Scholarship & Connoisseurship Symbiosis in Design Education

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ABSTRACT:

The past two decades have witnessed design activities morphing from designing "posters and toasters", towards strategic planning, system integration, innovation, and social transformation. Probably, no other discipline in the world has attracted as much attention as "design" to drive innovation, create value and transform society. This shifting of the design paradigm has necessitated design schools rethinking the appropriateness of their curricula for nurturing and educating a new breed of designers capable of taking on more responsible roles in the highly complex and competitive landscape expected of the creative industries. This paper asserts that design is the "third culture" in education and human development. It is argued that the design culture is different from the traditional "two cultures" - humanities and science - that are predicated in the production of rigour, truth and scholarship. Design is based on connoisseurship. While scholarship and connoisseurship are positioned at opposite poles of the logic-emotion continuum, the paper argues for their alliance, symbiosis and synergy as a potent strategy to drive innovation. A Master of Design Degree designed at AUT University is described to showcase our attempt to harmonise scholarship and connoisseurship.

Keywords: Design Education, Scholarship, Connoisseurship, Symbiosis

1. INTRODUCTION

This paper posits that design is a business activity involving both explicit and implicit knowledge that is critically influenced by the interplay between art, science and technology to enable innovation to take place. In business parlance, innovation is a process of new thinking that creates value (Yap, 2012). A sustainable business must therefore create value, capture value and deliver value to the customer (Kaplan, 2012).

The ideation, design and development of the simplest product, service or system call for intense, purposeful, and creative iterations, and symbiotic consideration and judgment of thoughts and craftsmanship. An innovative product is the result of a successful creative process involving scholarship and connoisseurship of the designer. It is a process of weighing competing alternatives, pros and cons to design a preferred optimum outcome.

The process of innovation is aligned with, and supported by, considerable iterative and symbiotic constraints and opportunities – in the knowledge-imagination continuum. It is an iterative process of "conjecture and refutation" – a heuristic process of abductive thinking and generating value in products, services and brands. It requires more than a multidisciplinary approach. Successful innovative design outcomes are the result of the increasingly acute judicious thinking and creativity possessed by the designer, that necessitates an integrative transdisciplinary approach – involving inductive, deductive and abductive analytical and creative thinking (Kolko, 2010) – to arrive at innovations that are technologically functional, commercially viable, and humanly desirable.

The designer's connoisseurship in form, function and emotion – while implicitly / tacitly oriented - are informed by her expressive scholarship in knowledge, insights, contexts and methods. The symbiosis of knowledge and knowhow (craftsmanship) plays an important role in the successful innovative design process.

As artists and tacitly-centred designers, we are not trained to participate in evidence-based research or able to organise our findings in a format that is useful to convince business and industry stakeholders in the design process. Explicit and implicit design knowledge, even under its expanded form – Design Thinking – still presents problems in terms of its ability to generate and communicate rigorous information and hard evidence to other disciplines. Disciplinary and application barriers remain: business people solve problems by analysis; designers solve them by synthesis. The two activities are at opposite ends of the scholarship-connoisseurship design continuum (Yap, 2012).

Therefore, it is argued that solving problems in the complex world can no longer be subsumed under the current model of design practice that is supported by a heuristic paradigm for craft production, or by a scholarly paradigm of knowledge production. Current design problems and opportunities have necessitated researchers and designers shift current design thinking and conceptualising in product, system and service designs, not only to a preferred one, but one that would change the cultural perception of how designers harness, use and transform advanced technologies in the future.

Explicit research information to support design propositions is increasingly being demanded to align left-brain rationality with right-brain creativity; this forms the main argument of this paper. The search for integration between science and design is not new. This has led to the Design Science movement. However, the seamless symbiosis application in the design process is atypical in current postgraduate education in design. Scientists are practicing in isolation through deductive positivism; artists and designers are working in silos through abductive interpretivism. These two research paradigms are at opposite ends of the innovation continuum. Tension is created at the centre, between these two poles, to harmonise the explicit and implicit elements needed for true innovation. A hybrid scholarship-connoisseurship (logic-emotion) method is proposed to bridge hard and soft actionable insights for designers to answer incomplete, contradictory, and changing requirements that are often difficult to recognise in the 'wicked design space' (Yap, 2012).

However, in the past 20 years many design schools have erred on the side of producing design scholarship especially at postgraduate degree level, thus bastardising design from what is traditionally a studio-based activity that nurtures tacit knowledge, into scholars who cannot design, or have no experiential knowledge to competently and critically appreciate or discern the quality, beauty and emotion of a product form - or Connoisseurship.

2. THE TWO CULTURES IN TRADITIONAL EDUCATION

PC Snow (1959), in his book "The Two Cultures", asserted that education in the past had focused on nurturing two opposing scholarly cultures: The literary academics who are cultured in the arts and humanities, and the logic-centred positivists who are trained in the physical sciences. Snow noted that scientists are poor storytellers and communicators. As a group, scientists have failed to communicate the values and implications of their work to the public. Scholars in the arts and humanities, however, are avid communicators – who in the 1930s branded themselves as "The Intellectuals". These "Men of Letters" intentionally excluded prominent scientists, such as the physicists, Albert Einstein, Nick Bohr, and Werner Heisenberg; the mathematician, John von Neumann; the astronomer, Edwin Hubble; and the cyberneticist, Norbert Wiener!

The Two Cultures then, as now, are deeply divided and openly confrontational. Humanity scholars have a rooted impression that scientists are "shallowly optimistic, unaware of human condition" (Brockman, 1995). They are practitioners and not thinkers. Likewise, scientists believe that literary intellectuals are totally lacking in foresight, anti-intellectual towards other disciplines, and anxious to restrict both art and thought to the existential moment.

Snow highlighted the importance of the symbiosis between scholarship and connoisseurship in design innovation when he referred to the launch of the Sputnik into space by the USSR in 1957. This shocked both American Scientists and Humanists, and stunned the whole world. America had been beaten in space flight by the USSR – a nation they considered to be inferior in science, humanity and technology. Snow believed that the complex Sputnik project was made possible by the high value and importance the USSR attached to design and the practical and scientific knowledge at all levels of its educational programmes - the importance of the synergistic outcome of the symbiosis between knowledge and creativity.

3. THE THIRD CULTURE

Time and technology change human needs, wants and desires. Scientists nowadays are increasingly becoming better narrators, and are communicating directly with the general public through social media, books, magazines and newspapers in subjects ranging from deep space explorations to artificial intelligence, fuzzy logic, molecular biology, etc. More and more scientists are communicating directly with the public without involving the "middlemen" journalist-intellectuals. This has given birth to what Snow (1964) called the "Third Culture".

But, The Third Culture is also the Culture of Design. The design culture is an offspring of science based on imagination and technology. In the third culture, creativity and technology have together, been afforded a supreme role as the enablers and key drivers for innovation and competitive advantage. We are now truly living in a design culture wherein both scholarship and connoisseurship contribute their most prominent influences in business innovation and competitive advantage.

Kelly (1998) referred to this Design Culture as a "Nerd" Culture. "The third culture creates new tools faster than new theories, because tools lead to novel discoveries quicker than theories do. The third culture has little respect for scientific credentials because while credentials may imply greater understanding, they don't imply greater innovation. The third culture will favor the irrational if it brings options and possibilities, because new experience trumps rational proof".

While the design culture has always drawn insights from the scholarship of science, humanities and technology, its thrust is not perusing truth, but perusing innovation, novelty and competitive advantage. In business parlance the culture of design is predicated on the creation of value, capture of value and delivery of value as potent wealth creation strategies, and for predicting, protecting, projecting and increasing future sustainable competitive advantage of businesses, enterprises and nations.

4. THE SYMBIOSIS OF ART, SCIENCE AND TECHNOLOGY

While science and art generate truth and beauty, technology generates possibilities and opportunities through design. Innovation blossoms at the intersection between art, science and technology. A seamless alliance of the three disciplines is required for the design of meaningful and memorable products and services. A product's functionality, viability and desirability are the outcomes of the intimate symbiotic relationship and synergy of art, science and technology. Generally speaking, product functionality design calls for understanding in scientific and technological knowhow; business viability design calls for the knowledge of entrepreneurship; and the design of human desirability calls for knowledge in psychology, culture, emotion and the craftsmanship of form and function. Scholarship is required in these three factors to generate, capture and develop data, information, knowledge and actionable insights to inform the design of the products and services. Connoisseurship is required to transform insights into form, functions, emotions and meaningful experience through analysis, ideation, concept development, prototyping and evaluation.

Thus the research process and the design process in effective product and service innovation requires the seamless symbiosis between scholarship and connoisseurship. Evidence-based design outcomes are based on the synergy and harmonization of rigour-based scientific knowledge and the epistemic freedom and nonconformity of connoisseurship. Innovation processes in current complex markets rarely flourish without the symbiosis between scholarship and connoisseurship.

5. SYMBIOSIS BETWEEN SCHOLARSHIP AND CONNOISSEURSHIP IN DESIGN EDUCATION

Scientists and humanity intellectuals are scholars; artists and designers are connoisseurs. Scholarship and connoisseurship are positioned at different ends of the innovation continuum. Scholars make inferences of the world through analysis; connoisseurs base their craft on synthesis. Paraphrasing Henri (1987), not only do scholars and connoisseurs work at different poles of the creation continuum, their antagonism and differences are profound. Connoisseurs, it is claimed may be distinguished from scholars by knowing the craft of creation of form, function and emotion,

abstaining from writing on the subject; on the other hand, the scholar although writing a lot on the theory of design, really knows nothing about the practice of it; however, the prototype builders who boast of their technical knowhow are either competent designers, connoisseurs or scholars!

In recognition of the disciplinary differences, and the intellectual and practical nature of the design discipline, many Design Schools have design curricula in both undergraduate and postgraduate programmes that emphasise theoretical research, and practice-based research in both art or design education, or usually, a combination of theory and practice.

Design is an agile discipline, not constrained by the epistemic rigours and confines of Science. It is responsive to the ever-changing business landscapes. Design has been recognized as the most potent and dependable enabler for wealth creation during the "industrial era", the "experience era", the "knowledge era", and the new era of "social transformation" (Reon & Simona, 2012). Design Innovation is a lofty expression. Scientists, engineers, doctors, and business people apply design thinking in their own disciplines to reframe problems and explore new solutions. Their actions are informed by explicit data, information and knowledge – from which they develop precise understanding – to inform their practice – usually through the process of "designing". Ackoff (1989) indicated that data, information, knowledge and understanding deal with the "past", "what has been", "what is known". They are therefore, grounded in the logic-centric culture of humanities and scientific Scholarship. To create the future, practitioners must develop "wisdom" to enable them to evaluate their "understanding" of their discipline/profession with insight, judgment, discernment and acumen. Wisdom fuels imagination that powers innovation in science and humanities.

Connoisseurship, unlike scholarship, is an intuitive process focused on creating and delivering value through the application of tacit knowledge to transforming actionable insights into products and services that convey pleasurable emotion and meaningful experience. In design and business parlance, Connoisseurship is the craft of Scholarship (Henri, 1987). Connoisseurship is synonymous with designerly attributions, grounded in imagination, know-how and know-why a product or service is shaped and crafted as visual-haptic vehicles to capture and deliver business values and competitive advantage.

It is deliberately argued in this paper that Connoisseurship is the craft of scientific and humanities scholarship. Sustainable value creation in business and enterprise are grounded in the symbiosis and synergy between the emotion-centric potency of connoisseurship and the logic-centric rigour of scholarship. They are not only complementary, but they are also synergistic partners in successful product, service and process design and innovation.

In a highly competitive global market where companies compete through strategic design innovation, significant pressures have been placed in design schools all over the world to design and develop optimum curricula to educate a new breed of designers and creative thinkers for the new economy. Innovation is a complex business process predicated in the alliance, synergy and symbiotic fusion between art, science and technology. In the creation of commercial value, and competitive advantage through design thinking, it's no longer sufficient to create a product, a service, an experience, or a lifestyle that is merely technically functional. But, they must also be beautiful, playful, fun and emotionally engaging to the customer/user. Customers do not buy the physical attributes of a product per se; they seek the pleasurable, meaningful experience that the product or service conveys. The viability and profitability of a business is closely correlated with the psychological and emotional desirability of the product or service.

Hence, an ideal design programme should be grounded to nurture the student not only with the craft of beauty, finesse and emotion – in the products and services, but also with scholarly wisdom and evidence that is informed by art, science and technology - in an integrative, pluralistic transdisciplinary approach. Integrative thinkers must cultivate the ability to hold two opposing ideas in their minds at the same time, and then reach a synthesis that contains elements of both but improves on each (Martin, 2007). Unfortunately, scholarship is significantly different from connoisseurship. While design theory and studio-based design are still very worthwhile educational pursuits in their own rights, businesses are seeking a different breed of innovator to create values for their companies. Competitive advantage today is focused on the ability of the designer to predict the future characteristics of products and services that are enabled by art, science and technology. Graduates must be schooled in both connoisseurship and scholarship abilities.

The fusion of design thinking and design practice enshrined in the scholarship-connoisseurship continuum, with the disciplines of art, science and technology, is the DNA for innovation. The alliance of different disciplines is driven by the realization that the complexity of modern problems in the rapidly changing technological world is difficult to be resolved in any single way or by any single discipline. In an increasingly complex technological and sociocultural environment, designers have to have both explicit and tacit knowledge to enable them to prioritise critical problems and opportunities to judiciously propose and design future solutions. This must be based on scholarship and connoisseurship.

Epistemological connections or pluralism in multidisciplinary, interdisciplinary, and transdisciplinary research and application contributes four important elements to research enquiries, according to Miller et al. (2008):

- 1. It acknowledges the validity and value of multiple ways of knowing.
- 2. It asserts that integrating these epistemologies results in a more complete understanding of complex issues, such as the management of wicked problems.
- 3. It accepts that the inclusion of different disciplines would require cross fertilization that would benefit research and design outcomes, and
- 4. It requires that disciplinary researchers work together to find ways to benefit from each other's approaches rather than compromise them.

The appeal and advantage for epistemological pluralism – such as the scholarship-connoisseurship continuum in innovation is obvious: it recognizes the inadequacy of the existing knowledge base of the various individual disciplines for design and innovation; and the processes of innovation can be significantly improved when the needs for alliance, coherence, symbiotic and synergistic powers between the knowledge produced by different disciplinary scholars, and the craftsmanship and experience of the connoisseurship are met through integration (Yap 2012).

It has been argued that an ideal postgraduate design education should instill in its graduates the abilities to capture data for analysis, synthesis, ideation, design and evaluation of system efficiency, not only to answer materialistic and technical questions, but also to master human behavioural sciences. This would enable graduates to transform new technology into emotional and experiential meanings that would make products safer, more functional, more usable and even more pleasurable. Designers who are knowledgeable and armed with a hybrid 'logic-emotion' or "scholarship-connoisseurship" methodology can contribute as a scientist, a designer, as well as a change-agent, thus playing a vital role in problem solving, value creation, designing and ensuring that the function, usability and viability of systems, products, services and brands are valuable and competitive.

6. THE MASTER OF DESIGN AT AUT UNIVERSITY

Based on the principles discussed above, The School of Art and Design at AUT University has designed and developed a Master of Design Programme specifically to educate students in design thinking, strategy and innovation. The curriculum is designed to deliver a multidisciplinary grounding to students from across the creative industries who enroll in the programme. It is a taught programme aimed at not only bridging the gulf between scholarship and connoisseurship, but also to make the best of them through the alliance of papers that develop design practice through evidence-based analytical, synergetic and symbiotic thinking.

The Master of Design (MDes) is a one-year taught programme, with associated research, aimed at developing innovative and strategic leadership for the design and business environment. Students are exposed to a range of design research and innovation methods and practices. The focus is on improving and extending creativity and understanding about the design of products, environments, services and brands within market contexts. This involves user-centered design of products and services, and exploring how design thinking and the power of design can deliver new forms of value, experience and competitive advantage for business, and environmental sustainability.

Spanning a range of core and elective subjects, the MDes allows students to focus on applied research and design practices within a chosen area of their own expertise. The programme consists

of 3 \times 30-point core papers, and 2 \times 15-point elective papers, selected from the six elective papers offered.

6.1. RATIONALE OF THE MASTER OF DESIGN

Technology, customer expectation and globalisation are changing the way we work, live and play. To succeed in the new economy we need to create products, services and systems differently in order to be competitive. Design thinking enables us to innovate strategically, to differentiate our product, service and brands. The main aim is to add value and compete in the global market. Design is a key creative and strategic activity that interacts with science, technology and business to enable innovation to take place. It is increasingly being considered as a driver for wealth creation and economic growth. Governments, corporations, businesses and universities around the world now exploit creativity and innovation to sustain global competitiveness.

The MDes programme has been designed to enable professionals in the design industry, and allied fields, to advance their knowledge, practice and research capabilities. These professionals may include: art and design educators working in tertiary institutions; multimedia, graphic and product designers; product developers; business people; technologists; scientists; engineers; and design managers across the creative industries, and business, marketing and branding sectors. It is envisaged that the MDes will also appeal to business, technology and art and design students, with an honours degree or equivalent, for those who aspire to become strategic design thinkers.

The programme develops key knowledge, know-how and know-why, and competencies to enable practitioners to become strategic design thinkers and entrepreneurs. Graduates will be able to: define the customers' experience; understand users' needs and wants, emotions and experience to propose product platforms, services and brand innovations in the global business environment. These capabilities are potentially the designer's greatest asset in product, service and brand innovation.

The MDes is an interdisciplinary programme for advancing professional careers. It extends and fosters the students' design ability to function in a broader role as strategic creative thinkers within the creative industries. The programme aims to integrate advanced analytical, theoretical and practical knowledge and skills that focus on professional development within a wider cultural, creative and commercial/business framework.

The curriculum is designed to nurture a new breed of strategic design thinkers and innovators. The qualification may be taken as a full-time or part-time work-based study. Work-based study at Master's level recognises creative work, knowledge and skills acquired through professional art and design practice as criteria for admission into the programme. This allows industry practitioners to fulfill their educational potential while simultaneously pursuing a career.

6.2. GOALS OF THE PROGRAMME

The MDes aims to:

- significantly strengthen productive relations between New Zealand design industries and the tertiary education sector.
- attract candidates from industry who wish to develop a stronger knowledge base in terms of analysis, best practice, strategic design and innovation in relation to their professional practice
- have sufficient flexibility in delivery such that work place research in conjunction with academic supervision and course work components will provide a comprehensive platform of education for the enhancement of design excellence.
- provide professionally oriented pathways for honours graduates who want to embark on advanced coursework papers in design as well as a practice-based research project with direct industry relevance.
- promote a deeper understanding of design and business so that designers can contribute more productively in terms of analysis, strategic thinking and innovation in business.

Academic Rationale

The programme of study comprises 90 points of coursework, leading to the development and realisation of a 30 point supervised design project. The rationale for this structure is based on the recognition that both industry-based designers and those wanting to establish a professional base from honours level study will require a range of coursework papers that are able to significantly orientate candidates to aspects of research training leading to knowledge informed projects that are practice-based and industry oriented. With the successful completion of the coursework components of the programme, it will be possible to satisfactorily gauge the capacities of candidates for undertaking research initiatives, as well as the relative strengths and weaknesses of particular candidates with respect to proposed arenas. Candidates will be able to move into the project with a degree of confidence based on the outcomes of assessment for coursework components. Likewise, supervisors will have a good understanding of how candidates perform in core papers, and will thus be in a stronger and better-informed position to advise.

Coherency of Programme Structure

The programme structure of core and elective papers and the design project aim to:

- forge a mutual partnership between education, industry and government,
- enable students with an honours degree, and mid-career professionals, to study for an advanced qualification through work-based learning,
- offer flexible delivery and student support to enable work-based learning and application,
- establish an in-depth understanding and critique of professional practice in a particular design or design-related domain,
- focus on analytical, practical thinking and sound interrogation of both theoretical and empirical knowledge relevant to a specific area of professional design study,
- provide a critical analysis of the wider socio-cultural, economic and technological contexts of contemporary design issues, including those relating to innovation, product development, design business, history and professional issues,
- develop the necessary knowledge and skills to carry out an independent project in order to improve practice, product design and development, or develop design policy, or value proposition, and
- · establish productive relationships leading to innovation in design and business.

The MDes is about innovation through design, emphasising the potential between design and business through analysis, creativity, strategic application and innovation. New ways of framing problems, new tools and the development of innovative design solutions will distinguish the MDes from equivalent MBA programmes that emphasise business growth and systems. Design is concerned with finding innovative solutions – within a business context that utilises design thinking and creativity to reframe problems and generate new ideas, approaches and solutions.

Student Progression

The programme aims to provide candidates with opportunities to gain a sufficient body of knowledge and highly developed analytical skills, so they have the confidence and capability to engage fully in innovation and development of design industries. The coursework component is developed around design industry concerns, such that candidates will be able to develop a critical approach to workplace professional commitments. The programme will involve visiting experts as academics and practitioners from both national and international companies and institutions. Flexible delivery will support students in part time study and maximise work-based learning opportunities. Student progression is through completion of three core and two elective papers to the value of 120 points.

Attained Body of Knowledge

Graduates will have:

an advanced understanding of contemporary contexts and applications of design in business,

- a well developed capacity to apply knowledge based design to research and development initiatives as well as creative product and services ideation, development and commercialization,
- a developed understanding of a range of methodologies appropriate to design research and be able to make judgements on the appropriateness of design methods for best practice project realisation and applications,
- demonstrated competency in the completion of a design project, and its dissemination in written documentation and exhibition or prototype production, and
- developed a high level of expertise through relevant elective papers which support a specialist design project.

Teaching and Learning Objectives

- Teaching and learning objectives have a particular focus on establishing a learning environment that fosters a critical approach to design processes, applications and outcomes.
- Emphasis is also given to experimentation in design process and studio, workshop or laboratory based practice.
- Coursework components aim to integrate methodological and contextual understandings to candidates' design projects.
- Project work aims to emphasise reflective practices to enable candidates to make sound judgements on the viability and directions of their design process.
- A range of teaching and learning methods will ensure that students can communicate effectively across a range of formal, visual, textual and verbal modes.
- A strong emphasis will be placed on the development of skills and attributes to ensure students are capable of working productively in teams.

These objectives aim at developing graduates who are confident designers, capable of sound judgement on appropriate research methods and strategies, and able to clearly ascertain the affectivity of design processes.

6.3. GRADUATE PATHWAYS

It is expected that graduates from the MDes programme will significantly enhance their professional capabilities to initiate and lead design innovations. They will be favourably placed for promotion and increased leadership responsibilities in both design and business sectors.

6.4. GRADUATE PROFILE

Capabilities and Competencies Expected of Graduates

Graduates will be able to:

- construct and apply advanced theoretical concepts and knowledge to investigate professional practice, design advantage and design business,
- apply in-depth knowledge and insights based on theoretical and empirical investigation of a specific design topic or issue to enhance innovation,
- understand a range of philosophical, socio-cultural and methodological issues in design research and design thinking to create strategic advantage in design-led business,
- apply the multi-dimensional functions of "design" especially the notion of design as an enabler to enhance innovation, value and competitiveness,
- critically analyse, transform and evaluate design decisions based on past and current sociocultural, political and economic impacts,
- work efficiently in both collaborative and individual design settings in order to better confront problems and issues,

- initiate greater co-operation, understand and debate across the design sectors and designrelated fields on contemporary issues,
- apply enhanced leadership qualities and creative insights to incorporate informed design decision-making based on the analysis of evidence drawn from multiple sources,
- write strategic design briefs, value propositions and formulate teams to implement them,
- appreciate a range of professional, business and ethical issues and responsibilities, within
 the contexts of design as a change agent and as an enabler for economic value generation
 and socio-cultural enhancement,
- apply enhanced leadership qualities and creative insights to incorporate business and informed design decision-making based on the analysis of evidence drawn from multiple sources,
- understand business contexts and bring new insights and approaches to business decision making, and
- appreciate and demonstrate a commitment to the principles of the Treaty of Waitangi and to the inscription of difference and it politics relating to design and innovation.

7. CONCLUSIONS

Scholarship and connoisseurship play a central role in the innovation process. In a logic-centered society, businesses and institutions are increasingly demanding design outcomes to be based on rigorous hard evidence. On the other hand, they are also seeking designers with creativity and connoisseurship to design products and services that are desirable, viable and functional. It has been argued that both scholarship and connoisseurship, while positioned at opposite ends of the knowledge-design continuum, are to be harnessed and applied seamlessly, as their synergy and symbiosis are needed for true innovation.

The Master of Design is an attempt to capture these important attributes aimed at the nurturing of future graduates with both logical research thinking, and intuitive designing. It was also developed in accordance with the Design Education initiative of the New Zealand Design Taskforce, and the Growth and Innovation Framework. They have identified that nurturing a new breed of designer-entrepreneurs for an increasingly more complex and connected world as strategically important for New Zealand. The Design Taskforce Education Strategy is aimed at improving the design capability of businesses in New Zealand to achieve and sustain global competitive advantage through better use of critical creative thinking and entrepreneurship as strategic tools within the Growth and Innovation Framework of New Zealand.

Both AUT and the Government believe that there are substantial opportunities to broaden the scope of design education to encourage a deeper understanding of the potential of design within business as well as increase awareness of the cultural and commercial value of design in New Zealand. An innovative design culture through education will improve the integration of emerging creative talent in industry, while equipping business with the ability and insight to implement design strategically and effectively (Successes by Design, 2003). A Doctor of Design Degree has also been designed and developed, but never offered due to lack of teaching staff.

The Master of Design was first offered in 2007 with six students. It has now grown to 20 students. Around 75% are international students from the European Union, United States, Russia, Saudi Arabia, China, Malaysia and India. Many of our graduates have found new careers in New Zealand and their home countries as: brand strategists, service designers, business designers, and in more traditional roles across the creative industries such as retail planning, interior design, graphic design, etc. Some have started their own design consultancies, gone into the teaching profession, or enrolled in research degrees at MPhil and PhD levels.

8. ACKNOWLEDGEMENT

I would like to express my appreciation to Associate Professors Mark Jackson and Frances Joseph for their contributions in the design and development of the Master of Design Programme.

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