

University of Auckland

Impacts and Challenges of the Campus Development Programme



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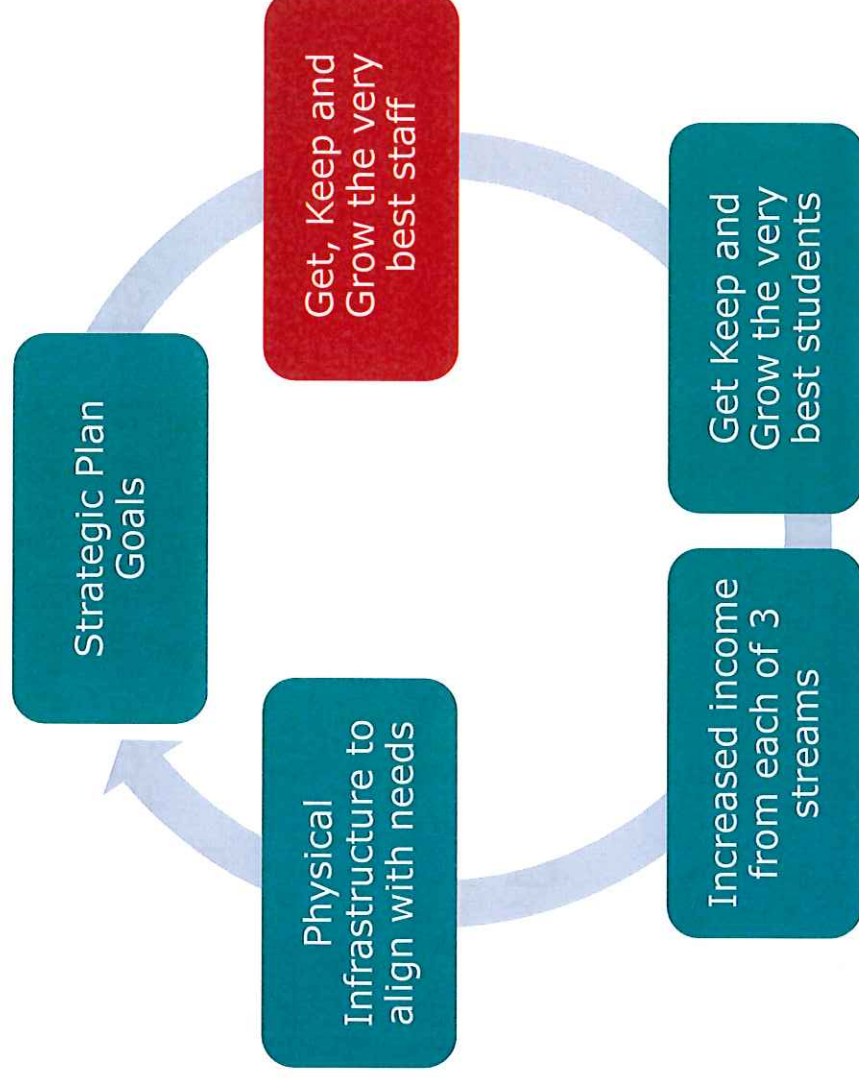
NEW ZEALAND

Te Whare Wānanga o Tāmaki Makaurau

Introduction

- University's Programme of works
- What are some of the challenges facing the university?
- How we are mitigating the procurement risk
- Asset complexity and tools to make our lives easier

Strategic Plan vs Best Facilities

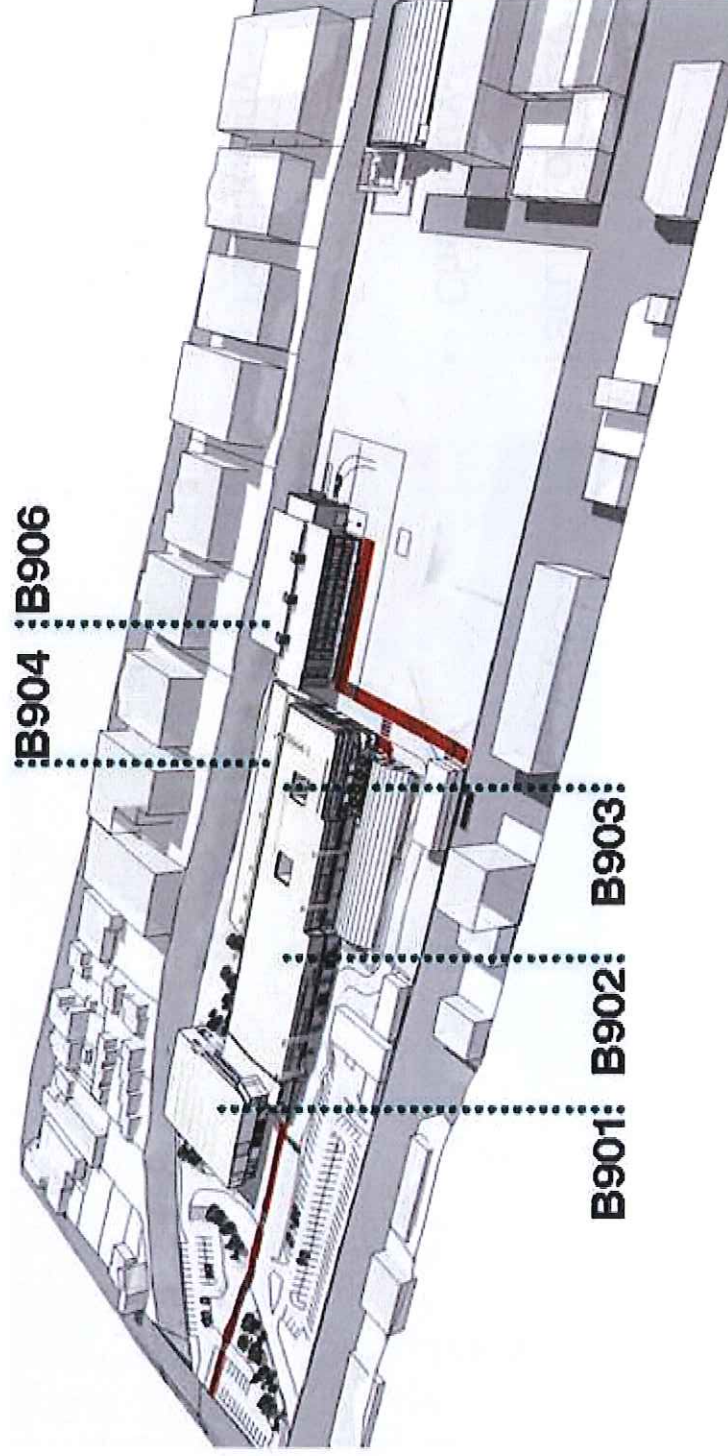


Property

- Over 670,000 m² gfa
- Capital value ~ \$1.8b
- Building numbers: 155
- Campuses: City, Grafton, Newmarket (NM), Epsom and Tamaki
- Tamaki and Epsom to be divested
- Capital spend: last 8 years \$912m
- Average p.a. \$114m – peak \$190m (2010)
- 2014 \$150m
- 2015 forecast \$145m

Newmarket

Refurbishment and New Build scope



Science Building

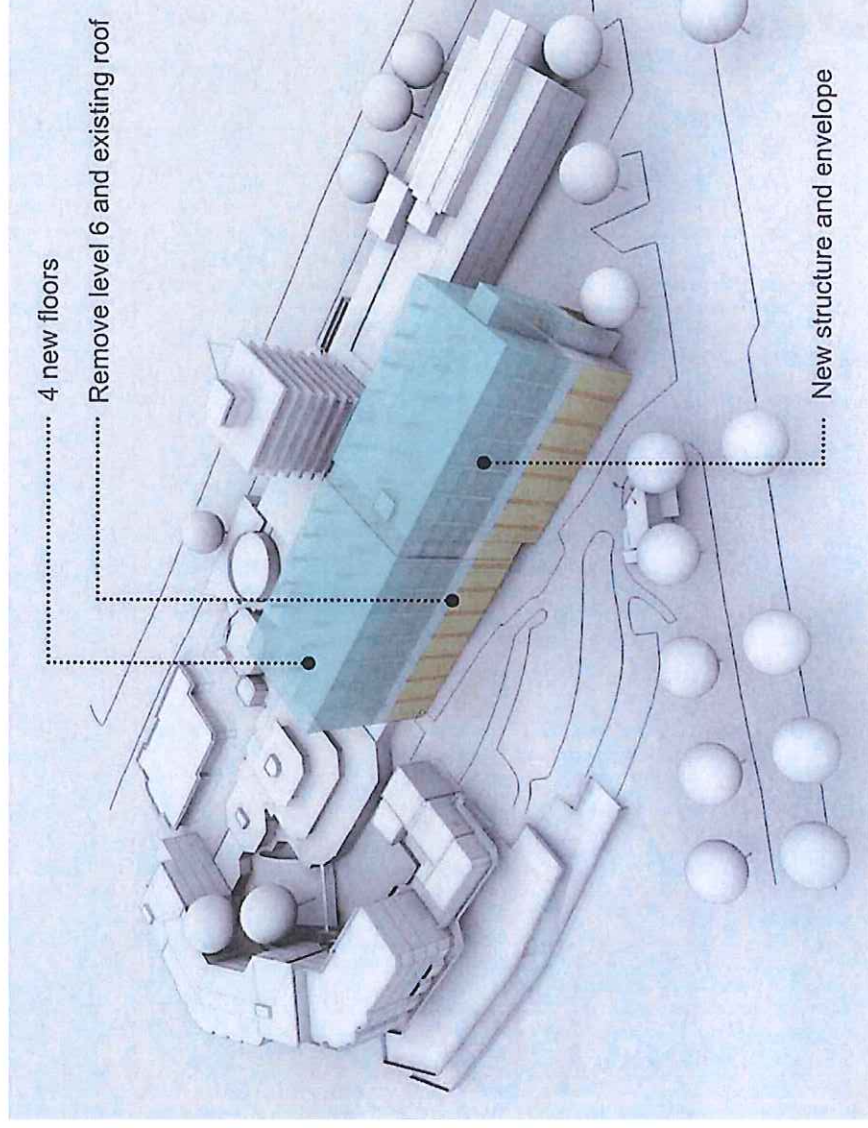


- 13 Levels
- 23,000 square metres of new build
- Significant investment over \$200m

Faculty of Science;

- Chemistry
- Environment
- Psychology
- Computational Sciences
- Various smaller research groups
- Student spaces, including lectures theatres and seminar spaces

Faculty of Engineering Buildings



Projects - Seismic



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Major Developments

Owen Glenn (Business)	\$219m	2002 - 2008
Grafton (Medicine)	\$230m	2007 - 2012
Science Centre	\$260m	2011 - 2016
Engineering B403	\$200m	2015 - 2019
Newmarket (Eng Research)	\$160m	2013 - 2015
Seismic Programme	\$40m	2013 - 2016
Recreation Centre	\$50m	2015 - 2017
Tamaki and Epsom Divestment 5-10 yr plan		
\$1b build over next 10 years and probably will continue		

Challenges

- Increased Development Programme
- Increase in size and complexity of our building infrastructure
- Capital Asset Management – technically more advanced

Mitigating procurement risk

- Recurring relationships are founded on continuous improvements
- Team approach, serving the best interests of the project – everyone takes ownership
- Team members are free to suggest ideas and innovations and to challenge each other
- Project faster, cheaper and better

Mitigating Procurement Risk

- Early Contractor Involvement
- Procurement risk is shared
- Pre-select our contractors
- Using weighted attributes system more and more; other than cost, primarily focusing on project team and methodology/programme

What were cars like 20 years ago?

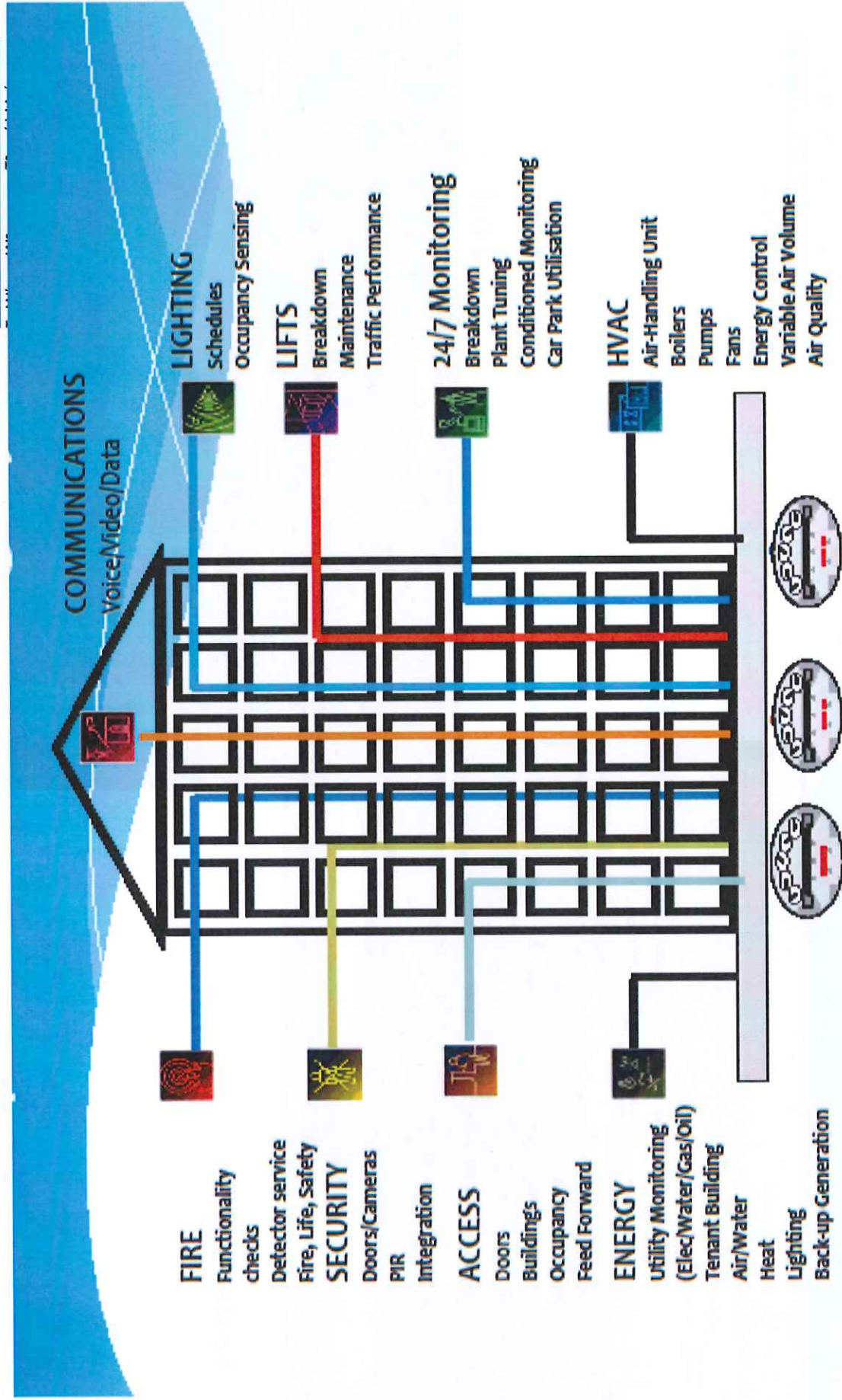


Yesterday

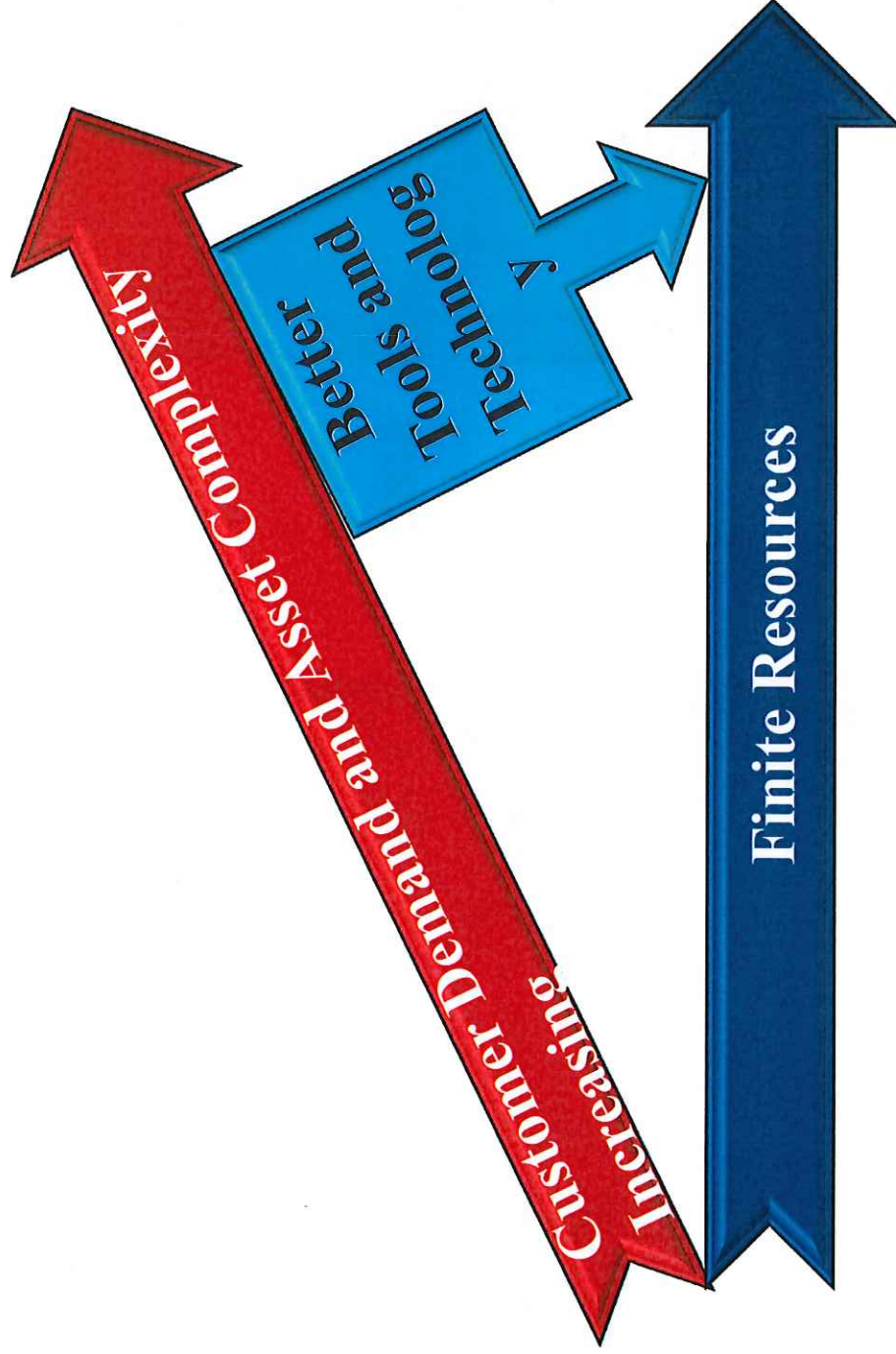
Today



More Complex Buildings



Bridging the Gap



Data Quality Improvement

SMART TOOLS

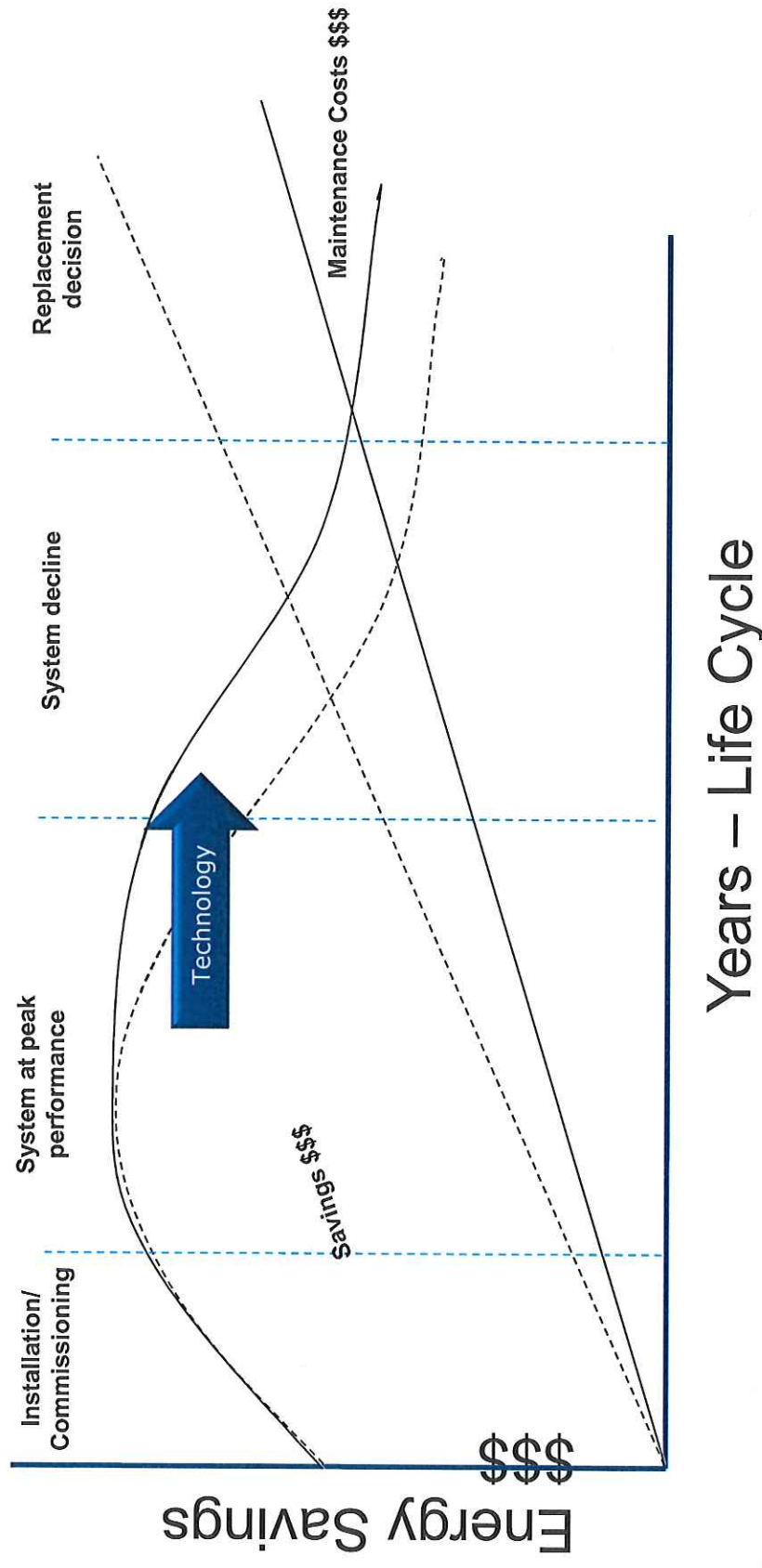


Versus



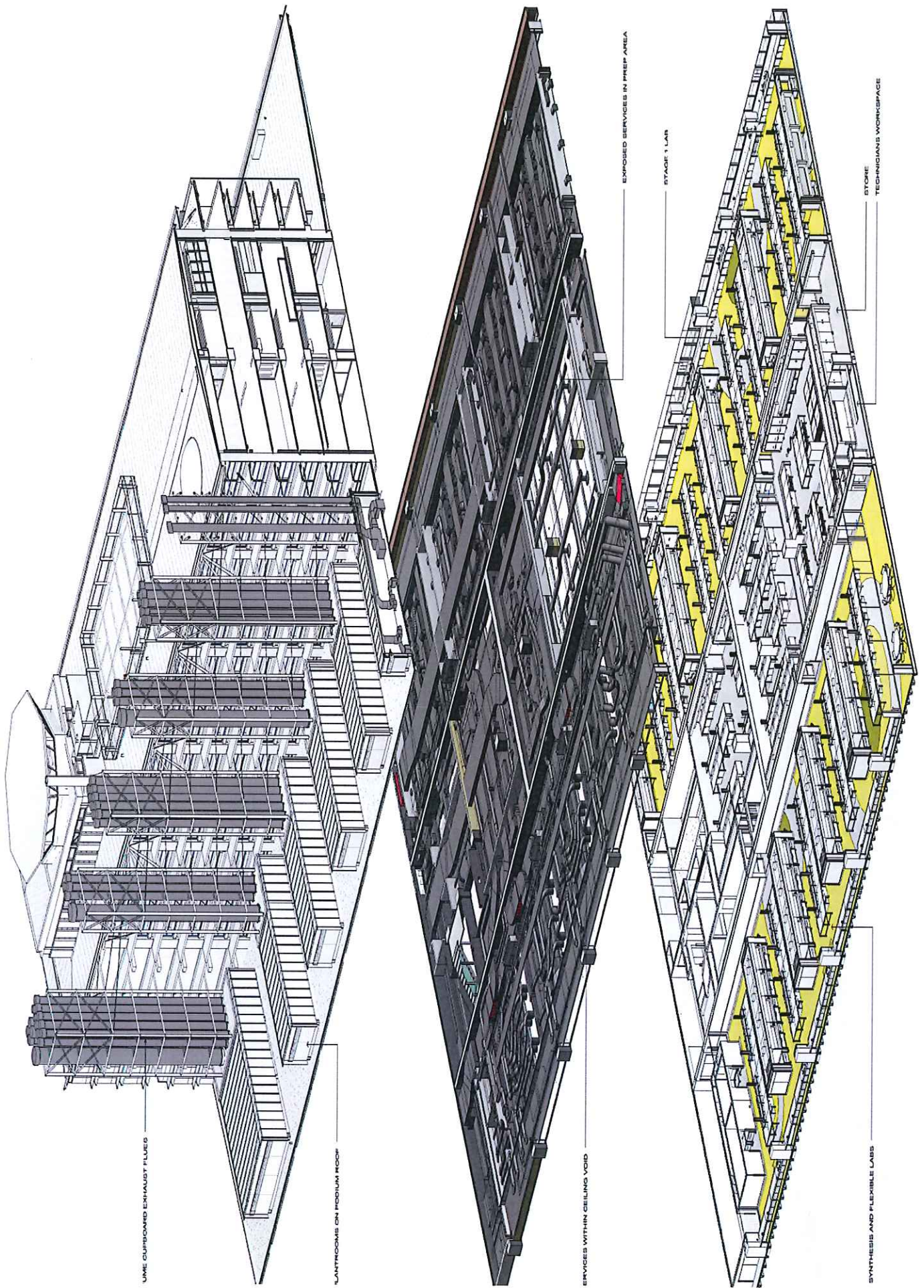
Technology Being Applied

The application of **technology**, **information** to make better decisions and facility **improvement** programs that deliver measured results.



BIM (Building Info Modelling)

- Essential in integrating all information of the life cycle of an asset
- UoA has different systems that don't integrate
- Big project that needs a lot of resource



UME CUPBOARD EXHAUST FLUES

LANTHOOMS ON PODIUM ROOF

SERVICES WITHIN CEILING VOID

EXPOSED SERVICES IN PREP AREA

STAGE 1 LAB

STORE
TECHNICIAN'S WORKSPACE

SYNTHESIS AND FLEXIBLE LABS

Summary

- Smart procurement in a very large programme – pick Consultants/Clients that we partner with; share the risk
- High performing teams to manage our very complex buildings
- Managing Assets – smart tools; BIM; accurate data collection optimising very long asset life cycles



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Questions?

