THE UNIVERSITY of ADELAIDE

ADELAIDE BUSINESS SCHOOL MANAGEMENT DISCIPLINE

Research Areas and Connectivity

November 2021 research day summary

Adelaide Business School's Management Discipline offers the benefit of big thinkers focused on complex issues that affect business, society and government.

The Management Discipline investigates broad and diverse business, industry, social and environmental problems and analyses themes, alliances and connections.

The Discipline's innovative, impactful research adds value to existing or new public and private projects of all sizes, as well as large-scale programs across government and industry.

The team's builds synergies for maximum benefit, approaching intricate systemic problems through multidisciplinary research across its unique areas of interest and speciality. These include:

- **integrating effective, logical systems** with people, culture, technology and complex, multi-industry project management
- **motivating people to change or adopt new behaviours**, leadership for productivity, biocultural influences on the workplace, and organisational communication
- **socio-technical analyses of and modelling** for engineering, technology, computer science and education/training sectors
- **niche expertise in social implications around transition to 'net zero' emissions** or renewable energy, considering impact of policy/government support, industry opportunities and the ultimate goal of a 'circular economy' and AAA corporate rating
- **social policy for community acceptance, social/economic wellbeing –** analysing social problems in new ways that connect people, research and data
- **cybersecurity and risk management, productivity and systems reliability** analysis, big-picture planning and asset management for complex, widescale infrastructure (including whole-of-government)
- **intercultural and inter-country communication**, business relations, alignment and co-creation of values linked to service practices focusing on sustainability of new entrepreneurs in Australia (such as Australian-Chinese relationships).

The Management Discipline has concentrated research expertise that can be harnessed for maximum local and broader gains. Its staff, researchers and higher-degree students have published multiple papers on their diverse speciality topics. The team has an ongoing interest in exploring new and improved ways of working together to maximise University, community and individual benefits.

adelaide.edu.au

We stand taller together – combined expertise for mutual benefit

Adelaide Business School's purpose and history

The University of Adelaide has a proud history of delivering world-class courses in business as the first Australian tertiary institution to offer business education in 1902.

With an enviable network of researchers, teaching staff and alumni, the Adelaide Business School offers diverse, cutting-edge courses and research options for those who want to make a real impact across industry, government and in the world of business. We host research seminars attended by staff, higher-degree students and members of government and the business community.

Our disciplines cover:

- Management
- Entrepreneurship
- Marketing
- Accounting
- Finance and banking.

We have multiple researchers, staff and higher-degree students working on current, important topics that affect the whole of society, industry, business and government.

The Management Discipline

One of five disciplines within the Adelaide Business School, the Management Discipline's critical research capabilities interact and overlap, sharing a critical objective to deliver socioeconomic and sociocultural impact.

Comprising General Management, Project Management, Cyber Security Management and International Business, this team of people has research capabilities covering diverse industries, applications and interconnected themes.

Some of these are systems thinking, systems engineering and management, lifecycle and sustainability management, and risk/asset management.

Our team explores connections with systems that rely on human behaviour, such as stakeholder management, human resources management, leadership and broader management, and even cyber or digital security and allied systems such as artificial intelligence and machine learning.

Our research uses systems approaches to address complex management–business problems, including for maintenance/reliability, mathematical modelling and network diagramming.

Project management is a cross-disciplinary area of expertise that's vital for organisations to achieve large or small objectives. Project management skillsets are used in defence, aerospace, construction, engineering and transport – and increasingly also in areas such as IT, banking and finance, disaster relief recovery, climate change, telecommunications and mining.

Organisations in the public and private sectors rely on all four aspects of management to be effective and deliver outcomes, whether time-bound or ongoing.

Research focus areas and initiatives

Research driving change and creativity

Adelaide Business School research isn't just world standard – in many cases, it's rated above it, as evidenced by our (ERA) Excellence in Research Australia, 2018 rating.

Our people consult to the public and private sector nationally, building our school's reputation for relevant, meaningful research that makes a difference to commercial or public policy deliverables.

We apply a local lens to these uniting problems faced across the world.

Social engagement and co-creating values for change

Our marketing research incorporates social engagement, value co-creation, business networks and the wine industry.

We investigate the social and environmental aspects of the need for energy 'net zero' transition, new, sustainable technologies and the policy or commercial levers that influence their success.

Complex project management applications and education, productivity and disaster restoration are other areas of interest.

Cyber, risk and systems reliability and management

We study the socioeconomic impact, efficiency and effectiveness of various project management methods and systems, and the human or behavioural aspects of cyber security. \

Risk and asset management, productivity, and systems reliability analysis for complex, widescale infrastructure are specialities.

Partnerships and other opportunities

Our researchers have ongoing partnerships with universities, corporations and governments to lend their expertise and research interests to solve complex supply or infrastructure problems.

Dr Tracey Dodd's appointment as Senior Advisor to the Energy Sector Reform Division of the Victorian Department of Environment, Land, Water and Planning is relevant here.

Another example is Assoc. Professor Indra Gunawan's systems reliability in critical infrastructure expertise assisting SA Water, and his work on maintenance scheduling for brown coal power stations.

The Management Discipline is open to partnering with internal (eg University) or external (eg industry or government) stakeholders for mutually useful goals or common themes.

Our team's research themes

Systems design of ongoing infrastructure, managing risk and corporate assets

Unlike designing systems engineering considerations for short-term or finite projects or developments, ongoing infrastructure – such as transport, defence or whole-of-government – requires other considerations, milestones and project management expertise.

Our researchers can offer high-level transdisciplinary skills in holistic systems thinking for complex, real-world issues spanning many types of industrial systems. They use systems engineering methodology, designing frameworks for sociotechnical infrastructure and consider both qualitative and quantitative aspects – the people and the technical.

Our researchers also have skillsets in maintenance scheduling for core assets (such as power stations), mathematical modelling to optimise systems or services, and analysing computer network systems reliability. We are also interested in frameworks for managing risk where probability is unknown.

Another area of interest is risk transfer and management in complex systems where statistical probability may be unknown.

Complex project management, environmental and social governance, behavioural aspects of systems/ technology failure

Managing ESG (environmental and social governance) is a particular strength of the Management Discipline's researchers, who have a keen interest in renewable energy, managing cultural change towards sustainability, and engaging stakeholders in reducing social perception barriers. Offering tailored solutions by working in partnership is one way that we can assist industry or organisations to problem-solve.

We apply project management methodology to complex problems across multiple industries covering topics such as remote working, productivity and disaster management.

People and change

Research topics focusing on people, behaviour and motivation cover a diverse breadth of research conducted in the Management Discipline.

One specialist field considers the impact of workplace policies, systems and culture on individuals and families, with a unique model designed, based on research conducted in Sweden and Australia. The AAA method of management prioritises workplace wellbeing and social support, considering actions for systemic cultural change that values work-life balance and emotional health.

Another researcher is investigating the importance of 'soft skills' in project management, such as respect, accountability and clear communication for roles and responsibilities. This research recognises that systems are made up of people, who impact project outcomes or profitability.

This socio-technical aspect of sectors or industries is also a hot topic for research into *why* people do what they do – considering mechanisms not probabilities. This is relevant for artificial intelligence and automation project design, as well as successful adoption of technological change by workforces.

Employability research focusing on a common language and expectations between academia and industry has implications for graduate transition from university to industry for realising best potential.

A connected topic investigated by another researcher considers the importance of psychological safety in workplaces so that staff and managers can share ideas or knowledge without fear, in the spirit of genuine innovation.

Cyber security management

Investigating a critical topic in today's world, we consider the human aspects of cyber/digital security for industry, as well as advising on how to measure and implement structural controls.

We're interested in the actions and processes that influence behavioural choices and what businesses stand to lose in the event of a cyber security breach.

One of our researchers has created a free online tool that measure's an organisation's success in safeguarding digital security. Established partnerships include the Human and Social Modelling and Analysis team, National Security & Intelligence, Surveillance and Reconnaissance Division unit of the Defence Science and Technology Group.

Connections within the Management Discipline

Common *themes* in our work in the Management Discipline – as well as our combined *expertise* – are of great benefit to diverse public and private stakeholders.

We see current and future opportunities to help organisations to think innovatively about new policy or compliance-driven opportunities, applying both quantitative and qualitative methods.

One example is the global quest for AAA ratings, 'net zero' emissions and renewable energy. Our researchers currently apply a broader, holistic view to effectively plan the transition to and manage the various risks of a renewable energy future.

Another context is disaster restoration, including for climate events – rather than demolishing and rebuilding, evidence shows that restoration has sustainability, financial and environmental benefits.

We are also interested in finding better ways to connect with each other and our own areas of interest and expertise. The Management Discipline will conduct ongoing research presentation days to further build connectivity and share information, including:

- sharing opportunities to work with external or internal stakeholders
- sharing opportunities for funding
- considering synergies
- adding value to our work
- challenging ideas
- approaching wide-scale ideas through research
- joining professional societies and networking
- issuing industry-friendly communications
- meeting regularly to focus on connectivity and operationalising ideas.

The Management Discipline team members

Discipline Head, Management:
Dr Sam Baroudi
sam.baroudi@adelaide.edu.au

<Sam to add details>

Title
Name
Email

Title
Name
Email

Title
Name
Email

Title
Name
Email

Title
Name
Email

Title
Name
Email

Title
Name
Email

Title
Name
Email

Title
Name
Email

Title
Name
Email

Title
Name
Email

adelaide.edu.au