



# Challenges, blockers and planning for success

*From the CIO point of view*

# CAUDIT

Council of Australasian University Directors of Information Technology

# CAUDIT MEMBERS

- All Australian universities
- All New Zealand universities
- 3 PNG universities
- 2 Fiji universities
- 6 Australian research bodies
- The College of Law
- UTS:Insearch

CAUDIT's purpose is  
to support each other  
in **leading** the **application** of digital capabilities  
to **transform** education and research.

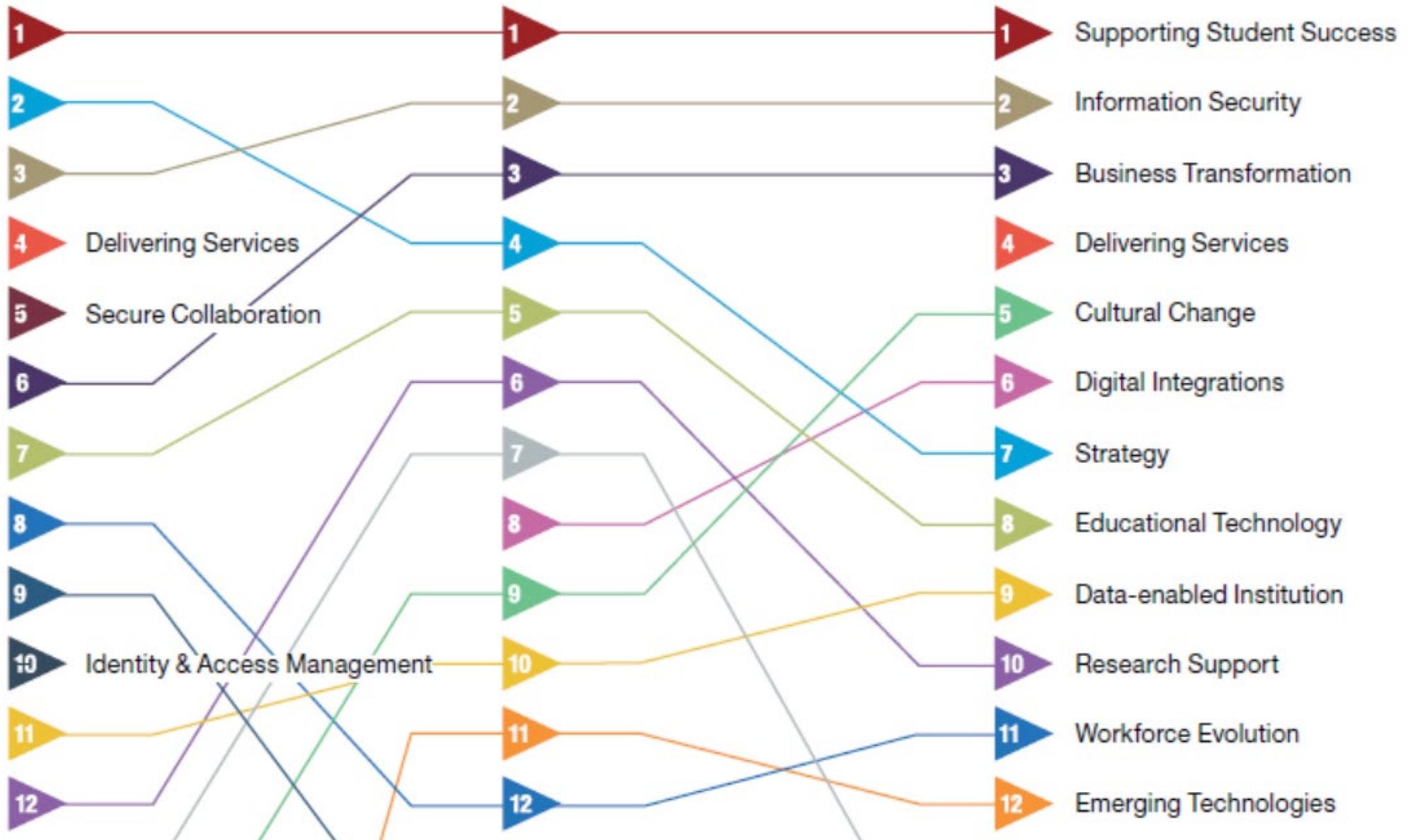


# Challenges

2017

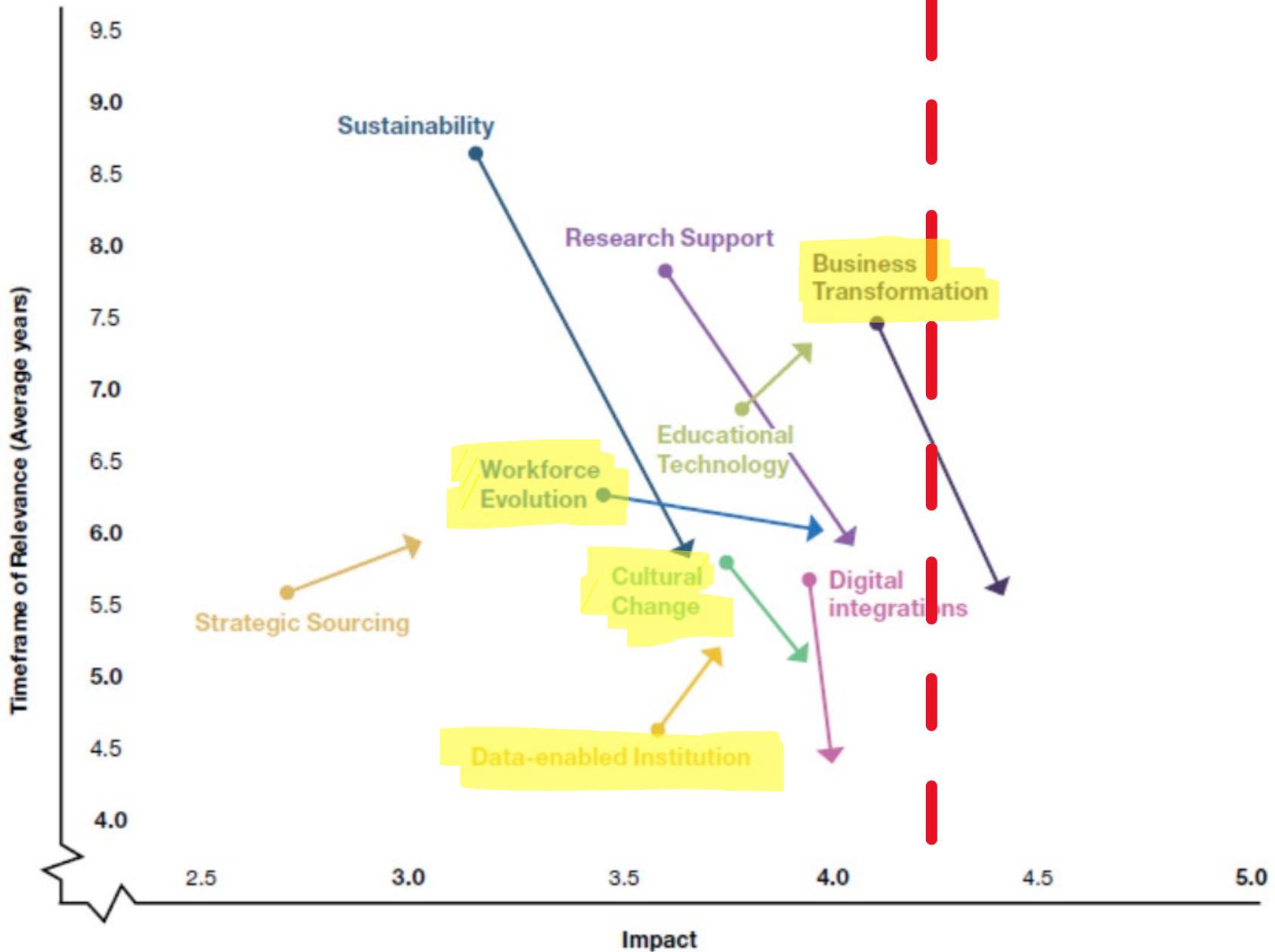
2018

2019



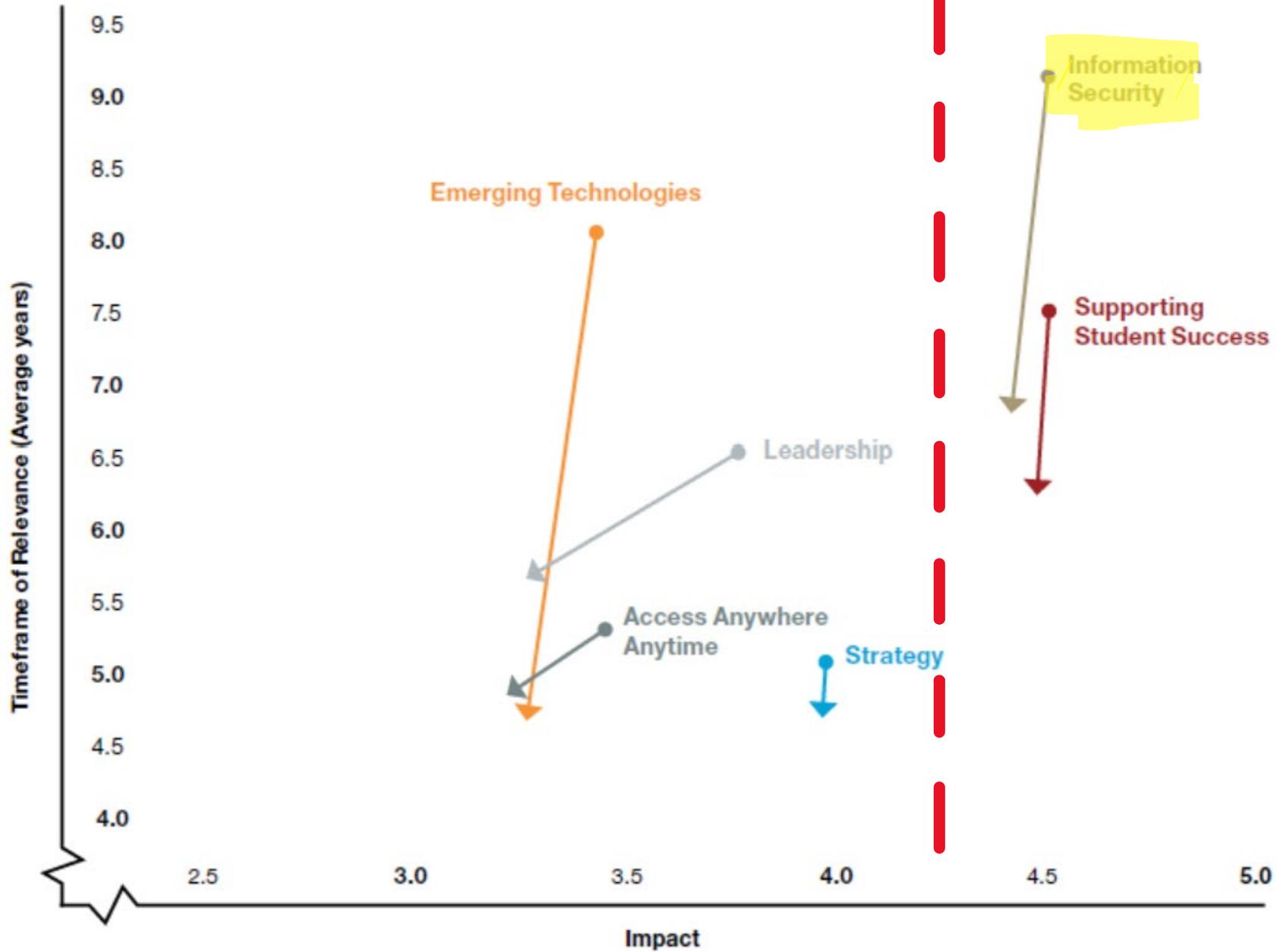
# Greater Impact from 2018 to 2019

Legend: ● 2018 ► 2019



# Lesser Impact from 2018 to 2019

Legend: ● 2018 ► 2019



**#2 Information Security**  
**#3 Business Transformation**  
**#5 Cultural Change**  
**#9 Data-enabled Institution**  
**#11 Workforce Evolution**

# Blockers











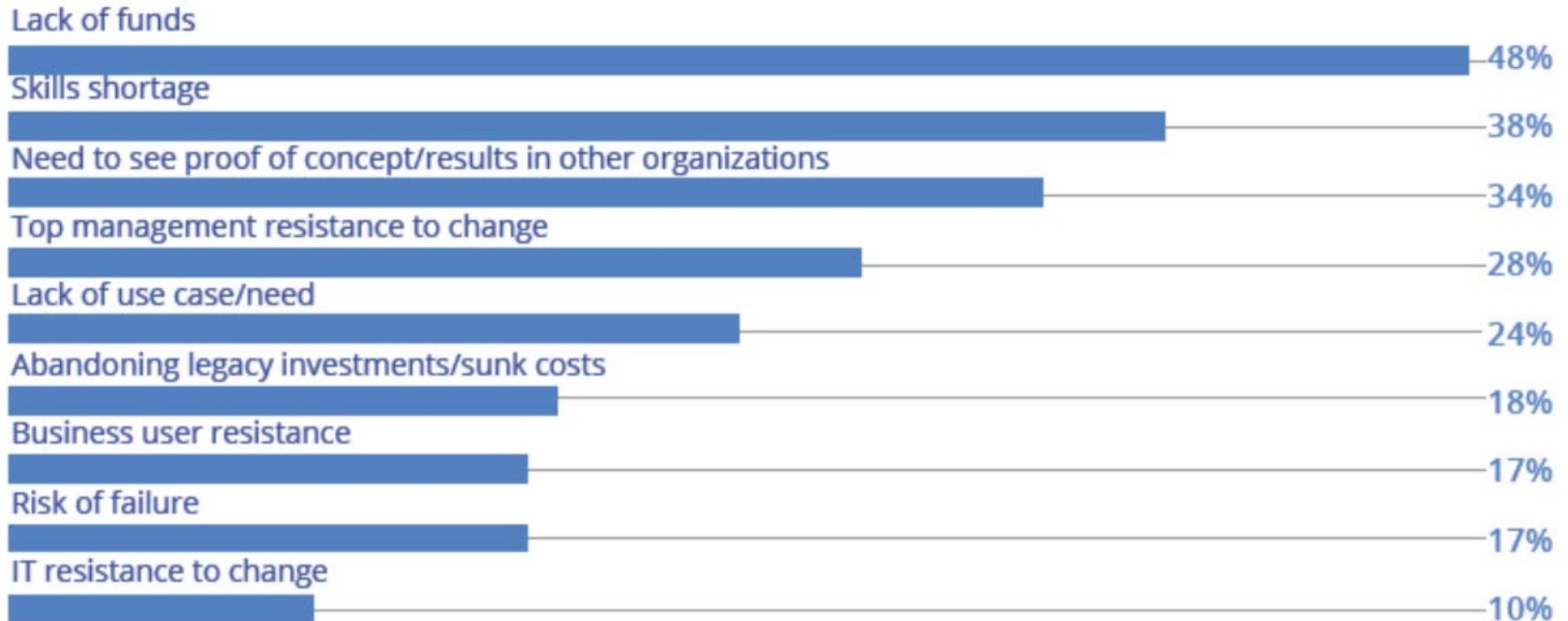






# Barriers to the Adoption of New Technologies

What are the greatest barriers to the adoption of emerging technologies within your organization?



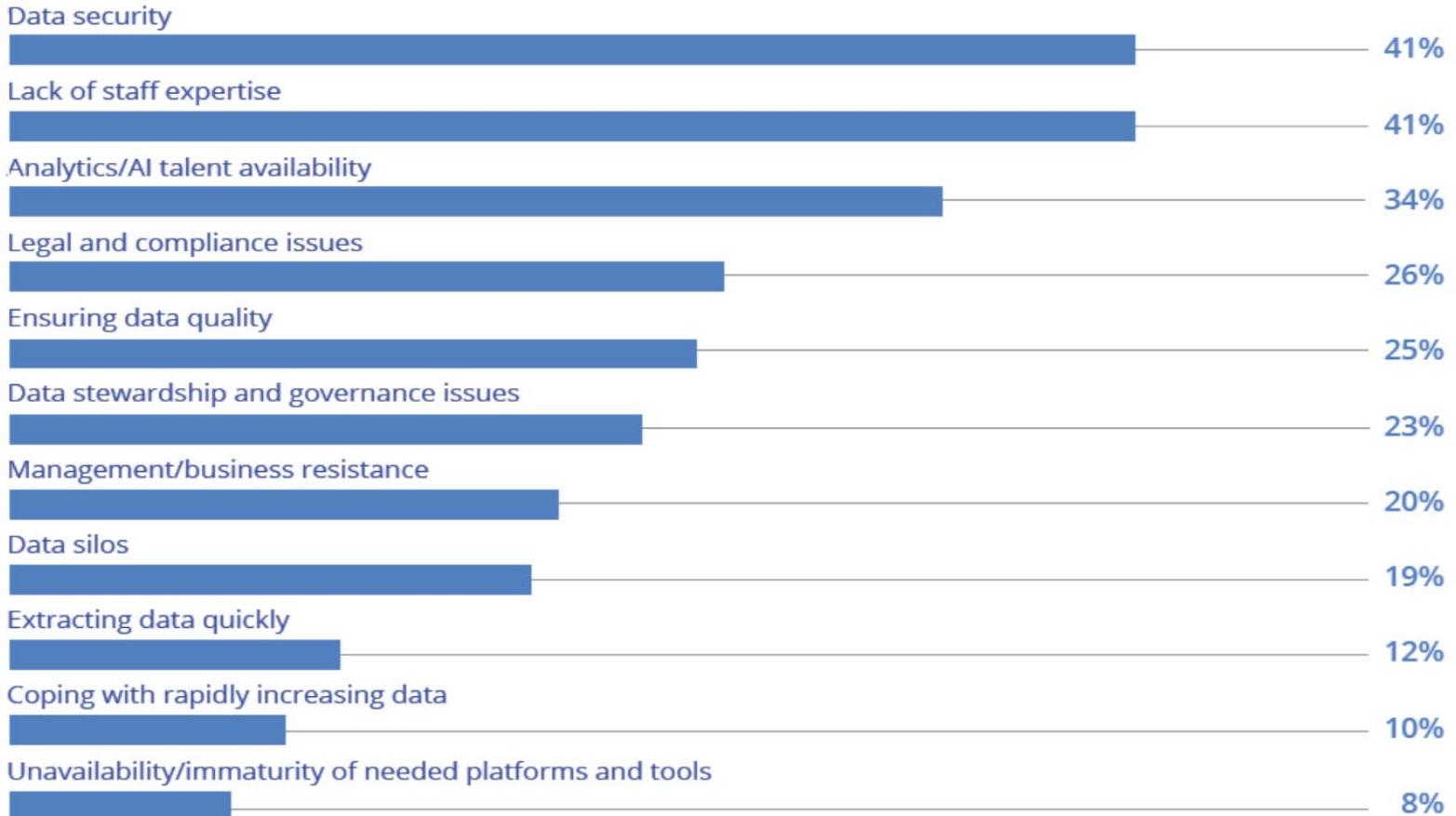
Note: Maximum of three responses allowed

Data: Interop survey of 181 technology professionals, March 2019

Ref: Interop.com Research Report: State of Emerging Technology June 2019  
Survey of 181 technology professionals  
14% in education (largest representation)

## Barriers to Data Analytics and AI Success

What are the biggest barriers to success when it comes to data analytics and artificial intelligence?



Note: Maximum of three responses allowed  
Data: UBM survey of 140 technology decision-makers, March 2019

Ref: Interop.com Research Report: State of IT April 2019  
Survey of 140 technology decision-makers  
11% in education (3<sup>rd</sup> largest representation)

# Planning for Success



**#2 Information Security**  
**#3 Business Transformation**  
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**Cybersecurity**  
**Networks / Communities**  
**Professional Development**  
**Benchmarking**

# Cybersecurity



# Proposal for CAUDIT members

To help safeguard the digital assets and reputation of the HE sector and individual institutions

**CAUDIT**

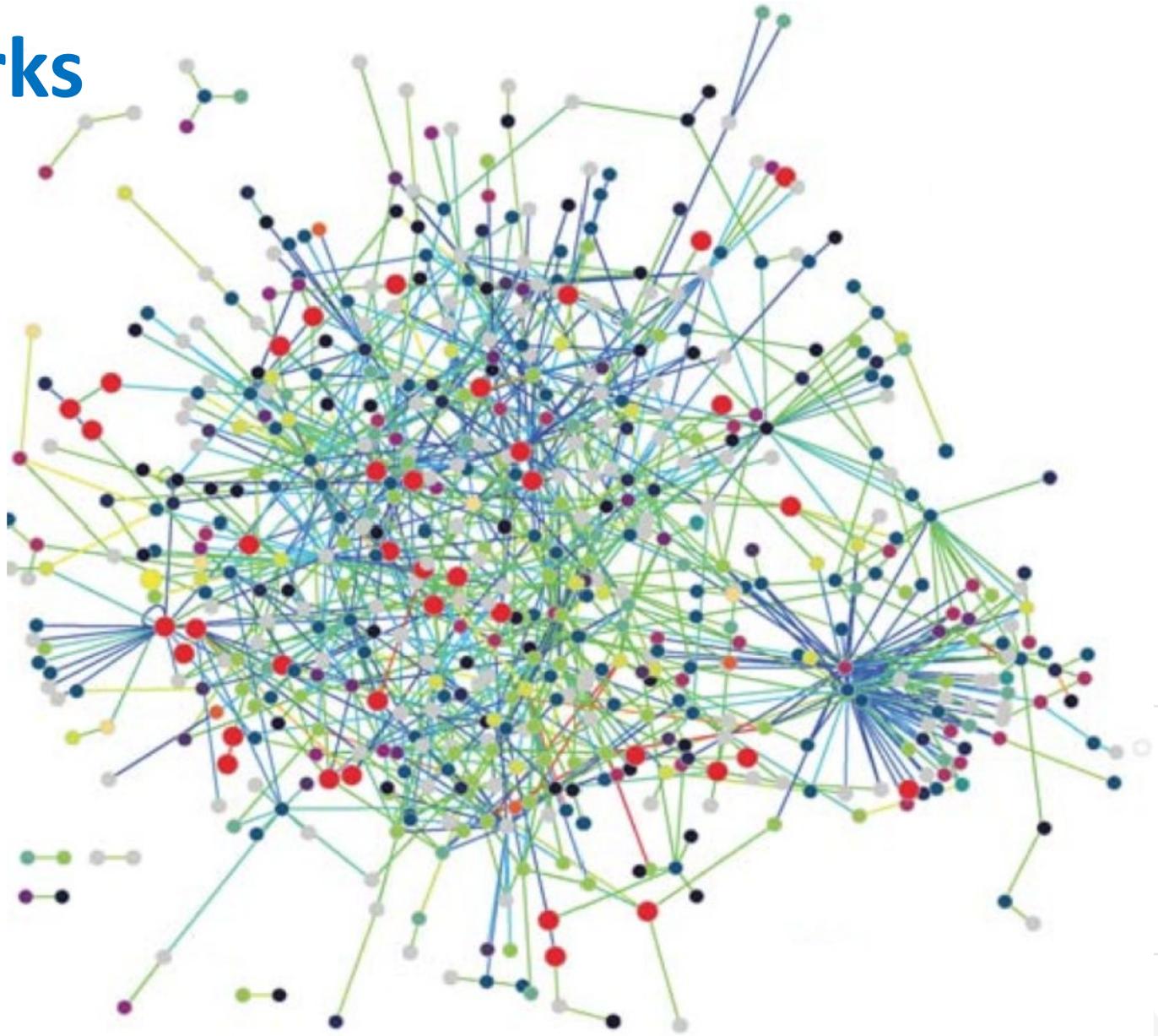


**#3 Business Transformation**  
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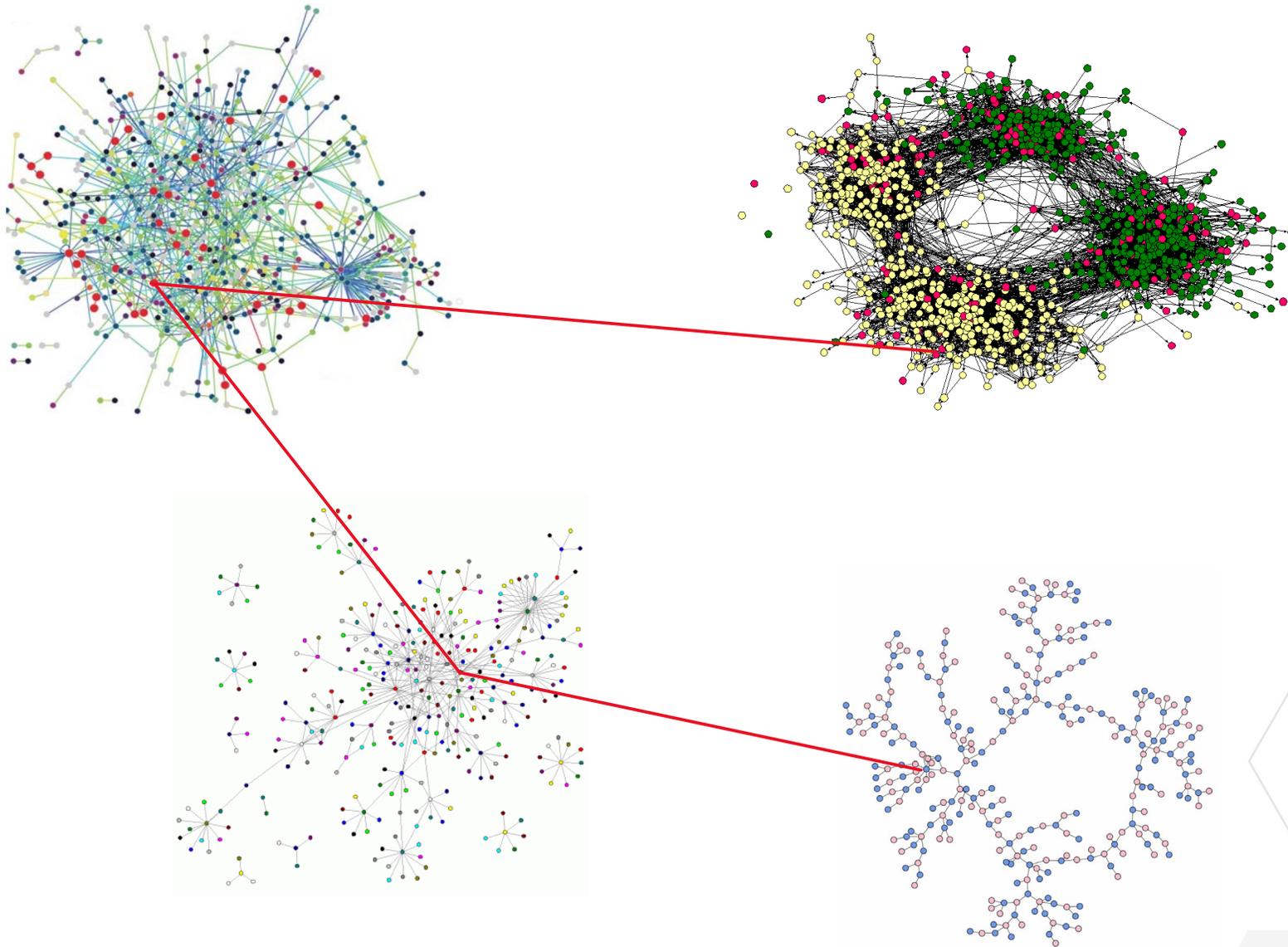




# Networks



**CAUDIT**

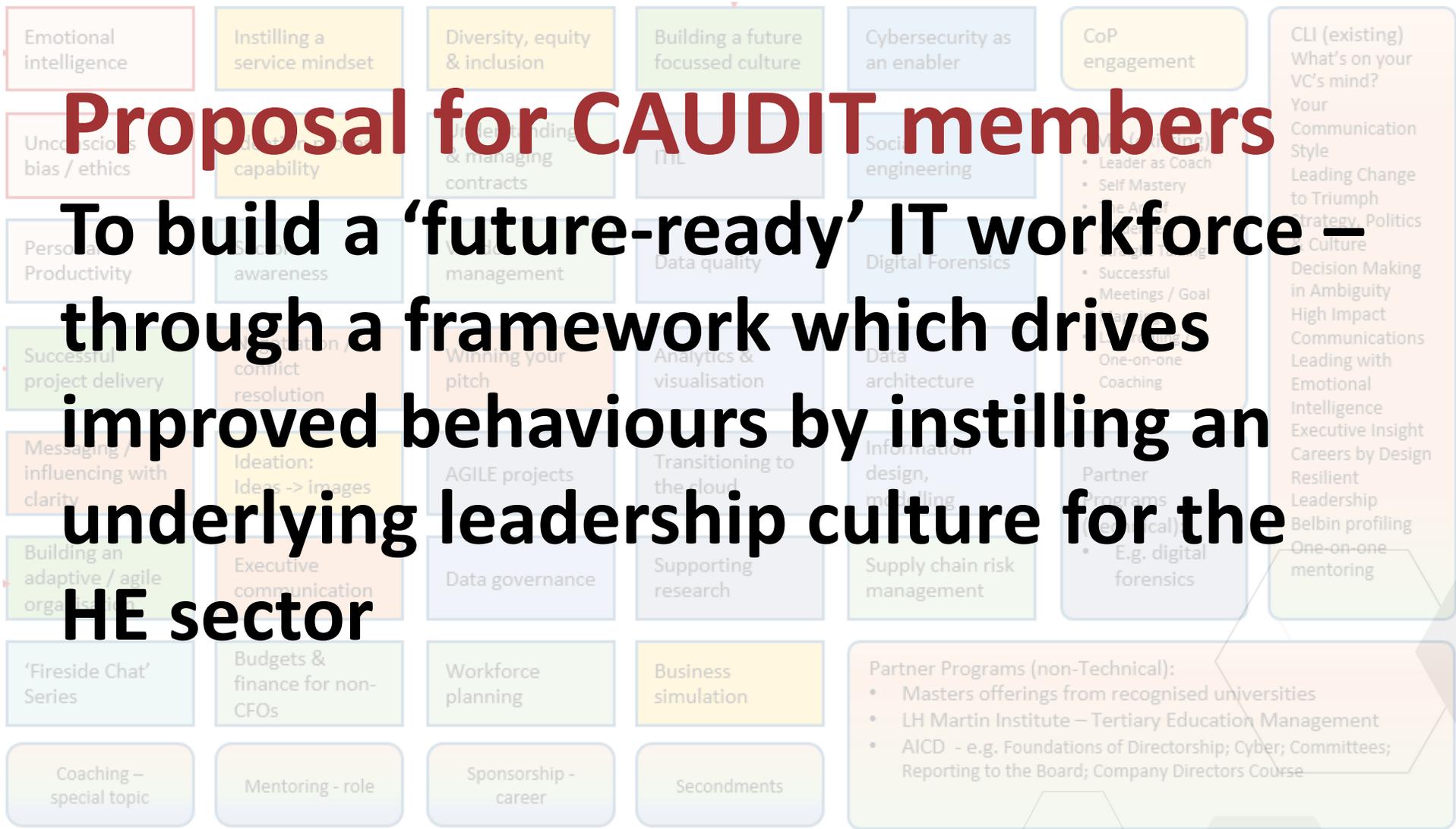


# Communities

CAUDIT Communities of Practice - 2019



# Professional Development



**Proposal for CAUDIT members**  
**To build a 'future-ready' IT workforce –**  
**through a framework which drives**  
**improved behaviours by instilling an**  
**underlying leadership culture for the**  
**HE sector**

# #9 Data-enabled Institution

**DESCRIPTION**

The Higher Education Business Reference Model describes a standard set of Business Architecture elements relevant to Higher Education. It can be used as a reference for Business Stakeholders, Enterprise Architects, and Technology Strategists to engage in discussion regarding business effectiveness, needs and challenges. The primary attribute of the Business Reference Model is the embedded capability model, which elaborates the core value chains for Higher education and the underlying business capabilities.

**UNDERSTANDING BUSINESS CAPABILITIES**

A capability model supports the development of strategies by viewing the business as a collection of capabilities that can be adjusted in response to the demands of the business environment. This models WHAT the organisation is capable of doing. It presents the business capabilities within the wider business context of WHO it serves, relies on and draws to, extending beyond organisational boundaries. A Business Capability is a particular logical combination of People, Process, Information, and Technology resources necessary to deliver a discrete required outcome to achieve a specific business objective.

**BUSINESS MOTIVATION**



The capabilities support the realisation of a University's strategies. A strategic framework commonly used in architecture is a business motivation model, which provides a structure for developing, communicating, and managing business ambitions in an organised manner. The motivation model can assist in informing the shape of the capability model.

**USAGE**

The Business Capability Model serves as an anchor for assessing perspectives such as strategic importance, maturity, business operational pain points, capital investment and organisation structure. It presents a view of the organisation with traceability from business objectives through to the information technology, and other resources required to support them.

**MAJOR CONCEPTS**

Typically an **ORGANISATIONAL STRUCTURE** would be included to provide context for the scope of the model.

**VALUE CHAINS** capture how the Institution generates value through Learning & Teaching and Research.

**CORE CAPABILITIES** that directly support the Value Chains are organised under the relevant Value Chain Segment.

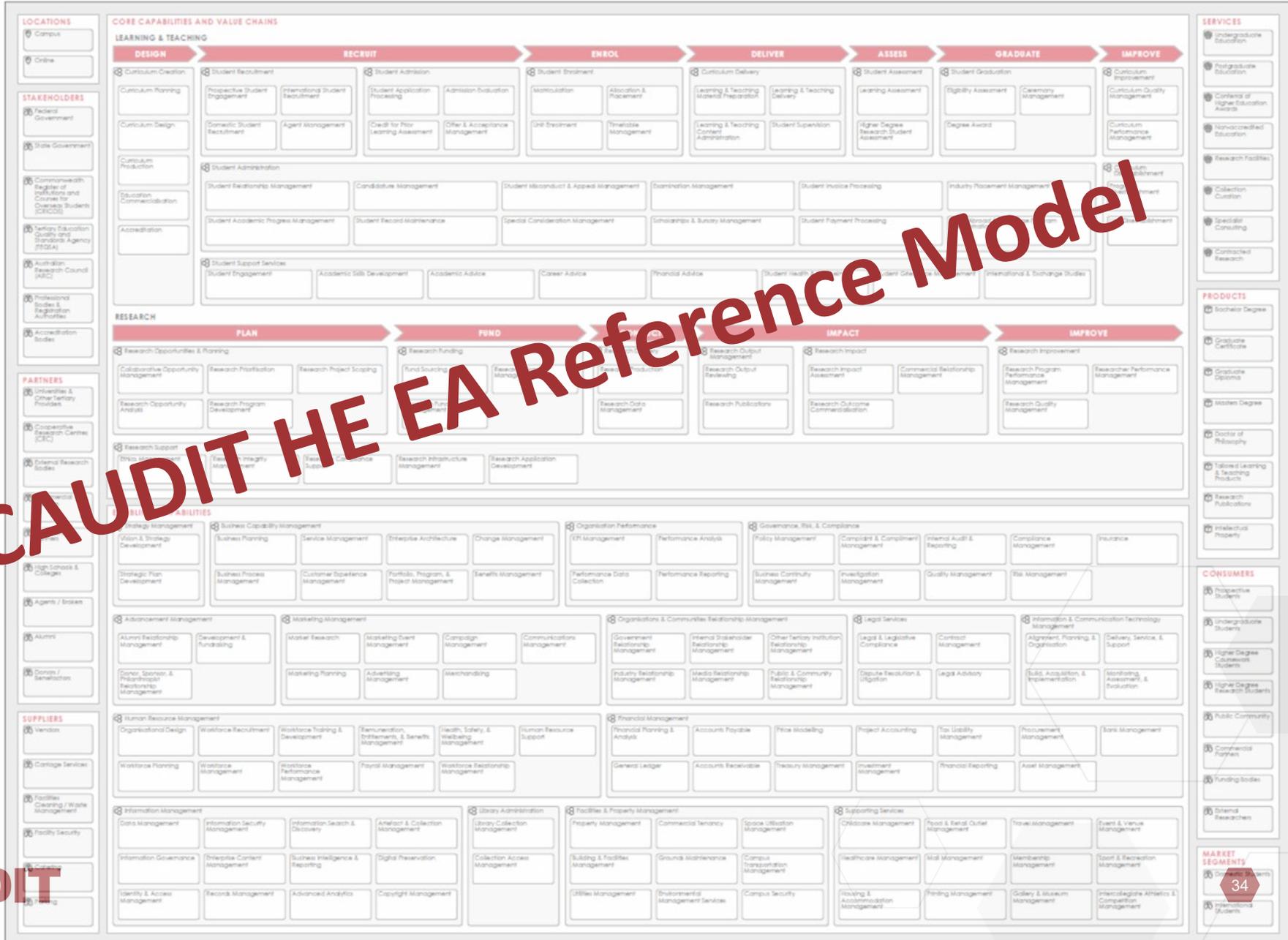
**ENABLING CAPABILITIES** support the core capabilities across the value chains and keep the Institution running.

External **LOCATIONS** and **STAKEHOLDERS** provide additional influencing business context.

**PARTNERS** and **SUPPLIERS** indicate the entities outside the Institution that provide critical inputs to the Institution.

**PRODUCTS** and **SERVICES** are those outcomes of the value chain that present tangible value to the consumers and target markets.

**CONSUMERS** and **MARKET SEGMENTS** indicate those people and organisations that are the beneficiaries of the value generated by the Institution.



CAUDIT HE EA Reference Model

CAUDIT

Well, we're both fruit.



# CAUDIT Benchmarking



# **CAUDIT** Complexity Index

The **CAUDIT Complexity Index (CCI)** is based on four key public measures available for all universities:

- Total number of students (EFTSL)
- Total number of staff (FTE)
- Research income (\$)
- Number and size of different university sites serviced by IT for an identified calendar year

### Multistage process:

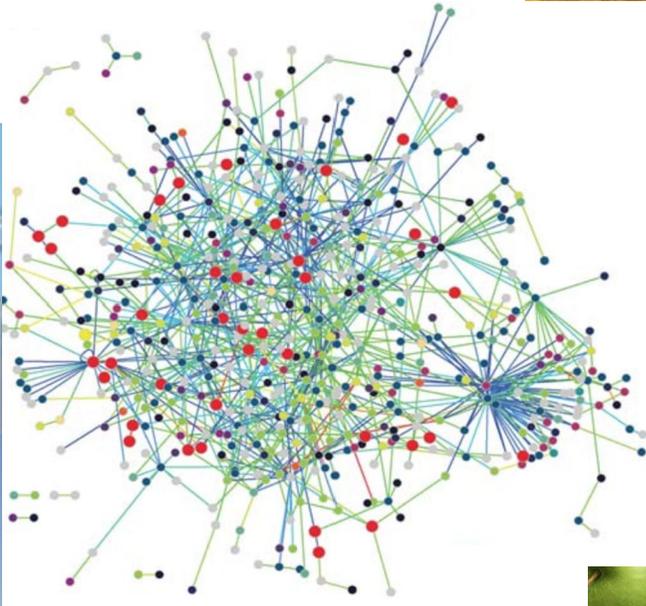
1. Index scale each component

$$Index\ Value_i = 1 + \frac{9 [Value_i - Min]}{[Max - Min]}$$

2. Apply prescribed weighting factors

3. Sum the four resultant weighted values

$$CI\ Value_i = [0.35 \times Staff] + [0.35 \times Students] + [0.25 \times Research] + [0.05 \times Geography]$$



**Lots of moving parts!**

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PO Box 9432  
Deakin ACT 2600  
Australia

T +61 2 6222 7575

F +61 2 6222 3535

E [caudit@caudit.edu.au](mailto:caudit@caudit.edu.au)

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