

COMMUNITY OF PRACTICE

RESEARCH AND INNOVATION WORKSHOP NOTES

JULY 2020 |

RESEARCH & INNOVATION COMMUNITY OF PRACTICE

Summary of workshop discussions held in the Research and Innovation Community of Practice event held on the 21st of July 2020

SESSIONS

1

PG3 Fore-sighting Workshop

11:10am | 30 min Discussion | 20 min report back

Session includes:

- Reflection on panel discussion
- Ideas for evolving our research and innovation ecosystem over the next five years
- Global practices and trends in research and innovation in the higher education sector

2

PG7 Break-out session on an Ideas Board

Four key enablers Culture, Capability, Partnerships and Careers

1pm | 30 min Discussion | 10 min per theme report back: *3 big ideas*

Session includes:

Lead for each stream to facilitate session:

1. Key drivers, risks and opportunities which will shape the university over the next five years
2. Prompting questions from the enablers
3. Report back on themes

SESSION 1

FORESIGHTING WORKSHOP

- REFLECTION ON PANEL DISCUSSION
- IDEAS FOR EVOLVING OUR RESEARCH AND INNOVATION ECOSYSTEM OVER THE NEXT FIVE YEARS
- GLOBAL PRACTICES AND TRENDS IN RESEARCH AND INNOVATION IN THE HIGHER EDUCATION SECTOR

FORESIGHTING WORKSHOP

REFLECTIONS ON THE PANEL DISCUSSION

KEY TAKE-AWAYS

- Digital innovation needs to connect everything we do
- Recognition of interdisciplinarity and the need for a systems approach.
- Maintaining a focus on gender, equity and social justice while rebuilding post-COVID
- Intellectual infrastructure will be core to restructuring and uplifting the economy, society and a sustainable future
- How do we create new partnership models for industry in this working environment
- the role of social science to understand technology use and futures
- In these uncertain times, showing humanity is very important for the wellbeing of our staff and students.
- Applying the SDG's framework to the local level

NOTES

- How universities can better prosecute the argument for the impact and value of research to the recovery, both with government and society.
- Huge demand for biotech e.g. synthetic biology and new ways of making food that are climate resilient. UBS forecasts that the plant based foods market will grow 28% per year and reach US\$85 billion by 2030.
- Where there is data available, the SDG framework is being applied to interlinkages of the unintended consequences of autonomous vehicle innovation impacts on biodiversity and the environment.
- The assessment of impact of environment issues on health are included in the methods to apply the SDGs as an organising framework.
- Government can benefit from a shared research agenda, resetting relationships between government and government sector.
- A need for a purposeful strategy around business model
- A need for people to acquire digital skills
- Digital transformation will be similar to "electricity" in roaring 1920's.
- Need to build the intellectual capital infrastructure
- A combination of engineering data analytics, AI cyber but also in combination with psychology, anthropology and design thinking to underpin innovation. Very important in the history of user experiences.
- Greater diversification to meet research and industry needs with strong industry relationships
- A coordinated and strategic approach to investing in critical biodiversity science and data capability critical research is needed.
- Innovations and capabilities are fundamental to deliver policy regimes.
- Need to integrate policy research with technological advances
- This is not a 'blip' expect generational level impacts
- The Q --- What is the role of the academic? was provoking
- Supporting SMEs now will lead to benefits later
- The problems outlined across socio economic and environmental challenges relied on technology
- The need for training and great opportunity for RMIT
- There's an appetite for big picture thinking. A need or a push for a 'major reset' to respond to the complexity of the challenges we face globally
- No present focus on the racial tensions that influence so much of global society - expect that as COVID eases we will see these re-emerge
- There seemed to be a single scenario view of the future - the idea that there is a determined window of recovery is perhaps not realistic
- On trend in direction we are going
- Potential for new models for engagement with industry sectors
- Ability to look at more sustainable model for partnerships. Look at connectivity

FORESIGHTING WORKSHOP

IDEAS FOR EVOLVING OUR RESEARCH AND INNOVATION ECOSYSTEM

Key Take-Aways

- Focus on applied interdisciplinary research with high level of industry input
- Partnerships - uniquely positioned as catalyst. how do we transform the value that industry need from us
- Expanding our research globally (Vietnam, India) with greater research support, more partnerships and more HDR students
- Expanding our research internally – applying our tools and findings to the RMIT community and workspaces
- Becoming a more agile research University – adapting to the needs of Industry as they change ever more rapidly, and even develop new micro-credentials to cater to their needs
- Investment in human capital
- Greater interdisciplinarity
- Understanding the social and cultural dimensions of technology
- Research for the benefit of Australia - corporate partnerships in line with RMIT values

NOTES

- Developing scale in RMIT VN, in terms of HDR and partnerships.
- Research further integrated with teaching for high-speed delivery of new and emerging knowledge for people wanting to keep their skills and micro credentials up to date in a rapidly evolving world and with great competition by 'freely' available information. Postgraduate micro-credentials with fast turnaround with strong industry and community engagement.
- Better leveraging governments and industry in VIETNAM to support HDR offshore program
- Importance of social sciences for research in the next 5 years. Need to continue developing strong and targeted relationship with partners, building on those already in place, and working together to develop and translate research.
- Focus on applied interdisciplinary research with high level of industry input
- Expanding our research globally (Vietnam, India) with greater research support, more partnerships and more HDR students
- Bringing industry in earlier as a strategic partner, and developing deep, holistic partnerships – working together and placing students etc.
- Ensure to continue conducting interconnected and interdisciplinary research, including and incorporating other disciplines such as the social sciences or arts on STEAM projects
- Case studies showing examples at all stages from basic research all the way through to real world translation
- Consideration of professional doctorates (Not DBAs) as per successful models (e.g. IE Business School, Cranfield) to enable stronger connections between industry professionals and RMIT and to provide these individuals with research training
- Facilitation of social and commercial entrepreneurship – being able to pursue ideas/opportunities quickly
- More interdisciplinary teams that contribute to solving problems through multiple lenses.
- Developing our skills to work across different levels within a partnership or collaboration is important - industry (national, international)
- Research teamwork seems to be even more of a priority now with academics having less time for research
- Ecosystem value definition, creation, capture
- Active identification of outcomes which can lead to impacts and supporting these
- Helping academics create quality time to deliver on projects - perennial challenge but more so when working from home and school is out
- How academics as species within the eco-system survive and thrive
- Skills on how to share short-term and long-term vision and commitment...develop trust through meeting achievement/value markers
- Greater emphasis on holistic frameworks (understanding how to put all the bits together to get an outcome)
- Understanding the social and cultural dimensions of technology
- Expertise in big project development and facilitation
- Strengthen the international dimension of the research and innovation ecosystem.
- Recognising ourselves as intelligent contributors and connectors - our responsibility to help government better understand *multiple scenarios as part of planning and policy
- Encouraging a different, and more accurate understanding of what Research and academic is, by agents in our ecosystem - namely government
- Need a more sophisticated understanding of impact & translation - one that is multilinear/pluralistic that reflects the open-endedness of research
- Applying the SDG's framework to the local level
- Need for cross-disciplinary. However, recognising the value of discipline driven and interdisciplinary research - both are important
- University based think tanks could be a great way of offering bi-partisan and transparent thinking / solutions to challenges, and a collaboration point for industry, government and the community
- Influence the value of research to government - partner, advocacy

FORESIGHTING WORKSHOP

GLOBAL PRACTICES AND TRENDS IN RESEARCH AND INNOVATION

KEY TAKE-AWAYS

- Major focus on offshore enrolments, and how to generate scale.
- Need to deepen and refocus our international strategy in the post-COVID world
- Solving the big problems in line with RMIT values
- Building on interdisciplinary approach

NOTES

- Given the changing world of work, we can use our own research capability and expertise (in areas like digital/social/health) to inform and transform the way we ourselves engage in collaboration/relationships.
- Significant growth in research funding. We need to invest in anticipating key areas and preparing to take the opportunities as they come
- More distinct career paths, with ability to focus on learning vs teaching vs combination of both
- Strangely levelled playing field (it is equally difficult/easy to connect to someone far away as nearby)
- Perpetuating further global inequality
- Conversations about research training and best practice/best models - ACOLA review, discussion of "US" vs "European" models, etc
- Greater unevenness in investment in R&D across countries and regions
- Donors/research supporters will have to decide where to invest money, and universities maybe a lower priority
- Partnership building
- Understanding digital unevenness and social inclusion
- WFH, families and inequalities
- We need to refocus our international strategy in the post-COVID world with uncertain political environments.
- Looking beyond our local focus - being a greater part and contributor to national and international research networks and agendas
- Strengthen our understanding internally in our role as being a connector between players in the ecosystem
- big agenda, solving the big problems - big data
- Needs to align with values
- Infrastructure capital
- Micro-cred

SESSION 2

FOUR KEY ENABLERS: CULTURE, CAPABILITY, PARTNERSHIPS AND CAREERS

- **KEY DRIVERS, RISKS AND OPPORTUNITIES WHICH WILL SHAPE THE UNIVERSITY OVER THE NEXT FIVE YEARS**
- **PROMPTING QUESTIONS FROM THE ENABLERS:**
 - *How do we evolve our research and innovation ecosystem to deliver greater value to our partners and enable RMIT to succeed in an increasingly disrupted future operating environment.?*
 - *What are the key enablers on the pathways to impact that RMIT need to build and invest in?*
 - *How do we adapt our models of collaboration to facilitate deeper and more strategic partnerships?*
 - *How can we develop capability more strategically that meets emerging and future needs?*
 - *How do we design contemporary and fit for purpose career pathways for our staff and aspiring researchers?*
 - *How do we continue to grow and embed a mission based culture that is focused on meeting the needs of society and creating impact from research*

ENABLERS: CULTURE, CAPABILITY, PARTNERSHIPS AND CAREERS

1a KEY DRIVERS THAT WILL SHAPE THE UNIVERSITY OVER THE NEXT 5 YEARS ...

KEY TAKE-AWAYS

- We need to invest in people – nurture them and help them continue to develop.
- Wider partnerships network to create greater research funding opportunities leading to more impactful work.
- We need to be more agile and responsive to external stakeholder needs.
- We need to understand and manage external expectations - government and the community.

NOTES

- How can we enable people to be more self-sufficient?
- Need to be more adaptive and future-oriented in our RI work including appreciating how future change is not just a topic to study.
- Showing humanity is important for the welling being of our staff and students.
- Industry challenges require multidisciplinary in solution finding.
- Wider partnerships network = provide higher research funding, for us to do even better and more impactful work.
- Expand the network, impact buy obtaining wider collaborations.
- Training and motivation.
- We need to leverage collaborations that academics are developing – support them across the whole lifecycle of partnership development. It is very difficult to grow and embed any kind of culture. Ways we can attempt do to this is to reward people w ho do this internally and bring in externals you have the capability to do this.

ENABLERS: CULTURE, CAPABILITY, PARTNERSHIPS AND CAREERS

1b KEY RISKS THAT WILL SHAPE THE UNIVERSITY OVER THE NEXT 5 YEARS ...

KEY TAKE-AWAYS

- Capability Gaps: a greater understanding of how to collaborate with industry partners is needed more broadly across the university.
- Transactional, reductionist, anxious approach to research impact that overlooks actual impacts and real lessons from projects
- The ability to attract international HDR candidates
- The absence of a researcher career trajectory story and the value researchers add

NOTES

- Our research needs to be rigorous, trustworthy and leading edge to build and support our reputation
- People are under a lot of pressure depending upon how long COVID is with us
- Do existing staff across RMIT have the capabilities to deliver the research outcomes we seek?
- Linear vision of research impact that ignores the impact on researchers and the university
- People remain in their disciplinary silos
- The current round of departures we lose key and valuable people.
- Understanding that a small group brings the most funding - do we bring interdisciplinarity towards these specialisations or do we share funding across disciplines
- The divide between Research Intensive and Academic careers - and the work required for each not always optimal or economical
- Due to workload demands, there is little time, capacity or scope for Academics to innovate or deviate in their course design - causing tension as demands to innovate in accordance with disruptive external forces / knowledge shifts become frustration rather than an opportunity
- Capability gap between different areas of the Research community
- Many of our staff don't understand how to do industrial research / collaborative work with a company
- We are not the only ones thinking this way - other institutions will be aiming to do the same thing. We need to move FAST and work with our existing partners (low hanging fruit)
- Many conflicting directions - more publications vs impact - can be a difficult balance to strike
- Challenges to bring new international candidates.
- Not being able to tell a career trajectory story of its researchers and the value the researchers add

ENABLERS: CULTURE, CAPABILITY, PARTNERSHIPS AND CAREERS

1c KEY OPPORTUNITIES THAT WILL SHAPE THE UNIVERSITY OVER THE NEXT 5 YEARS ...

KEY TAKE-AWAYS

- Building deeper relationships with existing partnerships.
- Leverage ECP work over last 4 years to foster interdisciplinary high impact policy/practice/industry relevant research
- Opportunity to use our reputation as industry friendly university to create ongoing relationships with core industry partners
- Developing a think tank at the university similar to Climate Works at Monash that helps set the agenda as well as follow the agenda
- To leverage our status as an 'industry-focused' applied research university through partnering with industry to solve problems
- Trusted strategic partner through being a connector - fostering notion of trusted adviser/partner
- Reimagining postgraduate research opportunities for international candidates.

NOTES

- Opportune time to bring in new capabilities in areas of focus
- Helping partners not only solve problems but recognise them in the first place by taking an open minded future oriented approach
- To provide distinctive forms of research training to HDR students
- Attract leading international talent
- Following the world manufacturing industry trend, focus on South-East Asia.
- Communicate successes through social media (e.g. LinkedIn) and encourage others to do this.
- Greater number of joint appointments with industry
- Improve access to alumni groups
- Important to show humanity to show our staff, students and partners for their welling being. This will enhance productivity and long term partnership.
- Multi-discipline approach with partners as well as students
- Challenge the idea that we should and can do everything - Specialisation is an opportunity in some spaces, recognising where this makes sense
- Building deeper relationships with existing partnerships, and working to find other opportunities for RMIT to partner within their organisation
- Leverage AIG and peak industry bodies as partners / networks to take our message into the broader community. We can become an influencer
- Embed our HDR / masters students into our partners. Masters (by research) students are a great "try before you buy" value proposition for a partner. MCW is potentially too short
- Adjunct appointments are a means by which we can access facilities we don't have currently
- Overseas partnerships - particularly in VNM
- Professorial career pathway
- Identify new opportunities for international candidates with specific skills in specific areas e.g. Masters by Research
- Economic downturn provides opportunity for further study opportunities

ENABLERS: CULTURE, CAPABILITY, PARTNERSHIPS AND CAREERS

2a How do we evolve our research and innovation ecosystem to deliver greater value to our partners and enable RMIT to succeed in an increasingly disrupted future operating environment?

KEY TAKE-AWAYS

- Closer coordination between R&I and senior researchers around potential partnerships, including multi-organisational consortia.
- Partner centric – working with industry to solve big problems.
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NOTES

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- To provide distinctive forms of research training to HDR students
- Attract leading international talent
- Following the world manufacturing industry trend, focus on South-East Asia.
- Challenges between the conflict of motivations between industry and researchers.
- The intersections of industry and students, in the research mix. Building capability by students and researchers being in workplace environments (industry partners) is mutually beneficial
- Partner centric rather than research centric. Partnerships are NOT sales! And cannot be viewed as such - we should not perceive ourselves as the source of all knowledge and truth.
- Offering research training to industry professionals (i.e. professional doctorate) to build industry capacity for applied research
- Working with industry to solve problems
- Efforts to draw out synergies across projects in different parts of the university and cross-fertilise ideas between them

ENABLERS: CULTURE, CAPABILITY, PARTNERSHIPS AND CAREERS

2b What are the key enablers on the pathways to impact that RMIT need to build and invest in?

KEY TAKE-AWAYS

- Systems that make it easy to get things done.
- High quality researchers! Recruitment and retention
- PhD students are the drivers of research in many (not all) parts of RMIT
- Repurposing Masters by Research

NOTES

- Opportunities to learn what different people are working on and to find synergies
- People! We need to keep investing in our researchers and become a preferred workplace of great researchers
- Top quality PhD students who can be part of research teams
- Research training
- Sophisticated, cutting edge understanding of what research impact and translation is (beyond tech adoption, Conversation pieces or patents)
- VC fellows - how do we support, encourage, mentor and grow?
- Long-term planning around capability development and deployment.
- Targeting of external research talent that we want to attract, not just waiting for the VC Fellows round
- Understanding the interplay of disciplines in solution finding, and the role of human centred design not a 'bolt on' to the impact process, but embedded at early stages
- Need for specialisation as well as disciplines working horizontally, we need both and should work towards a model that optimises both underpinned by empathy
- Influence Editors, their perceptions and process of communicating impact, and making multi-discipline work more acceptable. Encourage the removal of competitiveness between researchers and fields
- From the college perspective - it feels as though there is cross-over between ECPs, but not enough of a platform to exchange ideas and expertise
- ECP to build confidence that interdisciplinary collaboration occurs at the directorship level. Recognising the 'stem and house' divide that exists - and a need to work and engage with all areas, rather than select areas. Acknowledging research is connected to multiple ECPs and there are opportunities available to engage with multiple disciplines.
- We need lots of different models depending on the type of partner - peak bodies, SMEs, etc.
- Deeper knowledge of the value add that our partners want us to add to their work
- Training for our staff to be able to conduct industrial research / collaborative work with a company
- Repurposing Masters by Research

ENABLERS: CULTURE, CAPABILITY, PARTNERSHIPS AND CAREERS

2c How do we adapt our models of collaboration to facilitate deeper and more strategic partnerships?

KEY TAKE-AWAYS

- Collaborations are developed by academics, and support for academics should be across the life cycle of partnership development
- Collaborate with partners as early as possible, on like issues across the whole value chain.
- Mentoring of Early Career Researchers

NOTES

- Establish frameworks that make it easy for researchers and industry partners to collaborate.
- Willingness to get feedback throughout the research process and to (radically) adjust what we are doing in response to partner feedback
- Work with partners using adaptive governance i.e., try by doing, evaluate and then adapt
- Ensure researcher KPIs fit with collaborations
- Culture-aware and sensitive for international research.
- Bring partners in as early as possible. Builds better collaboration. If partner added at end - forced to refer to sales mode
- Collaborate with multiple partners on the same issue, and across the entire supply/ value chain of the problem - e.g. Raw Material Suppliers and Manufacturers of Components and Customers
- Mentoring for Early Career Researchers (ECR)
- Independent research sector a source of important career paths for HDR

ENABLERS: CULTURE, CAPABILITY, PARTNERSHIPS AND CAREERS

2d How can we develop capability more strategically that meets emerging and future needs?

KEY TAKE-AWAYS

- Design thinking, interdisciplinary research; co-designing research with industry/government partners
- A lifecycle approach to capability development
- Continuing to invest in areas of strategic importance, e.g. Centre for Cybersecurity, Blockchain Innovation Hub
- Have a holistic understanding of RMIT's research capability and develop our capability at all levels in response of our partnerships.
- Mentoring of Mid-Career Researchers
- Mapping the researcher career trajectory using all available resources include Alumni.
- Develop greater professorial pathways and beyond.

NOTES

- As we inevitably move to rebuild after the COVID contraction we need to be prepared as to where we will strategically invest.
- Working more systematically to identify talent we wish to recruit.
- Invest in the ECPs to take them to next level: deployment working in multidisciplinary teams; interdisciplinary PhD projects etc
- cross/inter/multi-disciplinary approaches in practise: Broadening our understanding of cross-discipline, taking a nexus approach
- Greater representation and input from the new generation of researchers (ECR's etc)
- Process that reward behaviour and excellence don't necessarily correlate to our desired outcomes for impact
- Capability up-lift to work both ways. Need to start here, and understand the concerns of researchers and academics, and then find the synergies
- Create greater flexibility at both ends, with tasks that align best to the value they can add, and enough space and scope to innovate
- We need a holistic understanding of our capability, to be able to pitch a broad value proposition to partners
- We should develop capability IN RESPONSE and as a result of our partnerships. We can learn from the partnerships themselves, particularly if we partner with world leaders
- How do we activate the professoriate? develop greater professorial pathways and the trajectory to grow professorial careers after.
- Core literacies and capability development in all HDR: big data creations and visualisation
- Using the resources in Alumni records to map career trajectory
- Alumni are well placed to provide mentoring to HDR and connections with industry.
- shared professorial mentoring model
- Mid-Career Researcher (MCR) - ensuring that MCR don't become stuck in growing academic responsibilities to not compromise their research.

ENABLERS: CULTURE, CAPABILITY, PARTNERSHIPS AND CAREERS

2e How do we design contemporary and fit for purpose career pathways for our staff and aspiring researchers?

KEY TAKE-AWAYS

- Mentoring HDR, ECR and MCR
- Direct entry Masters by Research
- Mapping the career trajectory and aggregating the data for strategic purposes
- Recognising that career pathways as 'diverse careers'
- Build capability in developing programs of work - moving beyond project to project approaches

NOTES

- Foster opportunities for the next generation of researchers - well trained in inter-disciplinary, co-designed innovative research
- Research training = different streams within HDR programs, fit for purpose coursework, professional doctorates
- Building inter-disciplinary into our scholarship models and our research careers - can we do this at scale
- Require more concrete and more valuable experiences/pathways/opportunities for ECRs
- We need to better understand the distinction between research intensive and academic careers - how do we create a framework that uplifts the capability of the 25%
- Senior staff must mentor junior / new researchers and research students on how to better work with industry
- Direct entry to Masters by Research with industry experience
- thinking about the movements in and out of the HE sector
- Mapping the career trajectory and aggregating the data for strategic purposes
- Change common language to non-binary talk about 'diverse careers'

ENABLERS: CULTURE, CAPABILITY, PARTNERSHIPS AND CAREERS

2f How do we continue to grow and embed a mission based culture that is focused on meeting the needs of society and creating impact from research?

KEY TAKE-AWAYS

- Retention of high quality research performers and recruitment and retention of high quality researchers from other universities
- Embed impact as a promotion criteria.
- Identify philanthropic partnerships which align to our mission and values
- Mentoring ECR and MCRs
- Showcases stellar examples of where positive value and impact is achieved for a partner.

NOTES

- Structures that are appropriate to the scales at which activities occur, e.g. Centres as key sites of building research culture.
- All internal funding opportunities tied to our priorities, SDGs and mission
- Building empathy into our the core of our approach and process that promote interdisciplinary, as well as our partnerships
- Process that reward Researchers for multi-disciplinary - currently research demands are a barrier to cross-school collaboration, and interdisciplinary internally and with partners
- Call for tactical disciplinary - knowing and facilitating space that values and multiplies impact for both multi-discipline projects and specialisation
- Promotion structures now put impact at the top. We now need to rigorously implement this system
- Mentoring of ECRs and MCRs
- Showcasing positive examples where we did create positive value and impact for a partner
- Communicate successes through social media (e.g. LinkedIn) and encourage others to do this.
- Greater number of joint appointments with industry
- Improve access to alumni groups
- Important to show humanity to show our staff, students and partners for their welling being. This will enhance productivity and long-term partnership.