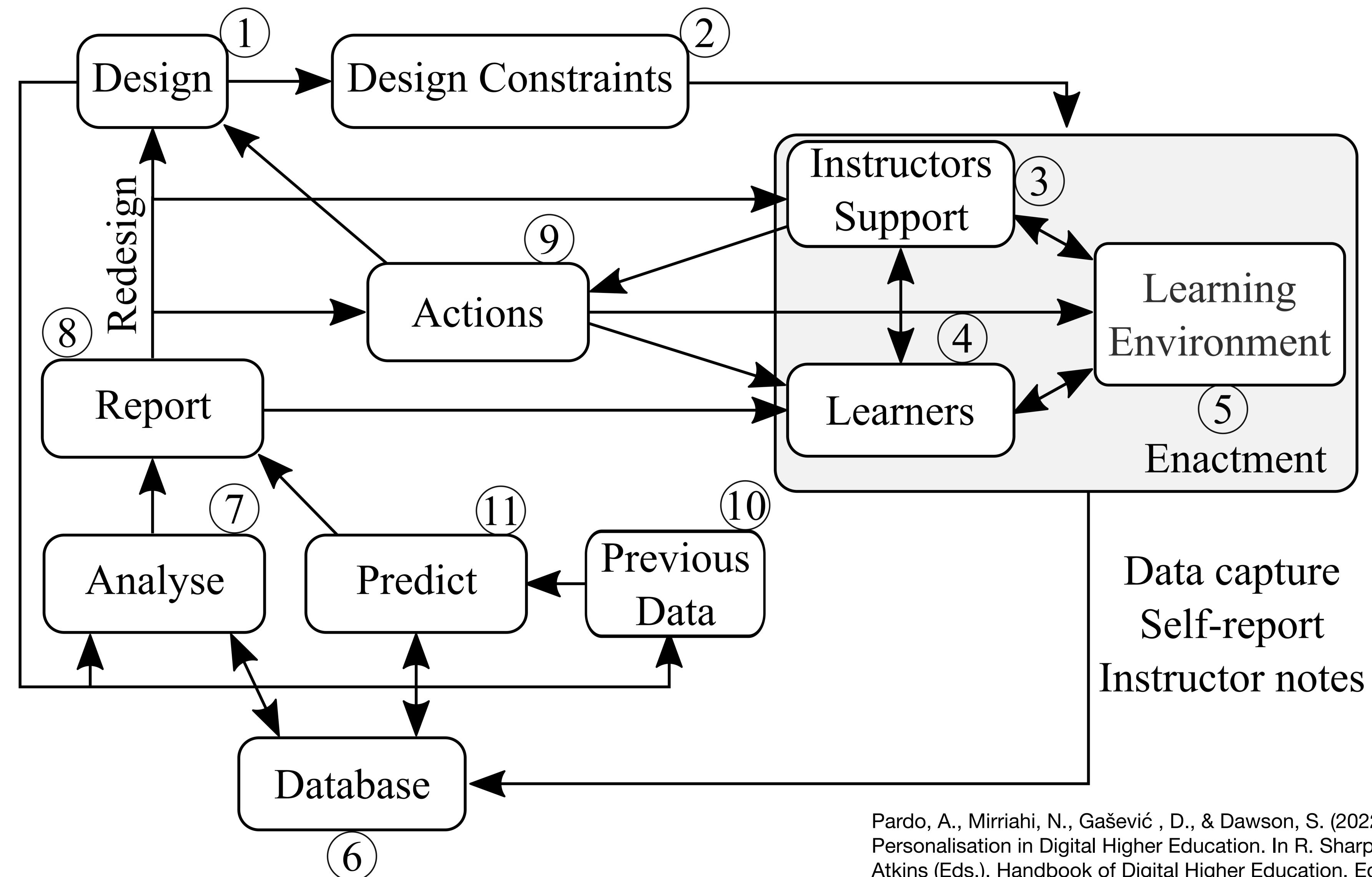
Centre for Change and Complexity in Learning

Exploring human and artificial cognition to understand
knowledge processes and their impact on society
Seeking practical application and impact

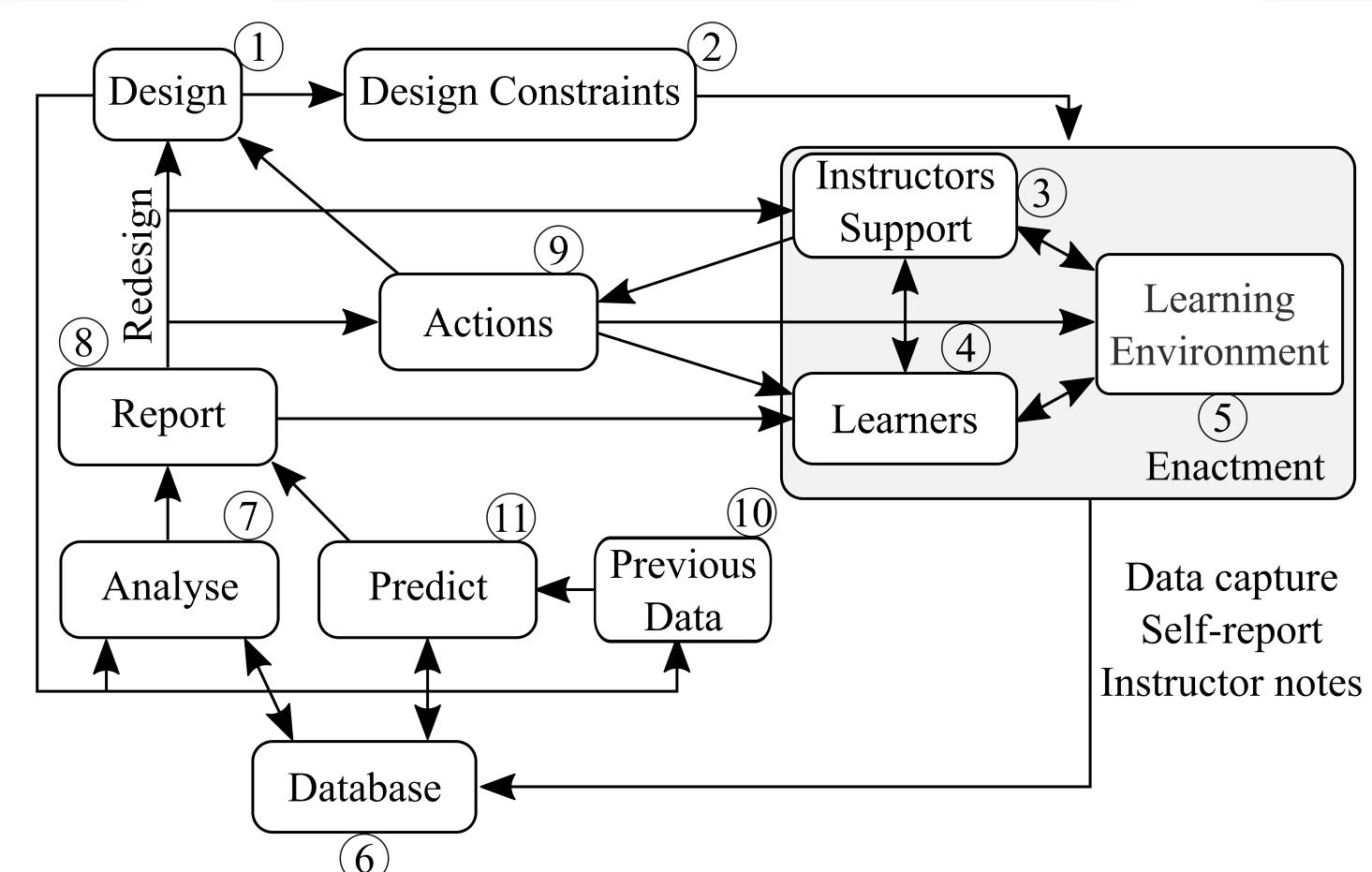
“Australia’s Top Research Institution in Educational Technology”

The Australian, 8/November/2022

Learning Analytics – Model



Stakeholder Groups – Relationships

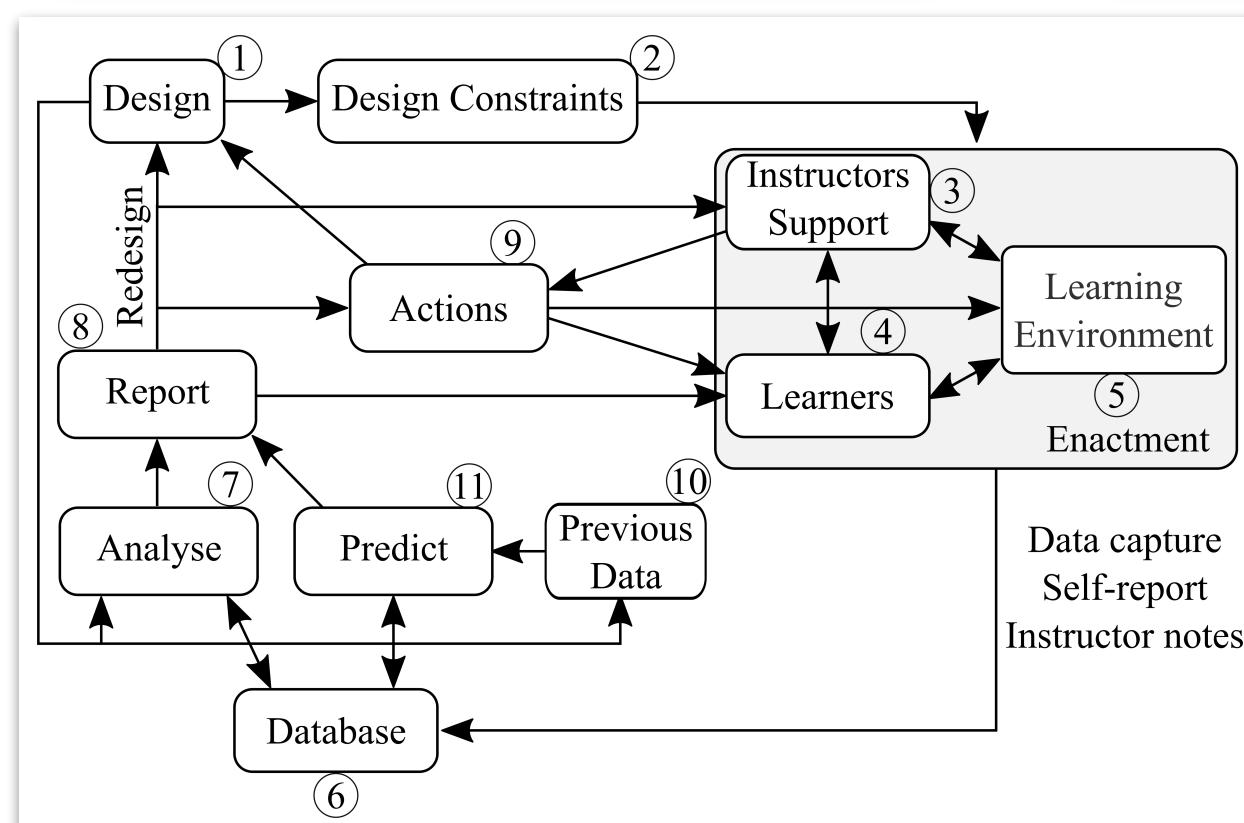
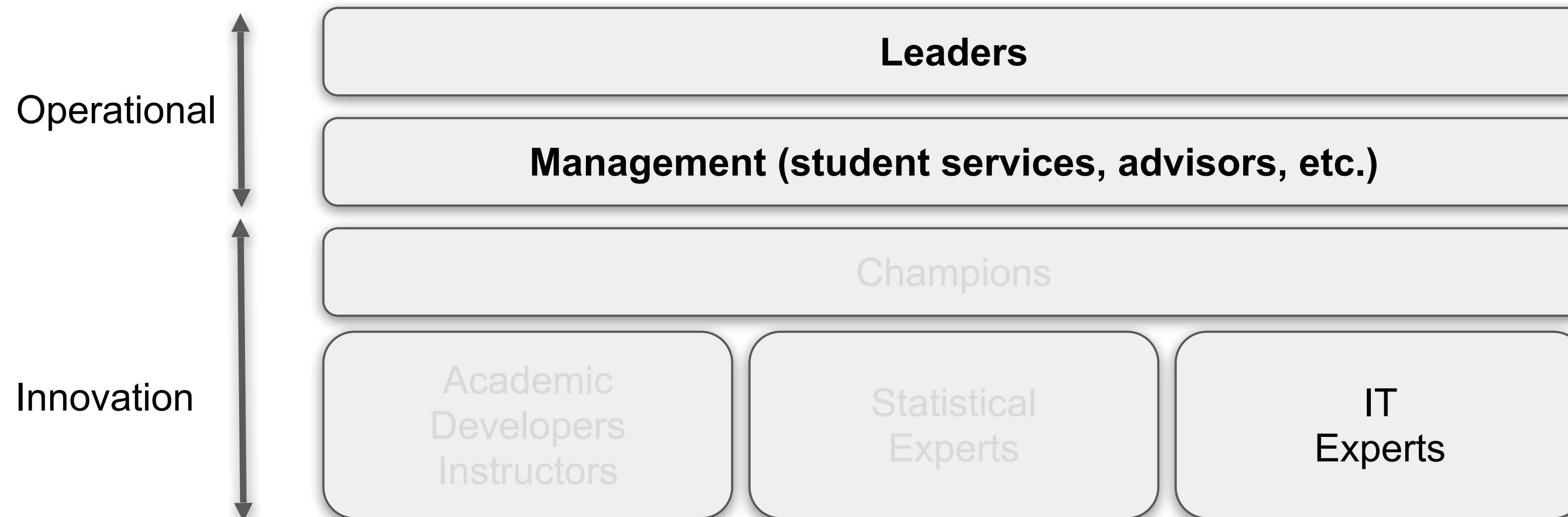


Institutional Adoption – Top-Down

- Led and strongly influenced by leadership teams
- Clearly articulated(?) goal and access to institutional capacity
- Limited resources to build staff awareness and shared understanding
- **AVOID:** LA as a technical solution for an educational problem
- **AVOID:** One unit “owns” the problem and the rest are “clients”
- **RISK:** Lack of (or very small) uptake and difficulty to see the impact

Dawson, S., Poquet, O., Colvin, C., Rogers, T., Pardo, A., & Gasevic, D. (2018). Rethinking learning analytics adoption through complexity leadership theory. Paper presented at the International Conference on Learning Analytics and Knowledge - LAK '18, Sydney, Australia. doi:10.1145/3170358.3170375

Stakeholder Groups – Top-Down

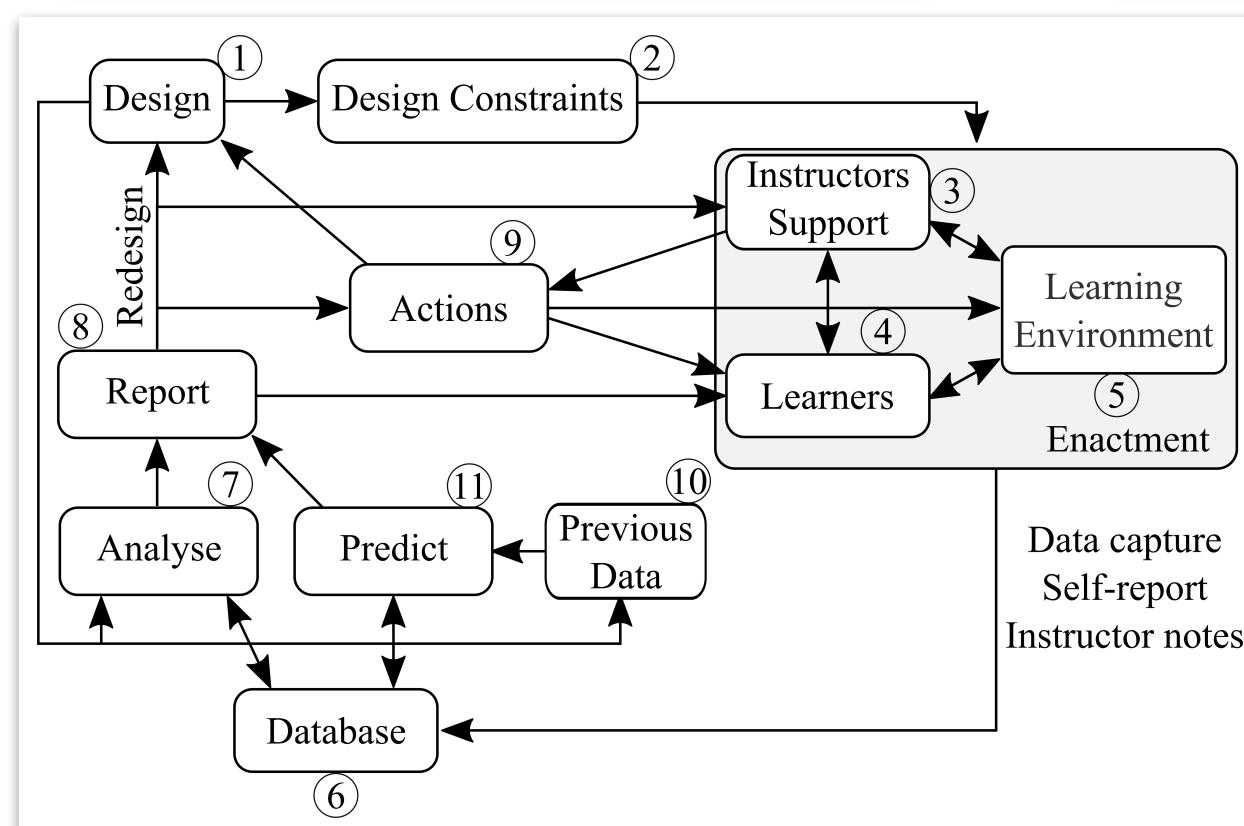
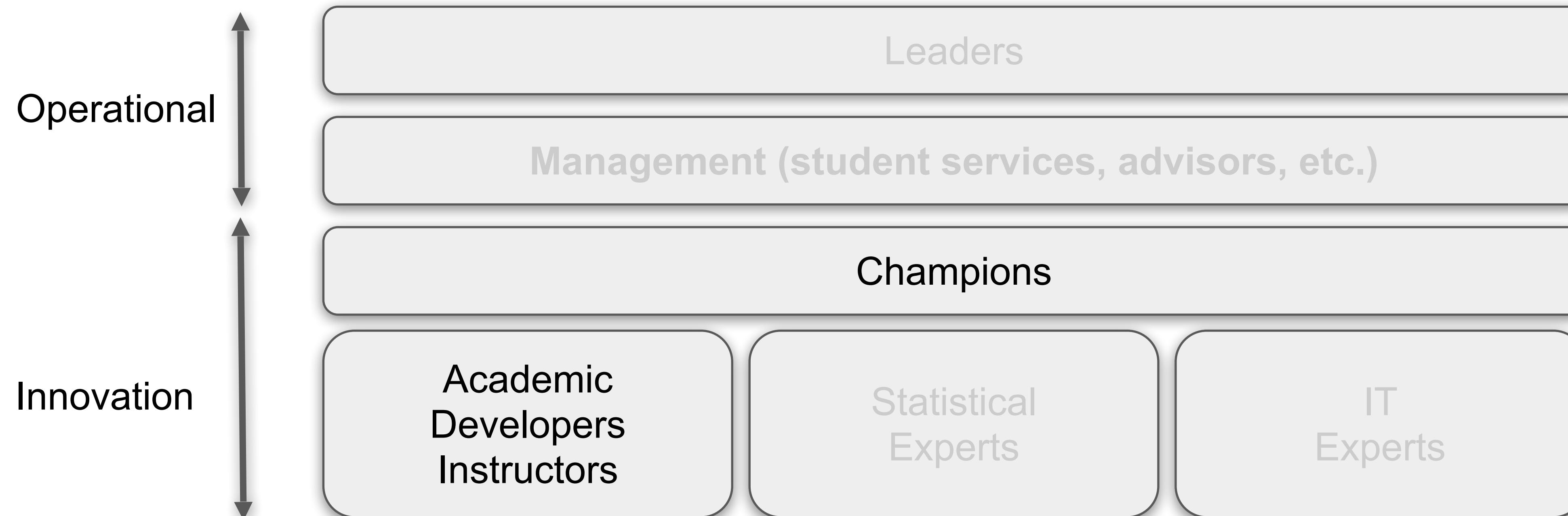


Institutional Adoption – Bottom-Up

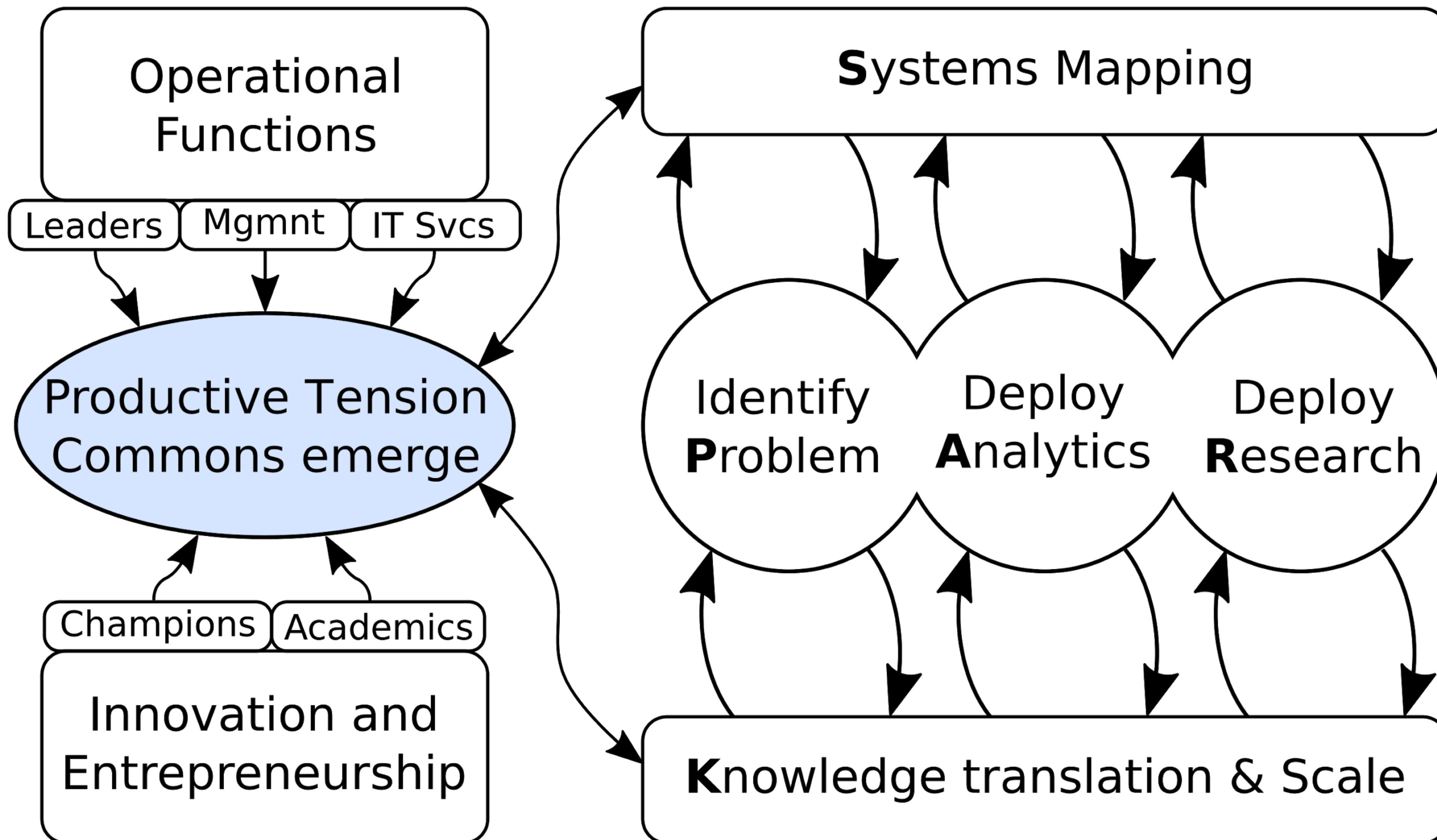
- Alliances emerge organically among independent institutional units
- Limited resources, leadership not aware nor aligned
- Difficulties to gain access to infrastructure, data, etc.
- **AVOID:** Lack of strategy to scale initiatives to the institutional level
- **AVOID:** Small initiatives divergent in aim, scope and focus
- **RISK:** Pockets of innovation and impact but with no institutional visibility

Dawson, S., Poquet, O., Colvin, C., Rogers, T., Pardo, A., & Gasevic, D. (2018). Rethinking learning analytics adoption through complexity leadership theory. *International Conference on Learning Analytics and Knowledge - LAK '18*, Sydney, Australia. [doi:10.1145/3170358.3170375](https://doi.org/10.1145/3170358.3170375)

Stakeholder Groups – Bottom-Up



SPARK model for LA institutional adoption



SPARK model for LA institutional adoption

Identify problem: Provision of personalised feedback during learning experience

System mapping: Adequate Learning Design, Activities, Data capture

Analytics: Adequate algorithms to detect indicators and translate into support

System mapping: Adequate algorithms, predictive models, reports, **actions**

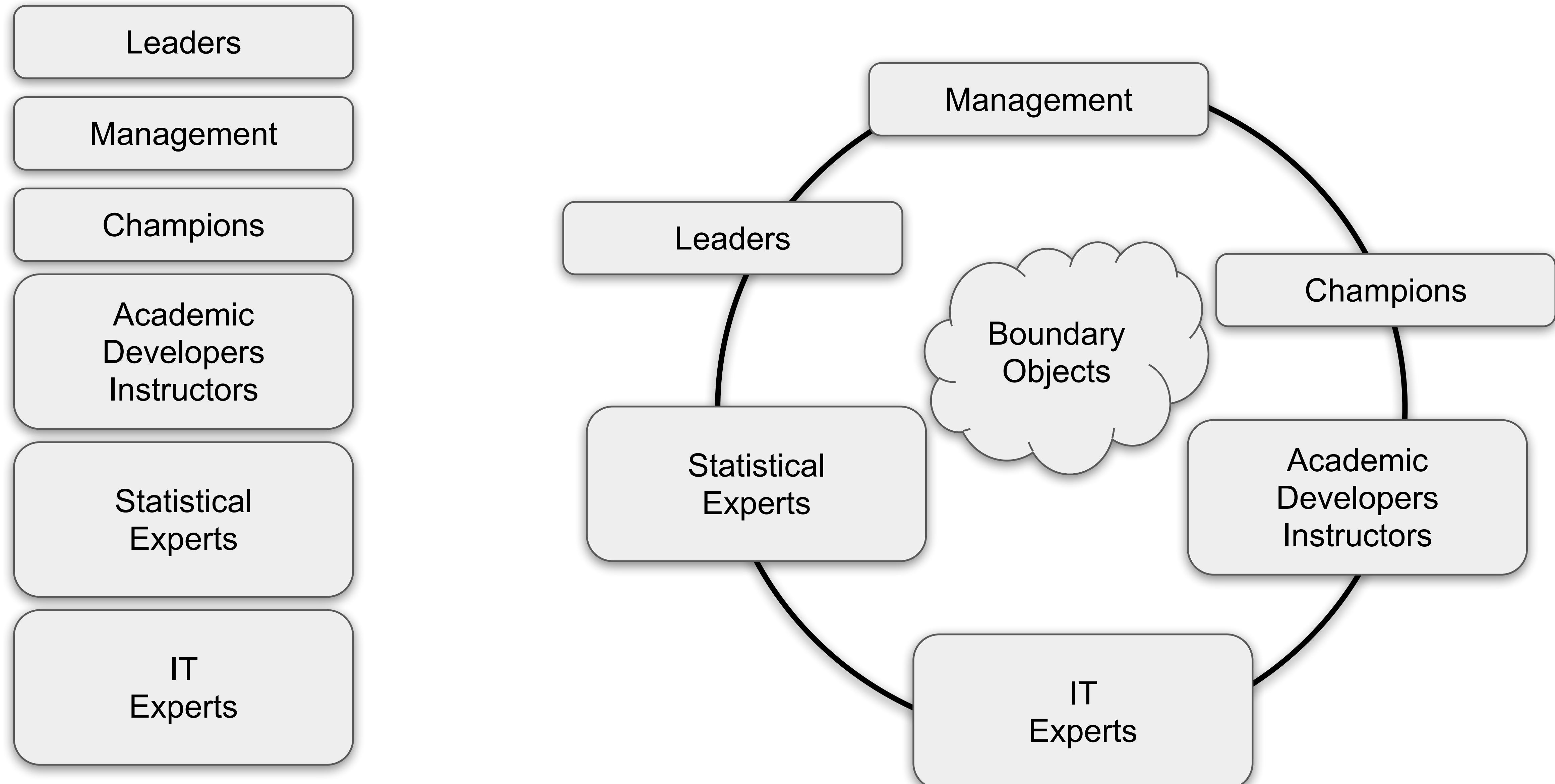
Research: Deploy pilots and **iterate with problem identification and analytics**

Knowledge translation: Maintain vision from small pilot to large scale adoption

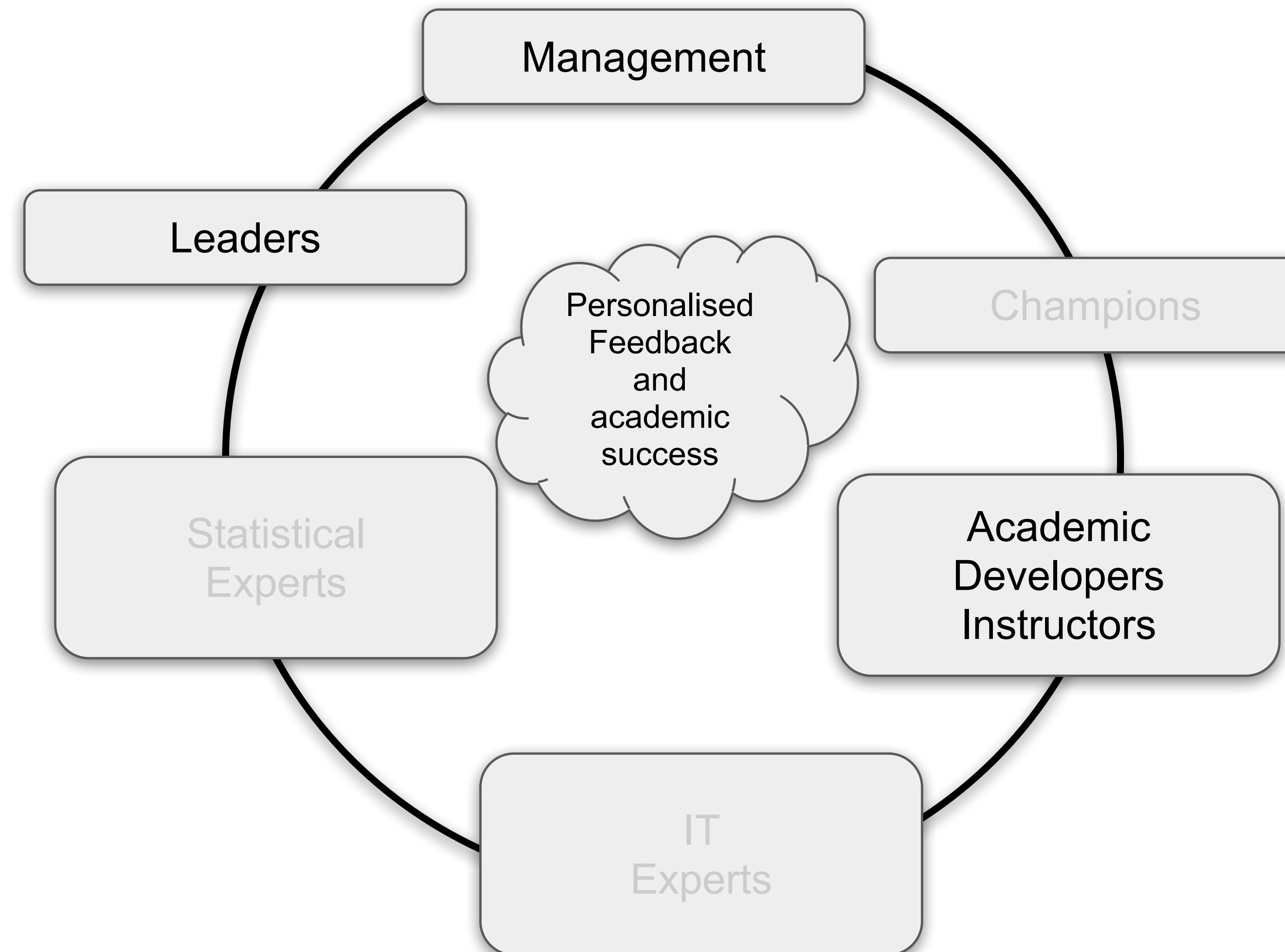
Emergence of the commons – From hierarchy



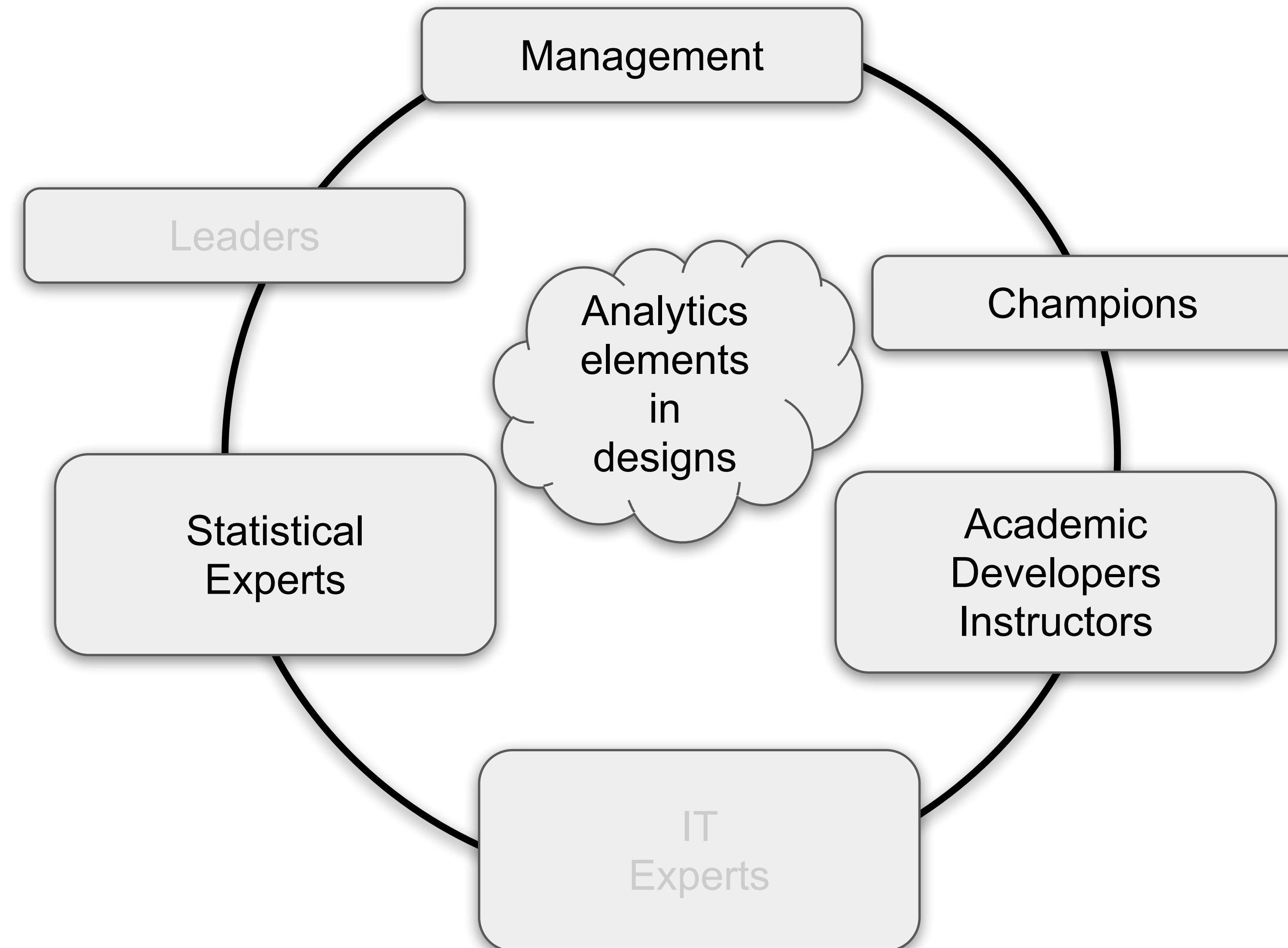
Emergence of the commons – To Networks



Personalised Feedback Promotes Success



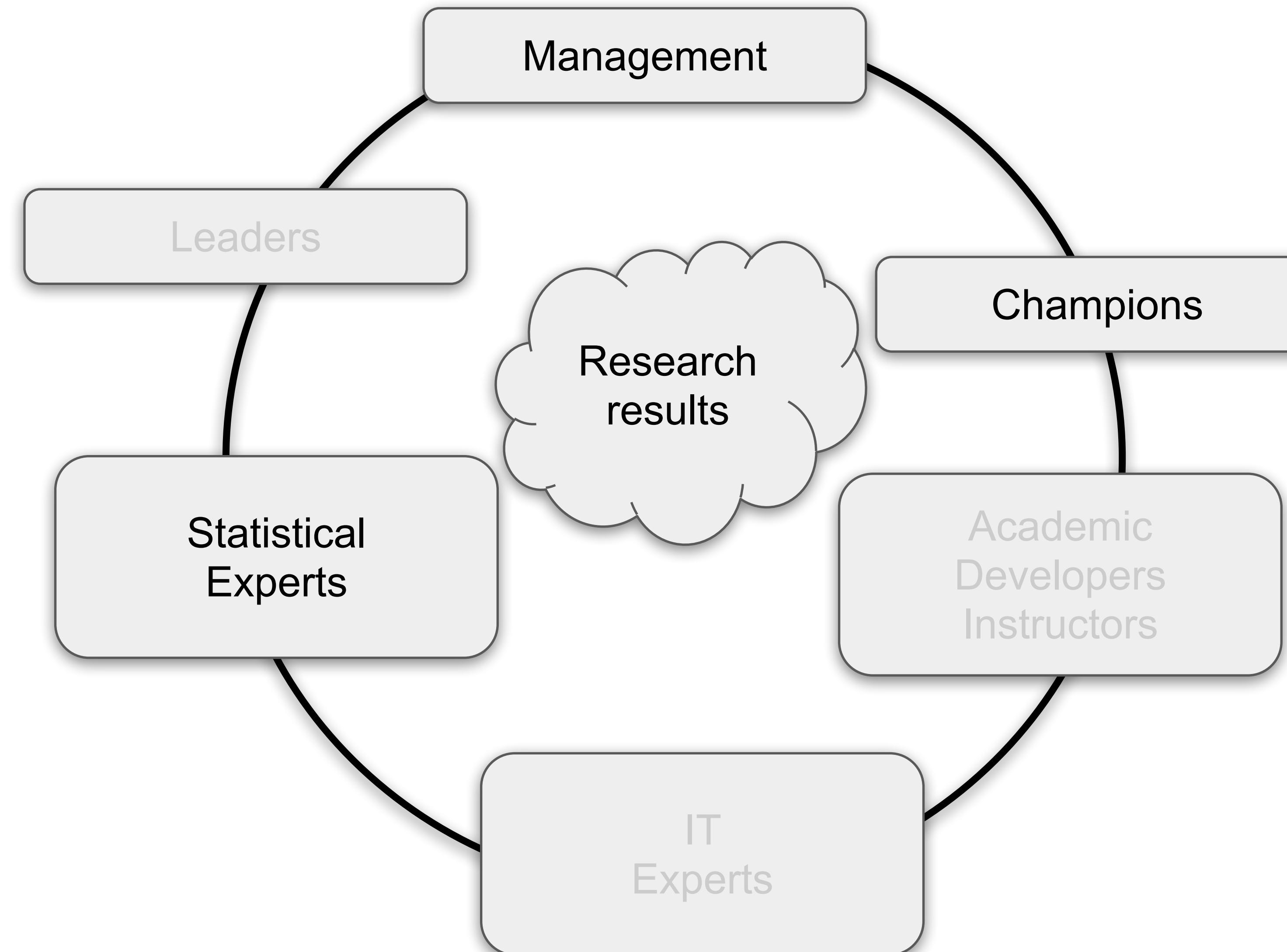
Personalised Feedback Promotes Success



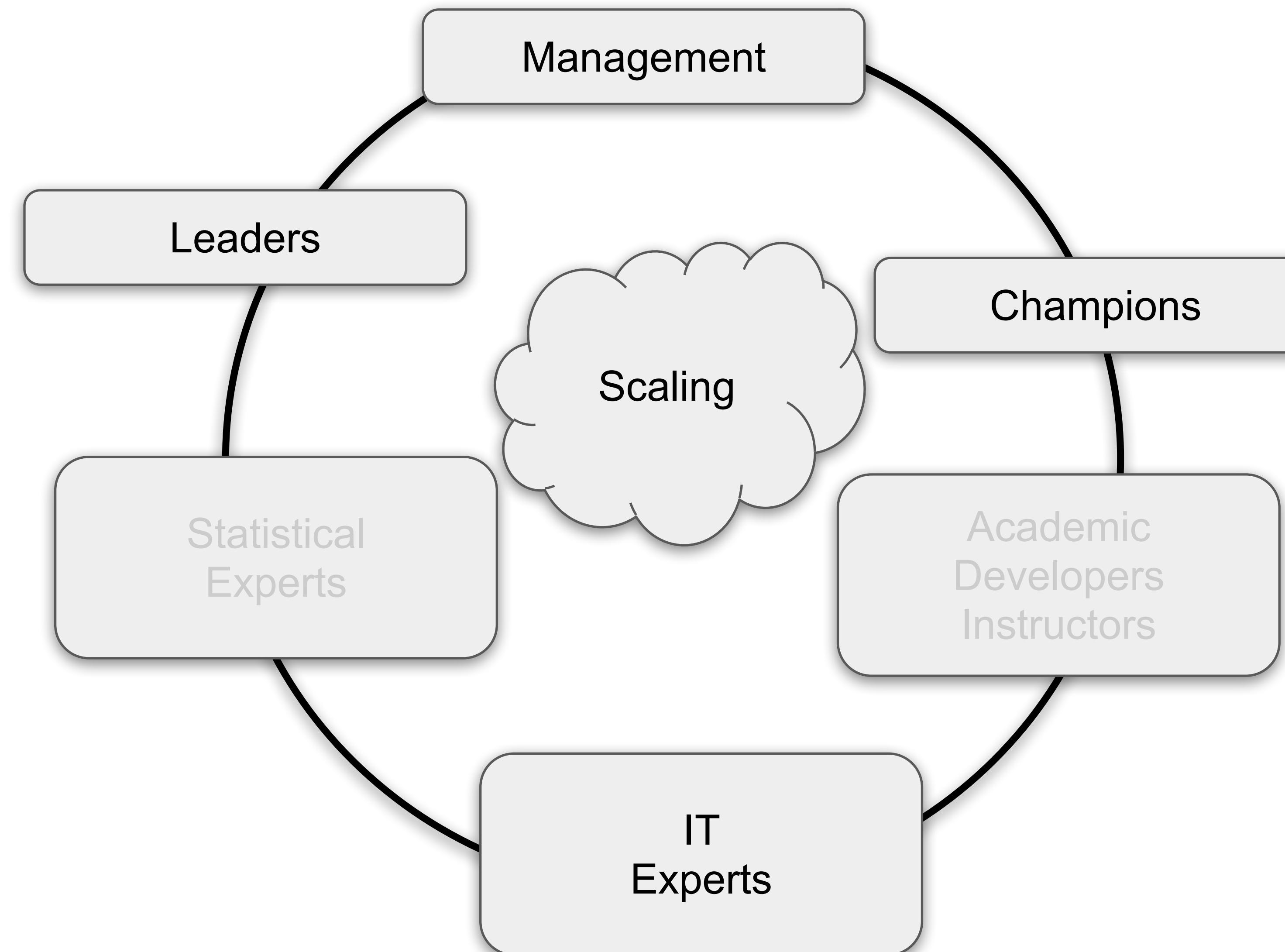
Personalised Feedback Promotes Success



Personalised Feedback Promotes Success

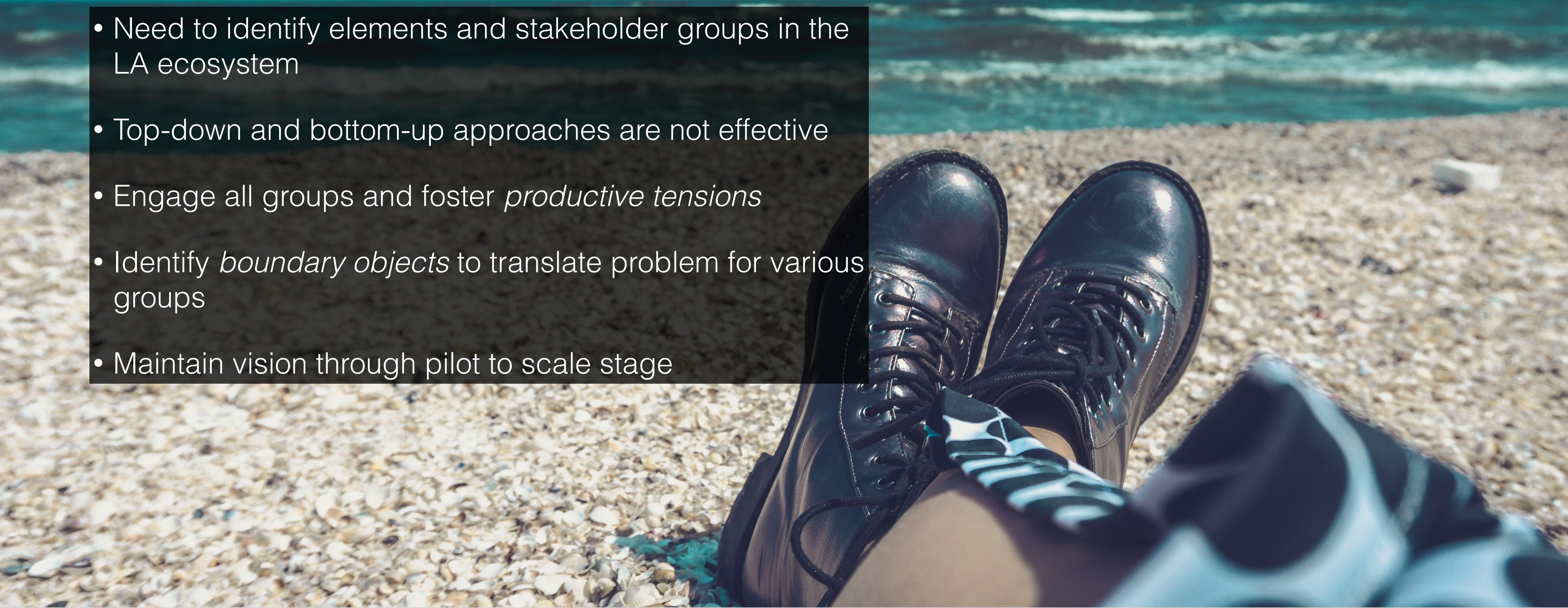


Personalised Feedback Promotes Success



Conclusions

- Need to identify elements and stakeholder groups in the LA ecosystem
- Top-down and bottom-up approaches are not effective
- Engage all groups and foster *productive tensions*
- Identify *boundary objects* to translate problem for various groups
- Maintain vision through pilot to scale stage



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