Optimising Investments in University IT

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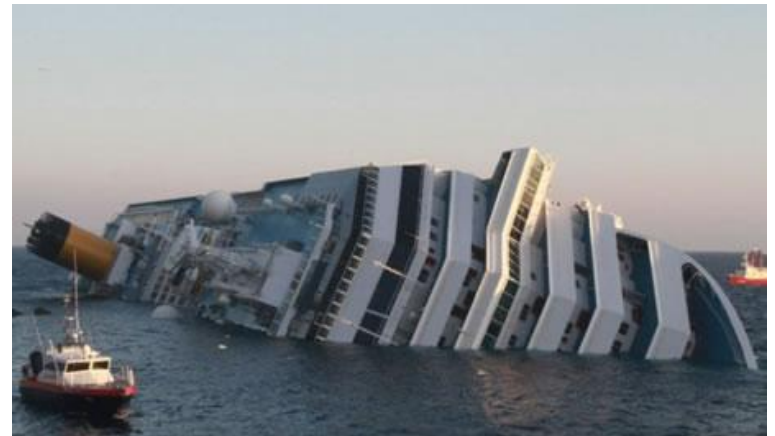
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Structure of the presentation

1. What does 'investing in IT' mean?

2. Where & how to invest

3. Governance, capability & capacity

4. Where next?

Challenges for strategic ICT

JISC / HE Leadership Foundation – Strategic ICT Toolkit

'Are the **foundations** on which ICT are delivered sufficient to facilitate the level of ICT that will meet [university] **corporate objectives**?'
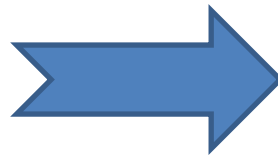
Strategic ICT needs to address these challenges for the university:
- Lack of IT agility
- Lack of IT integration
- Duplication of IT facilities & services
- Data held in sealed silos
- Lack of useful Management Information
- Senior managers cannot identify if what is delivered is vfm ★

Where to invest?

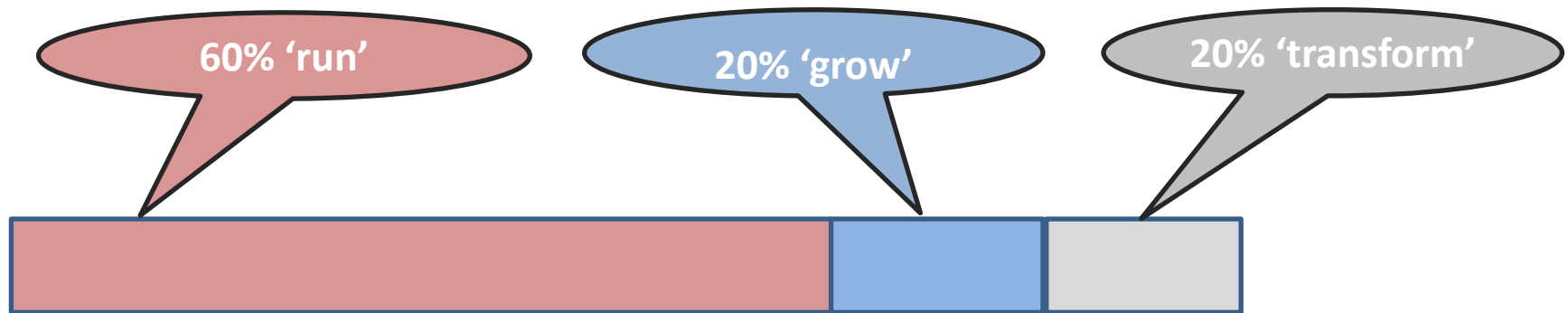**IT as an investment**

Should lead to…

'better business'

Known & unknown investments:
- Academic computing
- Corporate computing
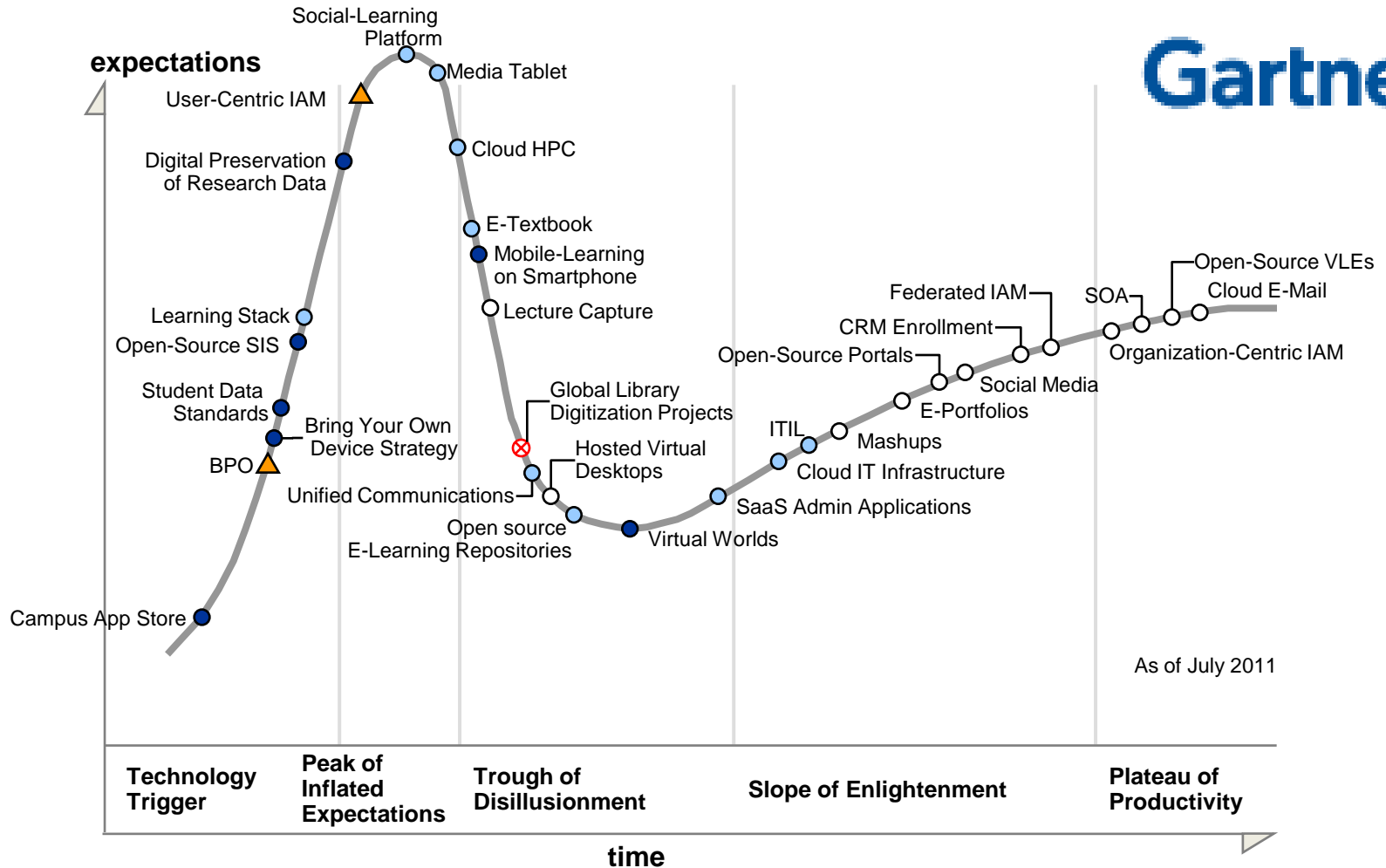
Measure the returns here (ROI)

Balancing your IT investment

60% 'run' 20% 'grow' 20% 'transform'

Adapted from
Gartner

- **Run**
  - Reduce costs no increase in revenue
- **Grow**
  - Increase revenue from existing products
- **Transform**
  - New products, new markets

Assessing Investment Risks:
Technology Hype Cycle or Maturity Assessment 2011

Gartner.

expectations

- Social-Learning Platform
- Media Tablet
- User-Centric IAM
- Cloud HPC
- Digital Preservation of Research Data
- E-Textbook
- Mobile-Learning on Smartphone
- Lecture Capture
- Learning Stack
- Open-Source SIS
- Student Data Standards
- Bring Your Own Device Strategy
- BPO
- Global Library Digitization Projects
- Hosted Virtual Desktops
- Unified Communications
- Open source E-Learning Repositories
- Virtual Worlds
- Open-Source VLEs
- Cloud E-Mail
- Federated IAM
- SOA
- CRM Enrollment
- Organization-Centric IAM
- Open-Source Portals
- Social Media
- E-Portfolios
- ITIL
- Mashups
- Cloud IT Infrastructure
- SaaS Admin Applications
- Campus App Store

As of July 2011

| Technology Trigger | Peak of Inflated Expectations | Trough of Disillusionment | Slope of Enlightenment | Plateau of Productivity |

time

Years to mainstream adoption:

○ less than 2 years   ◉ 2 to 5 years   ● 5 to 10 years   ▲ more than 10 years   ⊗ obsolete before plateau
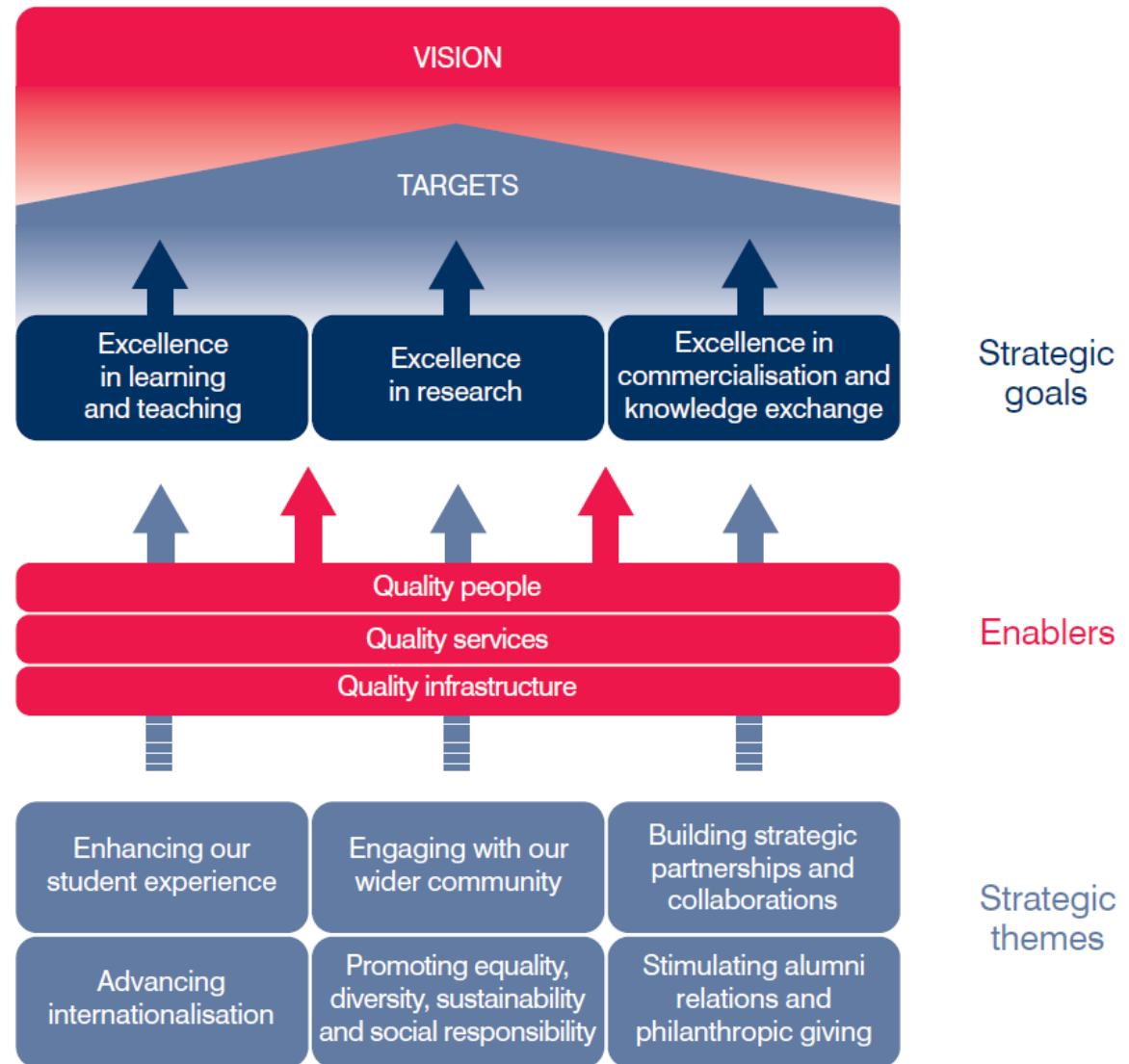
How much IT spend is enough?

- How much should my university spend on corporate IT?
  - probably "more not less"
- How much do others spend?
  - Very difficult to know!
  - Gartner shows
    - financial services: 12% turnover
    - Pharmaceuticals: 8%
    - Education: 2.5%
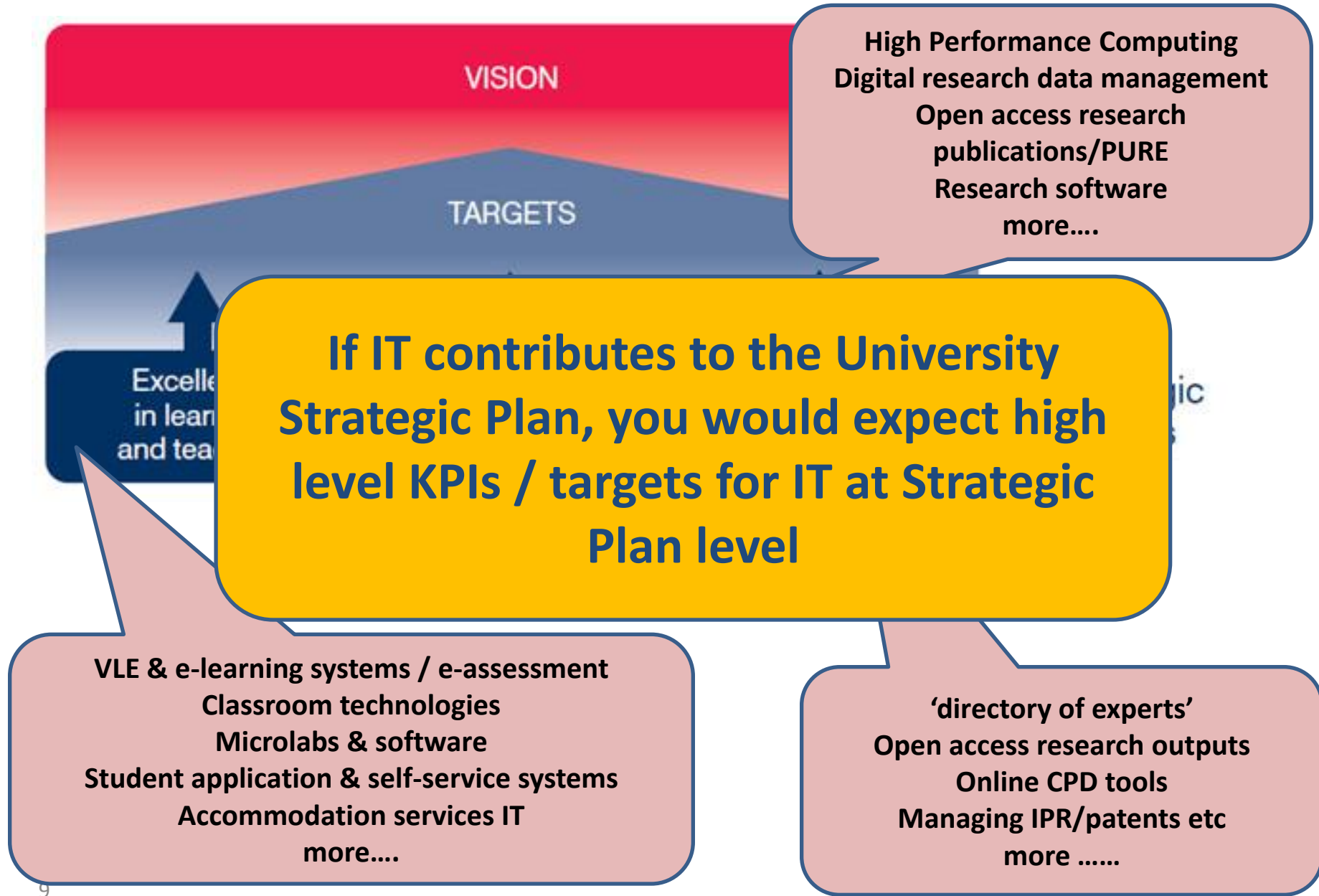 - UK survey of research intensive universities: 3-6% of turnover

Aligning Investments with University Strategy

University of Edinburgh Strategic Plan 08-12

IT contributions to UoE SP Strategic Goals

VISION

TARGETS

Excelle in lear and tea

High Performance Computing
Digital research data management
Open access research publications/PURE
Research software
more….

If IT contributes to the University Strategic Plan, you would expect high level KPIs / targets for IT at Strategic Plan level

VLE & e-learning systems / e-assessment
Classroom technologies
Microlabs & software
Student application & self-service systems
Accommodation services IT
more….

'directory of experts'
Open access research outputs
Online CPD tools
Managing IPR/patents etc
more ……

Governance, Capability & Capacity for Strategic & Major IT Projects

Getting the best returns on IT investment requires:

- **Governance** for major IT investments: governance toolkits & training

- **Capability** for major IT projects: Maturity Models / Strategic ICT Toolkit

- **Capacity** for major IT projects = bubble graphs & quadrants

Capability: Defining Strategic & Major Projects – Edinburgh Toolkit

Project criteria	Score range	Features
Budget (gross)	1 – 15	<£0.5M - >£25M
Impact students & staff	1 - 4	Direct impact across U – local impacts
Complexity	1 - 4	Low - High
Reputation	1 - 4	Local – international

If Score 20 or over, then project is a "Strategic" project
If Score is 10-19, then project is a "Major" project

For S & M Projects, Governance Board **must** be established as Project Oversight
with Senior Responsible Owner **at SMT level for S Projects**.

Capability: managing the process through stages & reviews

Capability: Guiding Strategic Projects and learning from them - Edinburgh Toolkit

"Visual aids for project governance boards"
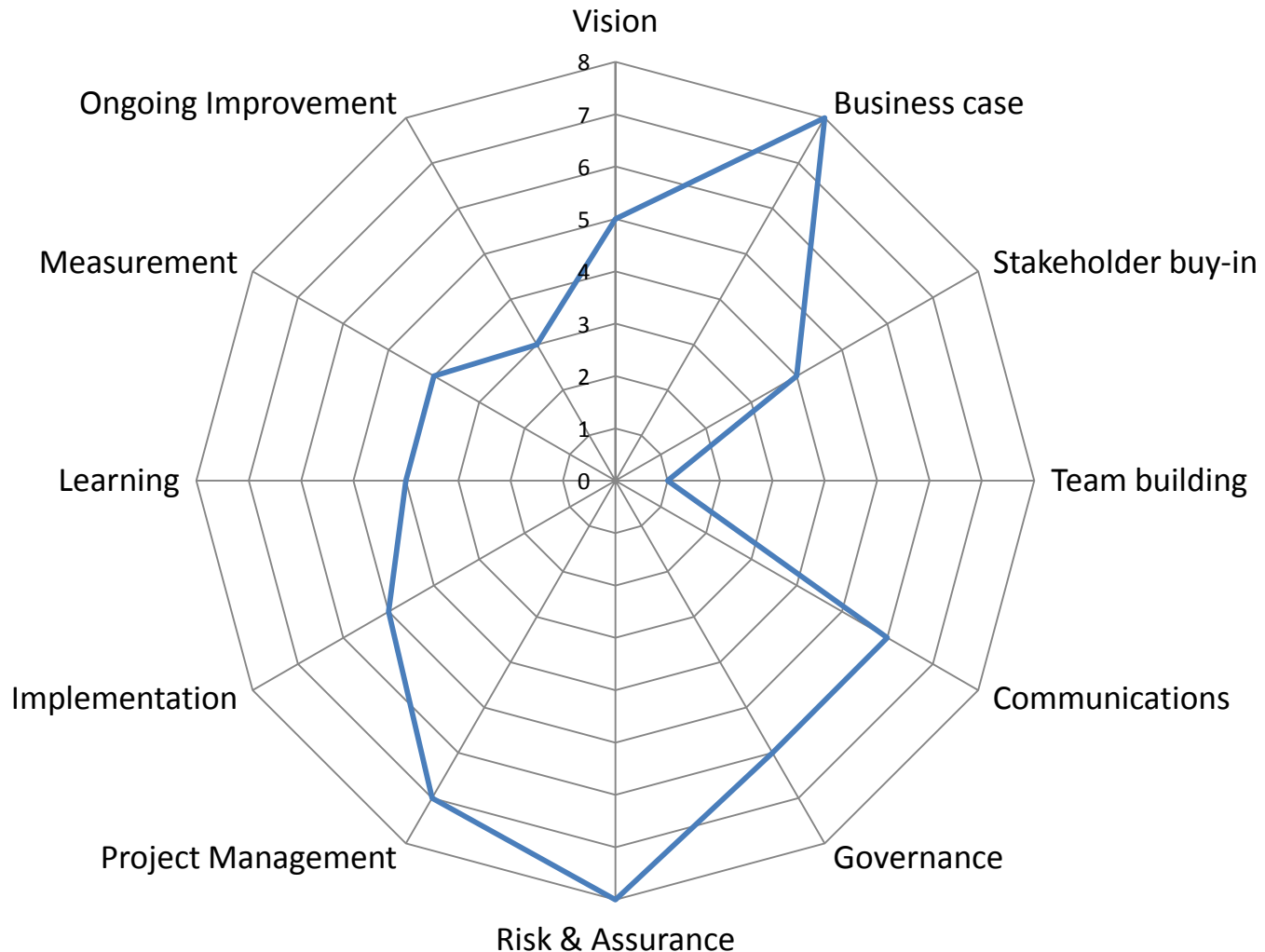
Strategic ICT

GRADUATE SCHOOL | THE UNIVERSITY OF NOTTINGHAM

The University of Nottingham
UNITED KINGDOM · CHINA · MALAYSIA

Strategic ICT Toolkit Project

The Strategic ICT Toolkit Project (SICT) is a self-analysis toolkit to help higher education institutions (HEIs) to analyse, assess and develop their strategic use of information technologies.

Developed by The University of Nottingham, this toolkit supports senior management in HE in developing towards more strategically directed ICT deployment. This project drew on the experience, insights and existing practices of a representative sample of HEIs to develop a toolkit to stimulate their understanding and support institutional development. This project was commissioned by The Joint Information Systems Committee (JISC) and the Leadership Foundation for Higher Education (LFHE).
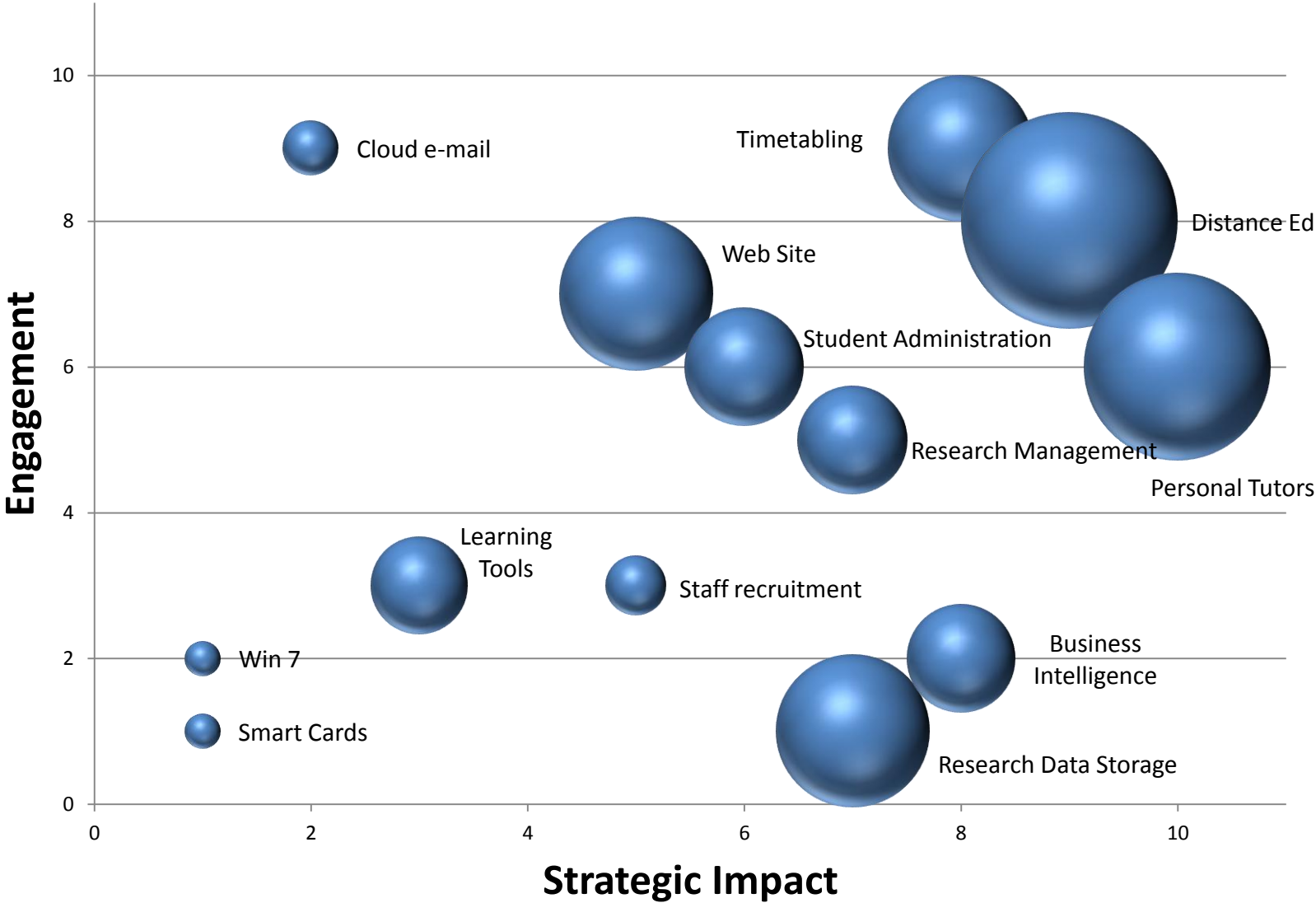
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Capacity: Modelling & visualising current & planned investments

Broad directions for IT investments

Desired actions

adapted from EDUCAUSE

A. Investments that facilitate improved student retention/progression

B. Investments that help increase revenues
1. Recruitment students, new formats of teaching, increased research grant success, new research areas, enhancements to fundraising

C. Investments that reduce operating costs
1. Measure costs + manage costs
2. Process efficiency gains
3. Workplace design
4. Shared services

Consequences

a) Source commodity IT services differently
b) Operate with maximum transparency
c) Reinvigorate IT governance
d) Develop new competencies in IT organisations

Thank you for listening….