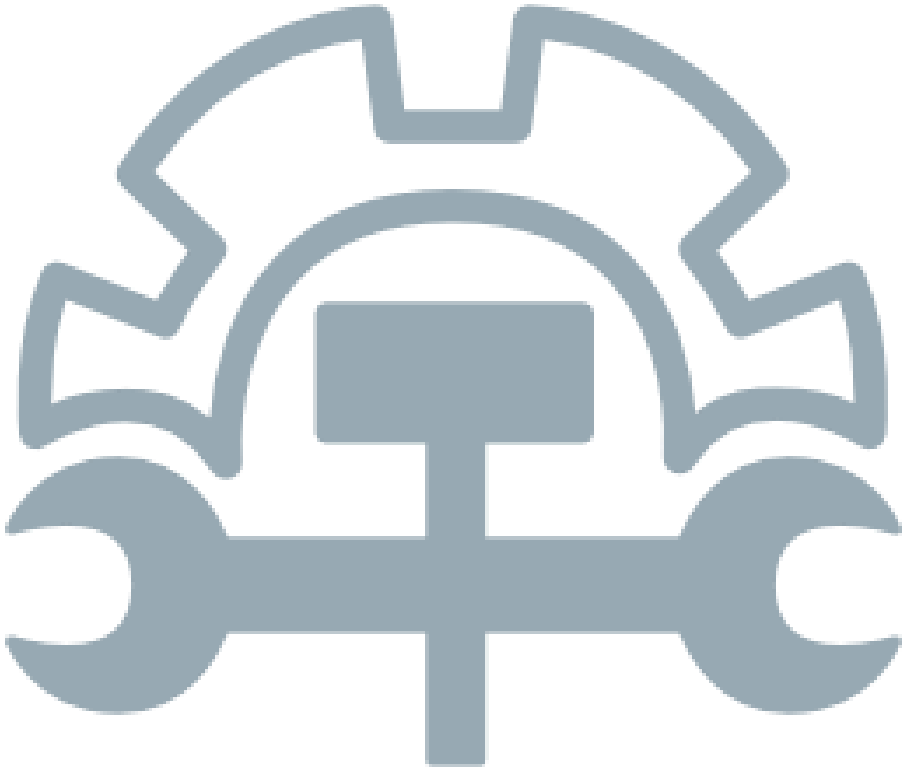
Australian National University

TECHNICAL WORKSHOPS

Stage 1 Briefing Session

1 June 2017



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PROJECT BACKGROUND

WHAT ARE THE WORKSHOPS?

- Multiple Research Schools at ANU operate independent technical workshops.
- Collaborate with researchers on the conceptualisation, design and build of novel research equipment that is not available commercially to support cutting edge and experimental research.
- This is often an iterative process that is reliant on the knowledge and expertise of technical workshop technicians.
- Also undertake maintenance on research and teaching laboratory equipment.
- A key concern of the current model is the future sustainability of the technical workshops and the ability of some Research Schools to continue providing support for their workshops.

PROJECT BACKGROUND

WHY THIS PROJECT?

- Discussions with other Group of Eight Universities indicated that many had, or were in the process of, updating their technical workshops.
- Uniforum data indicated that the ANU had a fragmented workshops workforce.
- Research Schools continue to operate under financial constraints and are struggling to maintain their technical workforce.
- The University conducted an analysis to explore the services provided by our workshops and how we can keep them viable into the future.

PROJECT BACKGROUND

HOW DID WE GET HERE?

- A concept paper exploring the current problems with technical workshops at the ANU was presented to the Service Improvement Steering Committee (SISC) in November 2015. Approval was granted to undertake a more in-depth analysis of the technical workshops at the University.
- From November 2016 to March 2017 a review of the technical workshops was undertaken by the Service Improvement Group (SIG).
- The data collected contributed to development of a Business Case that made recommendations for improvements and was approved by the SISC on 22 March 2017.

FINDINGS

12 Number of different workshops hosted within eight different Research Schools

Mechanical
39% Design & Fabrication
17% Operational Maintenance

Electronic
28% Design & Fabrication
31% Operational Maintenance

Time spent on different service activities

43 Number of wFTE working in the workshops at an annual cost of ~$4.5m

$4.5m

$133 Weighted average cost recovery rate required to fully cover salaries at current productivity levels

$18 - $112 Range of internal cost recovery charges to researchers with local workshops[1]

$1.4 million Amount cost recovered in 2016 by workshops that undertake cost recovery

5,000m² Area occupied by workshops, costing $760k to operate annually

$760k

4 Number of custom built work management systems in use[1]

32 Number of different manual lathes across the mechanical workshops

Departmental Workshops (RSES & RSPE)

- 8 Individual departmental mechanical workshops
- 33 wFTE costing ~$4.1m in wages annually
- 1,000m² of space costing $150k to operate annually

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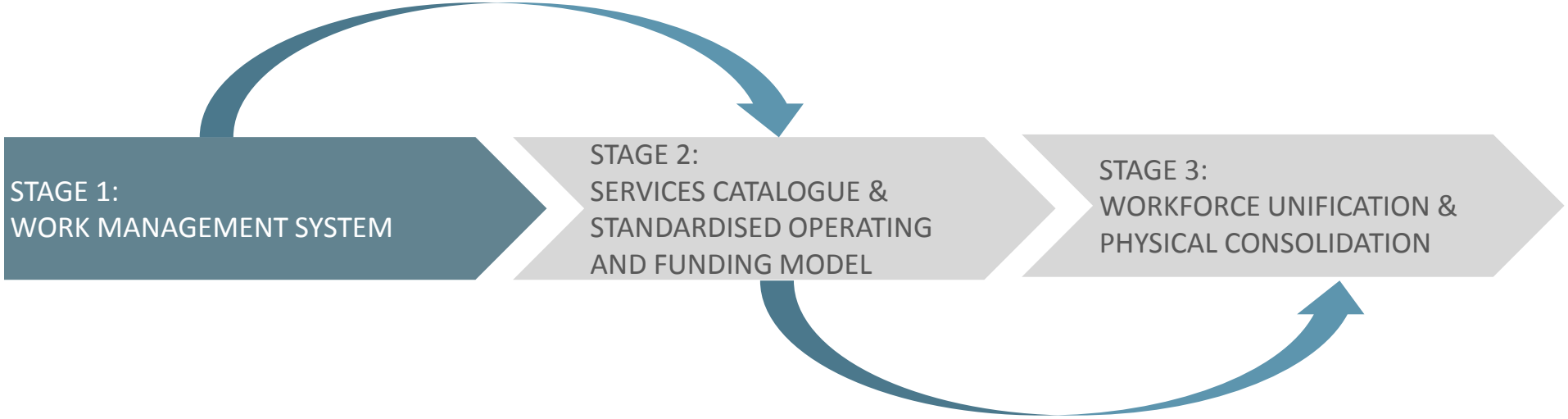
FINDINGS

	CURRENT	FUTURE
1. WORK MANAGEMENT	• Current systems are inconsistent between Research Schools in what data is captured • No reliable data sources	• A single work management system used by technical workshops to initiate, manage and track and invoice workshop services
2. SERVICES & DELIVERY	• No defined set of services • Variable levels of knowledge and expertise • Varying service delivery	• A thorough catalogue of what services are and are not available from all the technical workshops at the University
3. FUNDING MODEL	• Different levels of subsidisation between Research Schools • Researchers without a local technical workshop are disadvantaged	• A funding and cost recovery model that is equitable and accessible for all users of the technical workshop services
4. WORKFORCE	• Depth of both skills and knowledge, but it is siloed between workshops • No formal knowledge sharing or training • No workload sharing	• A unified workforce with the right skills and capacity to deliver services • Career path and skills development including a apprentice scheme with Indigenous Australians
5. DUPLICATION	• Inefficient duplication of equipment and spaces • Specialised equipment is siloed in workshops	• Optimised footprint and equipment needs through at least partial consolidation

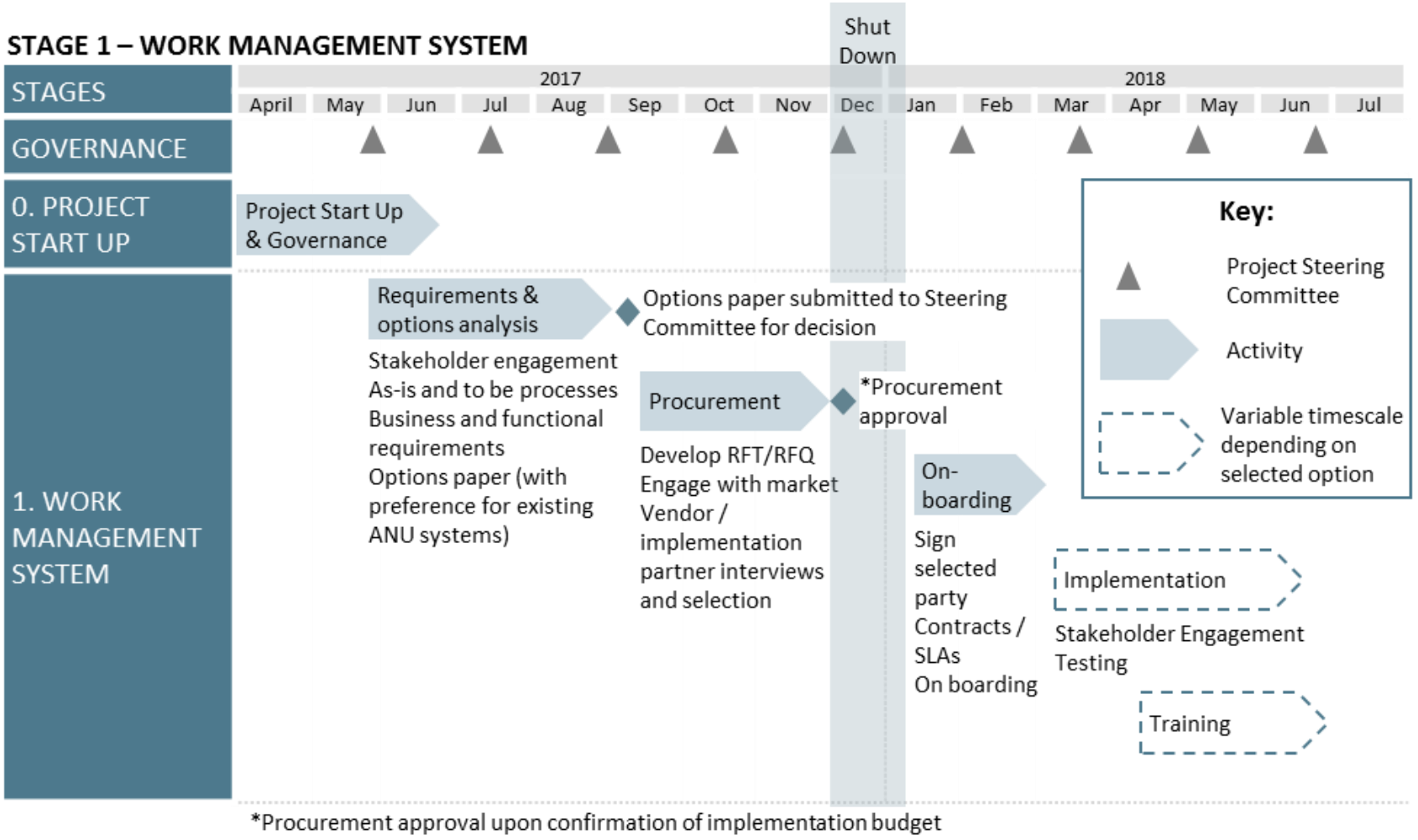
PROJECT STAGES

- Establish standardised processes and data reporting requirements
- Collect data on time effort by job, services and activities, and customer
- Use data to inform service catalogue and a funding and costing model



- Examine how changes to the operating model changed how the researchers use the workshop
- Develop a workforce strategy that meets the needs of the researchers
- Devise and implement a consolidated footprint, using data and consultation

STAGE 1 TIMELINE & ACTIVITIES



PROJECT SCOPE

WHAT WORKSHOP SERVICES ARE INCLUDED IN PHASE 1 OF THE PROJECT?

- Design services (including idea and feasibility testing)
- Fabrication services
- Maintenance and repair of research and teaching laboratory equipment

WHAT WORKSHOP SERVICES ARE NOT INCLUDED IN PHASE 1 OF THE PROJECT?

- Building maintenance services
- Operation of research equipment
- Workshop equipment used for teaching and learning

WHAT WE WILL DO NEXT?

- We will be in contact with the workshops and their managers to arrange meetings to discuss current workshop processes
- Launch a project site that will be regularly updated with information and documentation about the project
- Distribute this presentation and a summary of the questions asked and their answers

CONTACT DETAILS

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