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KNOWLEDGE-BASED CLUSTERS DRIVING INNOVATION

JAPAN’S DEMOGRAPHIC PARADIGM – WHAT WE CAN LEARN AS OUR POPULATION AGES

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Japan’s New Demographic Paradigm – Towards Society 5.0 33
Welcome to the first EDA Journal for 2019. The EDA Board kicked off the year with a strategic review and governance training session in February. As the national peak body for economic development professionals with directors in every state, we conduct the board meetings and business of EDA largely by teleconference and email, so the opportunity to meet face to face from time to time is extremely valuable. I would like to thank our Directors who volunteer their time and provide valuable expertise and input to position EDA strongly. This year, we met in Adelaide, the host city of the National Economic Development Conference (NEDC 2019). Adelaide is the ideal city to host EDA’s flagship conference which this year, has the theme Digital Globalisation: Digital Localisation. I hope to see as many of you as possible at this event, which is the only conference in Australia dedicated to economic development professionals.

There are a number of exciting initiatives being undertaken by EDA this year. We recently called for expressions of interest from suitably qualified professionals to develop a series of ‘delivery ready’ education / training modules and resources designed for economic development practitioners and elected local government officials. It is our objective that the new EDA education / training modules will be the leading source of professional development for economic development practitioners in Australia and will provide a global perspective focusing on case studies, best practice examples and practical learning outcomes. We look forward to keeping you informed as EDA progresses the development and delivery of these modules.

The EDA Webinar Program continues to grow in popularity and we are preparing a forward plan of interactive on-line sessions, providing best practice case studies and learnings from around Australia and the globe. We recently called for expressions of interest for presenters for a number of webinar sessions. If you have expertise in certain areas and would like to participate in this peer to peer program, we would love to hear from you.

As part of our Thought Leadership Program, EDA is establishing a National Working Group focussed on economic development measurement and evaluation. The issue of metrics is an important and challenging issue for economic development professionals across the globe and EDA is the ideal vehicle to drive this discussion in Australia.

During our strategic planning session in Adelaide, it was heartening to reflect on the significant growth and development that EDA has experienced over the last 18 months. I am proud to inform readers that membership of EDA has more than doubled, increasing to over 750 members. We are seeing unparalleled engagement in EDA by our members as we build a community of economic development professionals. Key to this success is the tireless work of our SPN Committees who plan and deliver fantastic events and projects across Australia throughout the year.

Thank you to all our members for their continued support and encouragement.

Kind regards,

Mark Holdsworth ACEcD
National Chair,
Economic Development Australia
This edition of the Journal also includes an article by two of our EDA Study Tour Scholarship recipients. Paul Johnson from Wellington Shire Council travelled to NZ and the US on an EDA Study Tour Scholarship to examine how celebrated tech hubs in NZ and the US foster collaboration to achieve digital innovation.

Bruce Marshall from Melton City Council visited Japan as part of his EDA Study Tour Scholarship and his article provides insight into Japan’s demographic paradigm and the impact it is having on the traditional economic and social models.

Ray Tiernan shares his timely reminder to economic development practitioners to build strong engagement with the local professional sector when undertaking economic development or retail strategy, place making,

Dr Elizabeth Perkins’ article outlines the potential development of a bio hub for the Limestone Coast region in South Australia. Businesses and governments gathered in Mt Gambier late last year to examine the opportunities around biomass, bioenergy, the bio economy and bio hubs.

This edition also provides a fascinating glimpse into a unique place making project concerning the activation of sites within the UNESCO World Heritage area of the Citadel of Hue thanks to Teresa Lever’s article on page 26.

Finally, Sasha Lennon and Roger Gibbons share some practical tips to ensure economic development professionals understand how to help regional areas capture a fair share of Australia’s growing visitor economy and, more importantly, grab a bigger slice of the pie!

Many thanks once again to all our contributors.

We hope you enjoy this edition.

Kind regards,

Jacqueline Brinkman
Chief Executive Officer,
Economic Development Australia
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Digital Globalisation: Digital Localisation
‘Innovation’ has been a catch cry of multiple governments over the past couple of decades as they seek to spruik Australia as more than just an open pit mine, and also to counteract declining labour productivity growth. Going hand-in-hand with innovation is the utilisation of spatial concepts such as clusters or innovation precincts.

A LITTLE ON CLUSTERS

The concept of industry clusters came to prominence in the early 1990s, largely on the back of work by Michael Porter, one of the most influential proponents of the competitive advantage gained by similar firms or sub-industries locating in close proximity to each other. He argued that inter-firm cooperation and competition breeds innovation and productivity improvements.

Porter’s work essentially built on ideas from nearly a hundred years earlier of industrial localisation, and the advantages generated by skilled people in similar trades co-locating.

Such advantages include the development and uptake of new ideas, the shared use of specialised expensive machinery, and greater efficiency in supply and demand of skilled labour. These benefits are now commonly associated with the concept of economies of agglomeration.

Today the rise of knowledge-based industries has re-established the exploration and encouragement of clusters. Interaction between firms and institutions is said to be the basis of innovations in clusters and the benefits of ‘knowledge spillovers’ is thought to be a large driver of industry concentration. However, despite many governments’ best efforts to grow innovative clusters overnight, most existing strong clusters have evolved over time based on locational advantages, economic trends and the strengths of key assets.

However, concentration alone does not make a cluster. True industry clusters contain specialisations and are built around what can be described as related diversity. This simply means that there is a concentration of different types of enterprises that are linked by related supply chain activities.

For an example, let’s consider the City of Monash, Greater Melbourne’s second largest economy by Jobs and Gross Regional Product (GRP). There is no doubt that it has a large concentration of businesses, institutions and employees, including world-class facilities; Monash University, Monash Medical Centre, the CSIRO, the Australian Synchrotron, and the Australian Regenerative Medicine Institute (ARMI).

So, does Monash (in Melbourne’s inner-South-East) contain a strong cluster? And, does this support innovation and new business development?

Over time, Monash has developed key specialisations in a number of linked sub-industries. For example, scientific research services are over-represented when compared to the rest of Greater Melbourne, but so are scientific testing services, scientific equipment manufacturing, and scientific goods wholesaling.

There is no doubt that these industries also rely on a steady stream of science graduates and associated scientific research training at Monash University. Businesses have established relationships and partnerships over time that have probably facilitated new product development and more efficient processes.

The area could actually be defined as having multiple thematic based clusters as there are other areas of related diversity. Some of the key linked industries where the City of Monash has a specialisation in are presented below.[1]
WHAT MAKES A COLLABORATION CLUSTER?

What makes a true ‘innovation’ cluster though is collaboration between players.

What I found during my research is that this happens all the time, especially within the National Employment & Innovation Cluster – a geographical area in Greater Melbourne that includes the Monash Technology Precinct and the Monash Health & Education precinct.

Some of these collaborations/partnerships include:

- The Monash Health Translation Precinct is a collaborative initiative of Monash Health, Monash University and Hudson Institute of Medical Research to strengthen links between education and training, basic and clinical research, and patient care.

- The New Horizons Research Centre is a new building which co-locates and integrates around 500 staff from Monash University and the CSIRO to provide platforms for global research and teaching collaboration through state-of-the-art information technology and research equipment that facilitates greater linkages with business and the community.

- Regenerative Medicine Industry Interface is a consortium involving Monash University, ARMI...
and the Monash Institute of Medical Engineering (MIME), CSIRO, the BioMelbourne Network and other research institutes to accelerate commercialisation and translation of academic research into products and solutions for industry.

- The Monash Centre for Additive Manufacturing works with research and industry partners to invent bespoke solutions to unique manufacturing challenges.

- The Melbourne Centre for Nanofabrication is a world-class nanofabrication centre, combining cutting-edge technologies with the knowledge and skills of expert process engineers. The MCN is a joint venture between six Victorian Universities and the CSIRO and is openly accessible to any researchers in academia, CSIRO or industry.

Also, between 2012 and 2016, average growth in businesses numbers in the City of Monash was 1.76% p.a., more than double the Victorian growth rate (0.83%) and five times the Australian rate (0.35%).

MAINTAINING INNOVATION POTENTIAL

The Brookings Institute did some work a few years ago on identifying what factors enable strong innovation precincts. They showed that having a lot of businesses, organisations and workers alone is not enough. Physical and social assets within an area also support the ability of these players to interact, connect and collaborate.

- Economic assets are the firms, institutions and organizations that drive, cultivate or support an innovation-rich environment.
- Physical assets are the public and privately-owned spaces—buildings, open spaces, streets and other infrastructure—designed and organized to stimulate new and higher levels of connectivity, collaboration, and innovation.
- Networking assets are the relationships between actors—such as between individuals, firms, and institutions—that have the potential to generate, sharpen, and/or accelerate the advancement of ideas.

It is rewarding to see many Economic Development professionals realise the importance of continuing to support innovation and enterprise by working on the physical and social connections.

Key objectives are centred on boosting collaboration, improving accessibility to key precincts and enabling transitioning industries (e.g. manufacturing and wholesale) to adapt to new technology/processes and the changing spatial demands this creates.

If you would like advice or assistance in economic development strategic planning, get in touch with our consulting team and tell us what you’re working on.

[1] Industries chosen based on links, 150 jobs or more (ABS Census 2011), and a Location Quotient (LQ) >1.2 (over representation against Greater Melbourne shares)
Planners and policy makers worldwide have long been focussed on the concept of creativity and its contributions to local economic development. It is widely accepted that creativity is a driver of innovation and entrepreneurship. Notably, creative activity (of which Artistic production is one special type) is believed to contribute to more than just economic output; providing valuable social benefits resulting, in part, from its role in establishing local identity and character.

Recently, we set about to sketch the Australian artistic landscape, in particular, we set ourselves the task to unveil the distribution of artists across the nation. We used 2016 census data to identify each person who declared themselves as working in one of eleven types of artistic occupations as defined in the 2016 census:

1. Actors, Dancers and Other Entertainers
2. Music Professionals
3. Photographers
4. Visual Arts and Crafts Professionals
5. Art Directors, Media Producers & Presenters
6. Film, TV, Radio & Stage Directors
7. Authors, Book & Script Editors
8. Journalists & Other Writers
10. Graphic, Web Designers, & Illustrators
11. Interior Designers

This analysis provides insight into the character of the distribution artists residential choices (as a proxy for artistic human capital) at the local government level (LGA), beyond the traditionally known hubs of creative economic activity.

WHY IS THIS IMPORTANT?

Many academic studies indicate that the presence of creative human capital impacts local prosperity, promotes community cohesion, wellbeing, and has the potential to attract industries of all types. To get an in depth understanding of the distribution and density of creative capacity in Australia we require specificity and attention to the uniqueness of the type of art and the place itself which can shed light on common assumptions about artistic location patterns. This analysis helps inform arts policy makers about the appropriate mix between targeted place-specific programs and broader initiatives.

CLUSTER ANALYSIS AND STRATIFICATION

To do this we first employed a well-known statistical grouping procedure called Hierarchical Cluster Analysis where LGAs were grouped together according to the degree of their similarity. The process essentially forms groups by collecting together LGAs that are most similar (in terms of artists living in the area) whilst simultaneously maximising the differences between groups. Interestingly this procedure did not identify patterns of artists concentrating together across regions. In other words no conclusive results emerged in this stage.

The results however did lead us to construct our own grouping algorithm. In contrast to the formal clustering approach which attempted to group LGAs according to the type of artist, we constructed a simple mathematical stratification classification system based on the presence of the relative extent to which the number of types of artists residing in an area. The analysis, in both applications were performed on what economists refer to as location quotients – these can be defined as the share residing artists in an area relative to the national average.

Our constructed stratification of LGAs are based on five classifications:

1. No residing artists
2. Negligible levels of residing artists
3. Some types of artists residing en masse in the local community
4. A majority number of types of artists are residing in the local community
5. All artist types on mass are residing in the local community
WHAT WE FOUND

Australia has a large number of LGAs with all forms of artists living in their areas although many are below the national average. This implies that within the LGAs the individuals that self-identify themselves as an artist tend to co-reside with individuals of similar and/or same traits, albeit not necessarily at relative levels of critical mass. Our results also showed there are 138 LGAs (from a sample of 545) across all states that have no (self-identified) artists living in their area. This implies that at least one-quarter of LGA are likely to be importers of artistic production (if indeed it is occurring at all).

Importantly, nearly 75% of LGAs across Australia have artists living within their constituency. However, where they locate is distinct according to the numerical size of the concentrations and the number of types of artistic occupations that are co-locating. Some LGAs are characterised by a small number of artist types co-locating en-masse. That is, they have a few types of artists residing in proportions above the national average. A handful of LGAs are notable for their high concentration of (nearly) all artist types.

DISTRIBUTION OF ARTISTS ACROSS THE STATES AND THE NORTHERN TERRITORY

Not surprisingly, when we examine state level data, similarities between the states were evident. Amalgamating the above five classifications, we redefine areas to be disadvantaged in terms of artistic capital (combined group one and two), advantaged (combined three and four) and leaders. The charts below presents the percentage each state (as well as the Northern Territory) has of the three reclassifications.

Disadvantaged – % of LGAs within each state with little or no Artists residing

Advantaged – % of LGAs within each state with some types Artists residing

Source: de Silva et al. (2018)
Leaders – % of LGAs within each state with many or all types Artists residing

From these charts we identify four distinct groupings. These groupings reflect (albeit imperfectly) the environmental, population and industry characterisations at the state level. Specifically, the New South Wales and Victoria artistic distribution is similar. Both economies are dominated by the service-based industries such as education and also have relatively high population densities. The states of Queensland and Western Australia are characterised by the natural resource sector forming the second group. The third group comprises Tasmania and Northern Territory. We suggest South Australia is unique to itself.

In short, the charts reveal that the states of Victoria and NSW have richer endowments of artists with a noticeable percentage of its LGAs with concentrations of residing artists above the national average. The charts also reveal that Western Australia and Queensland have the highest proportion of LGAs with zero or negligible artists concentrations and are thus artistically / creatively disadvantaged. In comparison the Northern Territory and Tasmania have relatively high percentages of advantaged LGAs (some and many groups). In South Australia the distribution is approximately a 60%/40% split between advantaged and disadvantaged LGAs respectively.

SCOPING ARTISTIC LOCATION BY AREAS OF REMOTENESS

Using ABS geographic classifications we analysed the profile of residing artists utilising our five classifications. Not surprisingly Major Cities contain the highest percentage of leaders. This, combined with the fact that they have the lowest percentage of disadvantaged LGAs, reinforces the urban-regional dichotomy, specifically, regional areas have lower (relative) concentrations of artists. However, we noted that Very Remote areas have relatively high proportion of LGAs that are recognised to have some form(s) of artists residing en masse – we believe this may be capturing the indigenous artist population.

THE NATIONAL LANDSCAPE

In the figure above a spatial map of the national artistic landscape is provided based on the five classifications originally constructed. In general the percentage of LGAs with zero or negligible artists (disadvantaged) increases when moving from major cities to remote areas, reinforcing the urban-regional dichotomy referred to above.

More generally, the figure demonstrates that there are a large number of LGA’s in Australia with relatively high percentages of resident artists. Some LGA’s have unique characteristics that likely draw artists to those areas -whether economic, social or aesthetic or some combination of all.

The national chart combined with the state profiles support the view that inner cities tend to have higher endowments of residing artists. However they show a number of notable exceptions include Mt Alexander (Central Victoria) and Byron (North NSW).
A deeper dive in our analysis revealed that remote areas in NSW have significant proportions of residing artists such as dancers and entertainers, musicians and visual artists and craft professionals. On the other hand, remote areas of Queensland and Western Australia exhibit LGAs that had little or no artistic populations. Notably there are a few exceptions such as Long Reach and Mareeba in Queensland and Carnarvon, Exmouth, Broome, and Ngaanyatjarrah. The analysis suggests that some mix between targeted place-specific initiatives and broader initiatives are appropriate in the arts policy space.

CONCLUSION

We note that creative endeavour is an important driver of innovation, with the potential to enhance economic and social wellbeing.

Our analysis shows that whilst NSW and Victoria have a higher endowment of LGAs with relatively large proportion of artists they do not have a monopoly. Further, there are large parts of both states where the local artistic population is relatively low (or unobservable). In particular, our analysis suggests that inner cities tend to have higher endowments of residing artists than outer metropolitan areas that are dominated by relatively lower distribution of artists.

The distribution of residing artists across States and the Northern Territory can therefore generally be grouped according to their broader economic and community profiles. At the same time, when looking at the distribution across areas of remoteness we note that very remote areas are not necessarily void of artistic communities, with some areas well above the national average (having a relatively large endowment of artists living within their constituency). Further, the maps showed that there was a general pattern extending out from the inner-cities but this was not uniform and there were notable exceptions.

The analysis suggests that some mix between targeted place-specific initiatives and broader initiatives are appropriate in the arts policy space.

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1. This article draws on research that has recently been published: de Silva, S., Angelopoulos, S., and Boymal, B. (2018) The Distribution of Artistic Human Capital-A Typology Building Approach. Economic Papers: A journal of applied economics and policy https://doi.org/10.1111/1759-3441.12236 the details of which can be found here: https://sites.rmit.edu.au/placemakingeconomicsgroup/


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Dr Angelopoulos is an applied economist and lecturer in the school of Economics, Finance and Marketing. Her PhD focused on the spatial distribution of creativity and diversity across Australian regions. This is now being extended into a housing, household and policy environment, with a continued focus on spatial modelling. Sveta is an early career researcher who has started to develop her profile by publishing in reputable academic journals in her field and presenting her work in conferences. Her research contributes to a field that is becoming increasingly relevant to policy makers seeking to improve the competitive advantage of regions.

Associate Professor Jonathan Boymal
Dr Boymal is an applied economist, specialising in the areas of housing and urban economics, cultural economics, population economics, evaluation, economic psychology, health economics, cost-benefit analysis, and technology diffusion. He has published papers in leading journals, and has undertaken commercial policy research for the Victorian and Federal Government, as well as refereed publications in these areas. In addition to his research Dr Boymal has extensive experience in designing and delivering courses, and establishing and managing programs, across a range of business disciplines, both in Australia and overseas.

Dr Ashton de Silva
Dr de Silva is an applied economist/econometrician specialising in the analysis of the housing sector, household credit & financial markets, regional (including cultural) economies as well as government policy. He has published papers in leading international and domestic academic journals. Ashton has a strong record of engagement which includes conducting research in partnership with industry as well as being commissioned by private and public sector entities to lead specialised investigations. Previously he has had several leadership roles at RMIT University including the College of Business Excellence Research Australia Leader. Currently, he is the Discipline Head of Economics.
ABSTRACT

This article examines how you can leverage the knowledge economy to improve outcomes for your local economy. Building on the understanding of what the knowledge economy is through theory and examples, the conditions and process for successfully creating a "local knowledge economy cluster" are discussed.

DEFINING THE KNOWLEDGE ECONOMY

Concerning the knowledge economy, consider this: an increase in the number of patents in your local economy will lead to a proportional increase in your economic growth. As will an improvement in the quality of education (all levels), the number of scholarly articles published by those that work in your area, and, unsurprisingly, the level of royalty payments that are collected by organisations that are situated locally.

Also consider the effect of knowledge on employment. For every skilled job in the tradable sector, another 2.5 jobs are created in the non-tradable sector. And for every high-skilled job in high-tech manufacturing, another 4.9 jobs are created in the non-tradable sector.

So, what is the knowledge economy? In essence, the knowledge economy is the production, distribution and application of knowledge. And with knowledge becoming ever more critical to business and economic success it is important to understand these three factors.

Production: the production of knowledge is just that. It’s the creation of new understandings about any aspect the world in which we live and the ways we do things. Not only is it about the quintessential scientific discovery in say medicine, but it's also about insights from the soft sciences like economics and psychology.

Distribution: the second factor, the distribution of knowledge, is about letting others know about what is known. Yes, it is through formal university lectures and in the TAFE classroom, but distribution of knowledge also occurs in the context of business networking activities and through social media platforms.

Application: thirdly, the application of knowledge. This is where people use knowledge to develop innovations. Whether these innovations be new products or improved business processes, the important outcome is that something new has been developed because of what has been learnt.

Another way of putting all this about the knowledge economy is this; There is a relationship between your community’s “knowledge-base” and its capacity to generate and utilise economically beneficial innovation. That the growth of your local economy is linked to a continual improvement to the stock of knowledge held by your citizens. As one economist put it: “long-run growth is driven primarily by the accumulation of knowledge by forward-looking, profit-maximizing agents”.

Let’s pause to consider one implication of these last two paragraphs. Do the conditions exist in your local economy for people in general, and those in...
business in particular, to learn new things? Is there an openness to improvement, to being taught by outsiders, to keeping up with the changes that are happening in the economy?

EXAMPLES OF A LOCAL KNOWLEDGE ECONOMY

Given the factors of a knowledge economy are the production, distribution and application of knowledge, let us turn to see how this applies in practice.

The most straightforward examples are referred to variously as “knowledge clusters”, “research parks” and “science and technology precincts” among other labels. These terms describe a defined geographical area in which, among its constituent economic actors, knowledge is created, is allowed to flow, and is used to develop new products and processes.

Another concept that is used to define these places is the term “Triple Helix Cluster”. A Triple Helix Cluster is one in which government, academia and business work together for the common good. Typically, its where academia produces and distributes knowledge, where business applies knowledge, and where government facilitates each of the three processes.

One of the most famous examples of a local “knowledge cluster” is Silicon Valley. This San Francisco-based locale has generated several trillion dollars of wealth from its activities in the high technology sector. It is a place where academia (ie. Stanford University), government (ie. ARPA, NASA, etc.) and business (ie. Fairchild Semiconductor, HP, etc.) each played their part and worked collaboratively for significant and mutually beneficial outcomes.

Two other examples are worth reviewing. The first is “BioTurku”, the Turku Science Park of Finland. The focus of this cluster is on biotech. It was established in the early 1990’s with the then understanding that biotech and pharmaceutical industries were about to grow rapidly. All of its activities are coordinated by the business policy company called “Turku Science Park Ltd”. And this cluster has been well supported throughout its life through appropriate government policies and support.

Some key statistics:
- 2 universities and three universities of applied sciences
- 300 organisations and businesses
- 17,500 employees, 31,000 students, 400 professors
- 210,000m$^2$ of premises across 11 buildings
- Business presence:
  - Bayer production plant, 650 employees
  - Also: Flakt Woods, Meyer Werft, Orion Corporation, Wartsila

The second example is Sweden’s “Kista Science City”. Also known as the Stockholm IT Region, it is the largest ICT cluster in Europe. It was formed in 1986 when academia, industry and the public sector formed a collaborative venture called the “Electrum Foundation”. The Electrum Foundation runs both the Kista Science City organisation (which promotes triple-helix collaboration) and The Stockholm Innovation & Growth organisation (which is an incubator for high-growth businesses)

Some key statistics:
- 2 universities, with 15 research institutes nearby
- 700 organisations and businesses
- 28,000 employees
- Businesses presence:
  - Cisco, IBM, Intel, Microsoft

Fig 2: Components of The Triple Helix Cluster. (Source: Author)

Fig 3: Cities with a higher share of college educated workers have created more jobs. (Source: Citi-GPS “Technology at Work 2.0”)
CONDITIONS FOR A LOCAL KNOWLEDGE ECONOMY

Reflecting upon what I have written here and gleaned from other sources and research, it is clear that a local knowledge economy is not one-dimensional. That it can be described as a jigsaw puzzle with specific pieces each uniquely important. Three of the pieces are academia, industry and the public sector. A fourth is a governance committee characterised by a forward-looking and collaborative mindset. A fifth piece is a shared understanding and commitment to pursue opportunities in a single sector. The last piece of the jigsaw is for the cluster to be imbued with culture of learning and entrepreneurialism, of the acceptance of what is new, fresh and potentially disruptive.

While it will take time to successfully put together this jigsaw puzzle, when it does get going there are observations that can be made to help ensure the ongoing health of your “local knowledge economy cluster”.

Through their LEED (Local Economic and Employment Development) program a few years back the OECD published a paper that listed several such observations. This study developed a set of measurements that could be used to understand the performance of “local business clusters in the knowledge economy”. They nominated measurements such as employment growth, increases in firm profitability and viability as well as the age of firms in the cluster.

Among the findings were two observations. Firstly, clusters devoted to knowledge-intensive service activities outperform hi-tech manufacturing when it comes to employment growth and economic turnover. Secondly, entrepreneurship (ie. young firms) is linked to growth in both employment and economic turnover.

CREATING A LOCAL KNOWLEDGE ECONOMY

Thinking about these jigsaw puzzle pieces and what is common among them, one can see that the successful creation of a local knowledge economy cluster does indeed come down to people. It comes down to those willing to champion such an initiative, and those willing to support these champions. There is no set profile for a champion. Referring to the examples used in this article: Bio Turku got started with a property developer, and Silicon Valley had academic John Terman as its primary instigator.

In short, it does come down to leadership, to men and women able to see where the possibilities lie. Then, as the vision of the early leader(s) comes into view, people and organisations from each of the components of the Triple Helix need to be gathered. Where the overarching intent is to ensure the three knowledge economy factors and the remaining pieces of the jigsaw are harmoniously unfolding the founding idea.

Where the possibilities are found in leveraging the existing strengths, skills and knowledge of your local economy. Where like-minded people and organisations are drawn to the nascent vision. And where structures are put in place to ensure long term success.

The creation of a local knowledge economy requires intent. It is built on the long-term effort to harness to potential of the production, distribution and application of knowledge. In this context, relevant are the words of Winston Churchill: “A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty.”

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ABOUT THE AUTHOR
Paul Tero is currently undertaking the practice-based PhD program at Swinburne University. Where his research is focused on approaches to long term peri-urban outcomes with respect to tradable goods in the knowledge economy (aka “The Industries of the Future”). He holds Masters degrees in Business Administration (Technology Management), International Business, and Strategic Foresight. Aside from the EDA he is a member of the Australian Computer Society, the Association of Professional Futurists, and the Professional Speakers Association. In recent times he held executive roles in local business groups and is well experienced in the education and information technology sectors. He has published a Kindle-based career choices workbook entitled “Jobs. Future. You.”, and speaks to business groups, councils and secondary schools about the future of business and of work. He is currently contributing a series of articles exploring aspects of the digital economy on the Association of Professional Futurists web-site (apf.org/blog). Paul can be contacted through his LinkedIn profile (https://www.linkedin.com/in/paultero)
As part of Economic Development Australia’s (EDA) Overseas Study Tour Program, Paul Johnson, Manager Business Development at Wellington Shire Council in Victoria, travelled to New Zealand and the United States in November 2018. Paul would like to thank EDA and Wellington Shire Council for the opportunity to participate, learn and share this research.

There is an old adage “Success has many parents, but failure is an orphan”. This highlights two things:

1. No one wants to be associated with failure!
2. Sitting behind a successful outcome is a team of people who worked together to make it happen. It is extremely rare to cite a major achievement in the field of medicine, sport, space travel or any other pursuit and pinpoint success solely to one individual.

During my study tour to New Zealand and the USA in late 2018, I visited the Computer History Museum in Mountain View, California, a short distance from Googleplex and the Facebook’s headquarters. The Museum tracks the history of computing and its ongoing impact on society. The Museum clearly illustrates that collaboration is key to innovation:

- Steve Jobs, Steve Wozniak and the team at Apple
- Paul Allen and Bill Gates at Microsoft
- Mark Zuckerberg, Eduardo Saverin, Andrew McCollum, Dustin Moskovitz, and Chris Hughes at Facebook.

Whilst an individual innovator may have had a ground-breaking idea, collaboration was the key to unlocking the idea’s possibilities and ultimately driving its economic potential.

So, if collaboration is critical to success, what is being done in New Zealand and the United States to foster collaboration to achieve digital innovation? Below are a few examples from my EDA Study Tour Scholarship which provide some insights.

AUCKLAND COUNCIL

Auckland Council and Auckland Tourism, Events and Economic Development have established GridAKL located at the heart of Auckland’s waterfront in the Wynard Quarter Innovation Precinct. The Precinct is home to global innovators including AirNZ, IBM, Microsoft, Fonterra and Spark.

Auckland Tourism, Events and Economic Development reports that over the last 10 years, the digital innovation sector has witnessed 25% growth. ICT and Digital Media accounts for 3.2% employment in Auckland or 1 in 30 jobs. Half (48%) of New Zealand’s ICT companies are based in Auckland, employing 37,000 people. GridAKL’s role is to assist high-impact, growth-orientated, technology-focused businesses and entrepreneurs to develop and commercialise their innovations.

GridAKL offers modern collaborative spaces for start-ups, SMEs and corporates across three flagship buildings which aim to connect people, places and resources to help businesses become stronger, more successful and more innovative. People can connect via:

- regular events featuring local and global keynote speakers,
- seminars focussed on technology and innovation,
- interactions in modern, open-plan co-working spaces for start-ups and early stage SMEs,
- free desk space within the Tech Café,
- mentoring programmes and investment networks,
- ‘Slack’, an online communication service accessible only to GridAKL users/tenants,
- community notice boards which profile who is in the space.

Whilst GridAKL’s is Auckland Council’s flagship innovation project, in October 2018 Council opened Ngahere Communities in Manukau, approximately 25 kilometres south of the Auckland’s CBD. Manukau is the capital of south Auckland.
Here I met with Joel Umali, Specialist Advisor for the ‘Southern Initiative’ with Auckland Council. The Ngahere Communities space seeks to cultivate communities that enhance creativity and innovation by using collaborative spaces and co-designed programmes. The space is designed to create a space for innovation and entrepreneurship to thrive, especially for Maori and Pasifika communities.

The co-working space includes eight permanent desk spaces and 32 shared desk spaces, three meeting areas for breakouts, private meetings or group presentations.

The importance of promoting entrepreneurship in Manukau cannot be understated, considering high rates of poverty and obesity and low rates of educational attainment, personal income and home ownership.

Following Council’s significant investment in GridAKL in central Auckland, Manukau is Auckland Council’s next priority for place-making investment. Council’s Transform Manukau initiative seeks to address the lack of existing space to create or promote entrepreneurship in Manukau and to promote grass-roots innovation within the community. I look forward to visiting Ngahere Communities in the future to find out how things have progressed.

Auckland Council’s approach to GridAKL and Manukau demonstrates that there is no ‘one size fits all’ approach to fostering digital innovation and collaboration. By carefully understanding the needs of the community and the importance of diversifying its economy, Auckland Council has adapted its offering to two diverse market segments. In an Australian context, economic development practitioners and Councils need to consider how place-based planning can extend beyond renewal of physical infrastructure and broaden the remit of place-based planning to build the capacity of communities to access the digital economy and increase employment options.

**PLUG AND PLAY TECH CENTER, SUNNYVALE, CALIFORNIA**

In the heart of Silicon Valley, you’ll find the Plug and Play Tech Center with its mission ‘to make innovation open to anyone, anywhere’.

Plug and Play aims to be the ultimate innovation platform bringing together the best start-ups and the world’s largest corporations.

During my tour with Andrew Hans Chang, Associate, International and Government Relations, it became clear that Plug and Play’s reach extends well beyond US borders and seeks to bridge the gap between countries around the world and Silicon Valley. Plug and Play works with international government agencies, technology incubators and universities to source, identify and accelerate the most promising start-ups from various global ecosystems and is currently working with partners from over 25 countries.

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Plug and Play’s all-in-one Start Up Ecosystem model includes:

- Mentoring
- Logistics
- Networking including daily events
- Corporate innovation
- Investment

Major companies base their innovation teams on site at Plug and Play to get access to the talent pool working within the office space. This way, major corporates are able to gain a competitive edge by attracting innovators to help solve problems and remain competitive.

Plug and Play, like the other digital innovation spaces I visited in New Zealand and the US, focus heavily on hosting events to gather a critical mass of people and increase the cross-pollination of ideas between digital innovators and to help foster
Most economic development practitioners won’t be based in a vibrant ecosystem like Silicon Valley. However there are elements of the Play and Play model which can be rolled out in Australia. For example, practitioners can:

- Conduct an audit of locally based digital innovators and small businesses to determine their capabilities. For example, capabilities may be social media marketing, graphic design, app development or web design.
- Use existing communications channels such as a business e-newsletter to circulate a survey monkey to gather data on the digital gaps local SMEs identify as limiting their and competitiveness. Gaps may be social media marketing, graphic design, app development or web design.
- Use this information to host an event or online/face-to-face forum to match local SMEs with locally based digital innovators who can address their identified gap. This collaboration will promote local procurement and increase the value of business to business transactions in the local economy whilst building the region’s digital ecosystem.

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The Capital Factory demonstrates that mentoring is a key factor when delivering an accelerator or incubator program. Economic development practitioners can identify the local digital champions in their community who may have successful businesses but who often operate from a home office or another location. These champions may have national or international trade activity yet maintain a low profile locally. However, these champions are an untapped resource for local startups wishing to pursue a business idea or scale up but needing a local mentor to support commercialisation of their business. Practitioners can foster this collaboration through local events, the use of Meetup groups or via Facebook to bring enable the ‘master’ and the ‘apprentice’ to collaborate formally or informally.

Companies who have collaborated with the Plug and Play Tech Center.

**CAPITAL FACTORY, AUSTIN TEXAS**

When the Capital Factory in Austin, Texas was first established, it was exclusively an accelerator for digital innovators to refine their business and commercialise their product or service. However, since then the Capital Factory has broadened out to attract and host events to help attract entrepreneurs. Incredibly the Capital Factory now hosts approximately 1300 events a year!

Through events, the Capital Factory promotes a sense of community which is at the core of its success. Start-up businesses accepted into the Capital Factory’s Accelerator Program have access to 170 experienced mentors, who make a one-year commitment to mentor participants on a monthly basis for free.

The Capital Factory’s expansive mentor program and highly competitive start-up scene attracts high potential start-ups, all co-located in one location, matched with an extensive events program and deep-pocketed venture capitalists to create a density of activity which fosters collaboration, drives innovation and has given rise to a very mature digital ecosystem.

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**ROLE OF UNIVERSITIES**

An observation made during the study tour was the role of universities in cultivating digital entrepreneurship.

If cities, towns or nations seek to manufacture or cultivate digital innovation, the role of universities...
cannot be understated. Universities can provide the tertiary courses, student pathways, and partnerships between for students and corporations to play a critical role in fostering a mature ecosystem.

Stanford University and University of California, Berkeley have been central partners in the rise of Silicon Valley. University of Texas is credited with supporting the digital renaissance of Austin and Texas more broadly.

• Is this simply borne from the fact that young people congregate at universities and university-life provides students with opportunities and time to collaborate and create?

• Are university students more likely to take risks, challenge the norm and be technologically curious, therefore more likely to innovate?

• Do universities with a strong pedigree for research and development bring a higher degree of collaboration which links students with real-life industry experience and capital?

A proactive university (or TAFE) can be another key driver to promote collaboration and promote digital innovation. Economic development practitioners need to understand the course offering, industry placement programs and international partnerships offered by their local university or TAFE. These opportunities need to be actively promoted throughout the local business sector to ensure collaboration between the tertiary/vocational education sector and the local business sector remains relevant, reflective of local industry needs and provides access for local businesses to benefit from the university’s digital innovation capabilities and research and development. An Australian example of strong local links between university capability, innovation and business competitiveness is the establishment of Carbon Nexus within Deakin University in Geelong with provides industry with access to a team of globally recognised high technology materials experts to deliver the solutions for businesses and researchers to gain a competitive advantage.

Play Tech Center in Silicon Valley very explicitly displayed the financial value of start-up companies from major US universities via a graph which compared the worth of different companies and the universities these start-ups originated from.
In a local government economic development context, a large proportion of time can be taken up with street level retail businesses. These stakeholders can be key drivers of, and heavily reliant on, foot traffic in main streets and activity centres but they’re not the only inhabitants of this retail ‘forest’.

Independent professionals - solicitors, accountants, tax professionals, financial advisors and superannuation specialists – as well as the ‘creative suite’ – architects, graphic designers to name just two - are often clustered in and above main street shopping precincts and form a subtle but important part of the local economic ecosystem. In addition, they provide government with an alternative ‘on the ground’ stakeholder to the traditional physical shop retailer.

**SAME SAME...BUT DIFFERENT**

It’s both the things these professionals have in common with shop retailers, as well as the differences that make them such a valuable stakeholder.

Like their shop neighbours the local professional is either a property owner or tenant in the precinct. In addition, they spend the majority of their time physically in the centre. Like shop operators, if there is a trader organisation then they are likely to be a member or at least be aware of its existence and know some of the members. Finally, if a special rate/levy scheme exists for the area then they are directly or indirectly participating and/or contributing to it.

Unlike shop operators these professionals usually keep more traditional office hours. They have more structured, calendar appointment based work practices and usually have no need to engage with local government on footpath trading or street infrastructure issues.

**THE OPPORTUNITY**

With their physical presence in the street the professionals have valuable knowledge about the history and relationships between traders as well as the inevitable ebb and flow of tenancies, shop operators and the opening and closing down of businesses.

As they usually operate by appointment it can be quicker and easier to meet with them one-on-one as opposed to a shop operator where the conversation is constantly under threat of interruption by staff and customers.

In areas where trader groups are in their infancy, professionals, through their constant exposure to government process and regulation, can be an invaluable asset in navigating the group through incorporation and other administrative regulatory requirements.

Finally, as they’re not as heavily dependent on foot traffic and the associated issues of parking, street infrastructure and footpath trading, conversations can more quickly move to macro strategic issues, for example, the marketing and promotion of the centre as a whole.

These professionals can be a trusted voice to encourage trader groups to lift their outlook to the medium term, bringing discussions of the “bigger picture” - the long term commercial sustainability of the precincts - to the forefront.

So when engaging with the butcher, baker and candlestick maker, keep the local independent professional in mind as well. With the rapid transformation of the retail sector, the professional services provide a critical piece of the tenanting mix to ensure the prized activation of our local centres is sustained.

**ABOUT THE AUTHOR**

Ray Tiernan holds a Bachelor of Economics from the University of Queensland and has worked in local government in Victoria for the last six years. He was Senior Project Officer for the City of Port Phillip’s Vibrant Villages Placemaking Program which won the 2016 EDA award for Community in Economic Development. In 2018 he was Program Manager - Planning & Performance overseeing the Council endorsement and publication of Year 2 of the City Port Phillip’s Council Plan 2017-27 and Budget 2018/19. His passion and focus is on delivering the benefits to communities and the local economy brought about by collaboration between businesses, community groups and local artists.
EDA is managed by a volunteer Board of Directors. Paul Martins from Sunshine Coast Council and Susie Bower from the University of Tasmania recently retired from the EDA Board and we would like to thank them for their contribution to the national peak body for economic development professionals.

REFLECTIONS FROM RETIRING BOARD MEMBERS

Paul Martins, Head of Economic Development: Sunshine Coast Council

“Economic Development practitioners shape outstanding business and community outcomes every day and EDA as their peer organisation helps connect best practice in this space around Australia. It’s been a terrific experience to work with the rest of the EDA Board and SPNs to increase engagement and partnerships across the network,”

Susie Bower, Unit Coordinator: University of Tasmania

“I joined the Board of Economic Development Australia in a phase when the Board was consolidating its efforts to build a strong financial base for the members. The Board members took on many responsibilities that would have normally been allocated to an Executive Officer in order to build that financial base. The Board achieved a strong financial position so that it could once again employ a CEO and the appointment of Jacqueline allowed the Board to concentrate on strategic matters.”

“My aim for Tasmania was to establish a State Practitioners Network and finally after four years this was achieved. Having achieved this and being elected as a Councillor at the October elections in 2018 I felt it was time for someone else to take on the role on the Board and take Tasmania to the next level. I thoroughly enjoyed my time on the Board and the collegiality shown by fellow Board members under the leadership of Mark Holdsworth. I look forward to seeing the continued growth of EDA and the strong advocacy role that it performs and I am proud to have contributed in a small way.”

Erin McGoldrick from Glenrochy City Council has been appointed as the Tasmanian Director following Susie’s retirement. All other Board vacancies will be advertised in due course and we welcome enquires from qualified professionals.
In 2015 Renewables SA commissioned a study to examine South Australia's Bioenergy potential with a view to creating a Bioenergy Roadmap for South Australia. This policy initiative was highlighted as one of the stand out policies in Australia by the Bioenergy State of the Nation Report in 2018.

At a national level the Australian Government has been funding the Australian Biomass for Bioenergy Assessment project (ABBA). The aim of this project is to deliver a national database of biomass resources for bioenergy across Australia taking a national approach to mapping biomass rather than it occurring in disjointed ways within regions. It provides the backbone for a regional approach to projects ensuring consistent information is more readily available. These policy frameworks are key enablers in the uptake of bioenergy across South Australia.

The South Australian Bioenergy Roadmap identified the Limestone Coast as one of the hotspot areas within South Australia. To facilitate the Roadmap implementation, the Bioenergy Connect Program was developed by the South Australian Government. Since 2016 the Bioenergy Connect Program has been available across South Australia for individual businesses who produce a biomass product and have an energy requirement. The program has included two components: prefeasibility and feasibility. The Prefeasibility Fund is an enabling fund designed to help South Australia accelerate its exploration of bioenergy and the role it can play for businesses. The Prefeasibility Fund is a low risk means for businesses to take that first look at the viability of bioenergy. All businesses need to do is commit time to engage with an expert consultant and provide key data. The consultant then does some basic calculations around whether they have the ingredients for a successful project. Over the last two and a half years the Prefeasibility Fund has supported 21 projects across 6 industries with businesses from piggeries, food and timber processors to dairies and olive farms.

The Feasibility Fund follows the prefeasibility process. It is designed to assist those businesses who received a favourable outcome in prefeasibility to take the next step of undergoing a full viability assessment of their project. At this point the...
project is either deemed ‘investment ready’ or impracticable. Feasibility has supported four projects to make that next leap into the bioenergy unknown. The first business to take up feasibility funding was Blue Lake Milling, an oat processing facility in Bordertown South Australia who scoped an anaerobic digestion system for oat husks. With a favourable feasibility study, they are continuing to develop and seek approvals to pursue this development opportunity.

While feasibility funding has enabled the next step for some businesses, what the Bioenergy Connect Program has more strongly revealed is that scale can be a real issue in project viability. While many businesses have the motivation and commitment to producing energy through biomass, they don’t have the scale to achieve a return on investment that makes the project attractive. This along with the recognition that much of the current biomass present in the region could have higher value through its end product rather than the energy created was a key realisation.

As a result of the Bioenergy Roadmap Project, Regional Development Australia Limestone Coast saw the opportunity to bring together businesses that had a biomass potential or had gone through the prefeasibility process with industry experts, to flesh out the opportunity that lay with hosting a bio hub for the region. A regional forum was held in Mount Gambier in December 2018 to outline this potential. With over 60 attendees from across the region and some from across the border, speakers from The University of Adelaide, Bioenergy Australia, Department of Energy and Mining and Renewed Carbon spoke to the opportunities around biomass, bioenergy, the bio economy and bio hubs.

The bioeconomy is a sustainable economic system based on the use of renewable raw materials and bio-based innovations. Bioeconomy projects can create growth, prosperity and employment but does so on a renewable resource base. Regions have a significant competitive advantage in the bioeconomy space, an advantage not yet being truly realised. Biomass at scale occurs in regions so they are best placed to pursue these opportunities as opposed to our metropolitan counterparts and turn them into economic development projects.

While it remains financially viable for some larger businesses to pursue opportunities in their own right, many of the forum participants saw that the true opportunity to enter the bioeconomy sits with a regional approach. Expanding in scale from an individual business to region wide creates a significantly greater opportunity and would bring together large volumes and types of biomass enabling a bio hub to sustainably supply markets and achieve volumes to reach global markets, opportunities that are problematic at a smaller scale. Regional bio hubs can also combine existing commercial opportunities with research
and development to ensure the hub continues to develop new products to supply new markets, as existing markets change or contract. In theory a successful regional project that truly enters into the bioeconomy can generate the same or even more revenue from the secondary biomass resources as the primary products can achieve, potentially doubling the Gross Regional Product from each hectare in production.

Taking a region into the bioeconomy is not without its challenges and barriers. Perhaps one of the greatest barriers is engaging all key stakeholders to connect to the potential such a regional project would offer and appreciate the benefits that collaboration can achieve.

A bio hub project is defined by the available biomass, however biomass can’t be considered available until the owner of that biomass commits it in principle to the project. Once again, these stakeholders need to understand the value to them of doing so when they could attempt to reap the economic benefits in a project of their own. The more biomass is given a value the more likely holders of it will consider more carefully how they allocate it.

Bio hubs are also not a well ingrained technology in Australia and this can lead to challenges around obtaining approvals, as key agencies are not equipped with the guidelines yet to assess these projects. This can lead to extensive delays and potentially even regulatory barriers to projects moving forward. As more projects roll out across the country this problem will dissipate and projects will be able to more easily understand and meet the required guidelines. Government can also play a key role in this area by looking at case studies of existing projects and understanding where approvals may have been a barrier.

Investment is another perceived barrier to these projects not only in the scoping and feasibility phases when viability is completely unknown, but ultimately any infrastructure will also require investment. Given the unknowns around biomass commitment in a region, the cost of a large feasibility study can be considered a risk as no viable project may result and would likely be best enabled with some financial support from government.

The infrastructure itself can then require a significant investment although at this point in a well-planned project, viability is assured and should prove attractive to private investment. The likely job creation and new economic activity aspects would also appeal to government funding and if return on investment calculations can be improved with the use of government funding the attractiveness to private investors is also improved.

While unquestionably challenges exist in what is a relatively novel concept in Australia the potential benefits are significant. With regional businesses and industry in the driving seat, in collaboration with Government and Government agencies, biomass is a regional competitive advantage there for the taking.

ABOUT THE AUTHOR

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Dr Elizabeth Perkins is an experienced leader with a track record in financial management, team leadership, strategic planning and project management.

Her PhD and research background is uniquely coupled with experience in managing complex facilities in challenging environments. After growing up on the family farm near Penola, Elizabeth completed a Bachelor of Science (Honours) alongside a Diploma in Languages (Mandarin Chinese) at the University of Adelaide in 2005. Elizabeth worked at the University of Queensland’s Heron Island Research Station where she was promoted through the ranks to become the Station Manager in 2012. Elizabeth has been with RDALC since 30 October 2017.
INTRODUCTION

In an urban planning context, site activation most often consists of the application of quite simple placemaking principles and the odd event driven by community involvement to create a ‘sense of place’ in which people are drawn for the purposes of recreation, social and commercial interactions through specific interventions. So, when asked to consider the activation of sites within UNESCO World Heritage site of the Citadel of Hue I felt that this model maybe insufficient. The Citadel of Hue is not an underutilised suburban park or neglected city laneway; it is a site of significant cultural significance and the Imperial City is an internationally renowned tourist attraction. It was a privilege to be invited to work on such a project, but necessary to for the site to be treated with the utmost cultural sensitivity. I feared that suggested interventions such as seating, constructed pathways or clustered commercial operations maybe too simplistic for a site of this historic magnitude. Initial reading outlined some of the local complexities such as the relocation of residents, pollution and flooding, also the devastating damage after years of war. However, on-the-ground research enabled me to explore, but more importantly challenge my bias and motivate me to contribute to a meaningful and practical outcome. This paper explores three identified themes consisting of tourism development, local identity and use of space, influenced by readings and practical undertaking by Australian and Vietnamese university students from the University of South Australia and the Hue University of Sciences. Firstly, I need to acknowledge the contribution of these (Australian and Vietnamese students) that I had the privilege to work with on this project as they provided a Vietnamese perspective to balance the western lens, introduced frameworks such as urban acupuncture, and reminded me that some of the best ideas are simple interventions regardless of the nature or stature of the site.

AND, WHO DO WE HAVE HERE TODAY?

Attempting to understand the tourism market in Hue.

A group of 20 Australian tourists wandering the Citadel in the midday sun was possibly a source of bemusement to locals and the packaged tour groups from China and Korea travelling in electric minibuses into the Imperial City Forecourt for their cultural experience of Hue. Whilst these tourism groups are vastly different in their preferences of modes of transport and level of service expectation, one
common factor in visitation to Hue stems from the intention to participate in a cultural experience. But, how to expand on that experience and activate ‘place’ involves a better understanding our who are the visitors to Hue.

According to (Nguyen and Chang 2014), visitation to Hue has expanded from 8000 arrivals in 1990 to 1.5 million in 2010. Rofe et al. (2017), state Hue received 1.2M visitors in 2014 with the majority of international tourists from Europe and the Asia pacific region with cultural heritage the primary draw card. However, with the majority of visitors on packaged tours the length of stay of two days remains relatively unchanged. McKercher (cited in Nguyen and Chang 2014) poses a model in which cultural tourism is divided into five classifications in which the packaged sightseeing tour is most likely to have a superficial and entertainment orientated experience. Whereas, the serendipitous cultural tourist is more likely to have a more immersed experience.

It is the latter that provides more opportunity for tourism development, specifically for extending lengths of stay and supporting the proposed UNESCO model of Sustainable tourism development (UNESCO 2014).

It is this model that proposes local community engagement to empower and engage in site conservation, supported by findings of work undertaken by Group 2 in 2017 (Economic, development, tourism and heritage) that indicated anecdotal support for the tourism industry by the local community, especially if it helped to beautify the citadel and improve infrastructure for walking. Also, Ngo Quang Duc & Phan Thuy Van (2017, p.79) state “…it is important to rebuild the general landscape environment so that the lakes in the Capital City are not only water reservoirs but also green, clean and beautiful parks with cultural and historical significance for the people to enjoy.

The challenge for developing the tourism market is to understand who is visiting and to collate better data for market development. Our Australian group whilst posing models of walking tours were witness to group after group arriving in buses or on cyclo tours leading me to think we need to be flexible on our thinking of how people would undertake a Citadel Trail.

THE LOCAL EXPERIENCE AND RETAINING LOCAL IDENTITY.

Hue has a complex history of imperial rule, colonisation, regional influences, political transformation and recovery from a war-ravaged landscape, it is the combination of these elements that form what is the unique identity and local character. Therefore, it is challenging to balance the conflicting interests of stakeholders and their interpretation of ‘local character’. In a comparison with the work undertaken by Dovey, Woodcock & Wood (2009) on Fitzroy in Melbourne Australia, the success of Hue as a tourist attraction exacerbates the tensions between stakeholders. On one hand, UNESCO’s requirement of preservation can be restrictive in terms of renovation and renewal, whereas, the other extreme is unchecked development. As an example, the construction of illegal dwellings on the rampart walls has lead to forced resident relocation. Another more visual example in the gentrification in areas where traditional housing is being lost to more glamourous townhouse developments. Whilst gentrification can be a signal of success in desirability of ‘place’, it is often at the cost of local identity.

Development controls exist within the Management Plan of the Complex of Hue Monuments (Thua Thein Hue Provincial People’s Committee 2015) in regard to setbacks and building heights, however does it need to preserve all of the citadel housing...
in the context of Hoi an, or is some modernised development a good outcome for Hue?

**HOW SPACE IS USED AND URBAN ACUPUNCTURE AT WORK IN THE HUE CONTEXT**

In a western context we judge the success of place in terms of amenity and human activity and interaction. Upon initial observation of three specific sites in Hue, it appeared that work needed to be done as river bank walk, the Truong Tien Bridge that leads to the Citadel from the tourist precinct and the forecourt area adjacent to the Imperial City entry were underutilised and lacked interest to visitors.

However, initial single observations failed to capture how urban acupuncture is activating these locations, it is just that visitors to the city of Hue may not understand how this is applied in the localised context.

**Figure 1: Principles of Urban Acupuncture**

In considering the principles of urban acupuncture of described by Hoogduyn (2014) in Figure 1, the Truong Tien Bridge and the Imperial City act as the sensitive points in which the analogy of the healing influence stems from these locations. Quick acting, small scale participatory activities create ‘places’ responsive to the requirement of the local population, considering climate and preferences for social engagement, however remain unappreciated by the visitor that does not make time to understand how space is used and place can be created through rapid activation.

**River walk transformation**

These comparison images of the river walk section under the Truong Tien Bridge demonstrate how the location is transformed. From a place devoid of people, possibly even perceived as unsafe in the morning, the river walk become a street market of an evening. Food and tea vendors line the walk in the cool of the evening when people have recreational time to shop or socialise with family and friends with no change to existing infrastructure.

**Truong Tien Bridge**

The Truong Tien Bridge is a sensitive point as it initiatives activation such as the market example above, but also enables alternative uses. Despite extensive public areas, the bridge is a popular morning location for exercise. As demonstrated below, the structure is used for strengthening and stretching exercises. An Australian comparison would be the installation of fitness equipment in a parkland setting, however again the Vietnamese adaption requires no investment in infrastructure utilised for short periods or subject to damage from flooding which is Hue has experienced over 48 recorded events exceeding 3.0m between 1977 – 2003 (Vo Ngoc Duc & Carlorosi 2017). It is this enabling that attracts people and allows the activation of surrounding and associated spaces.
The various guises of the Imperial City Forecourt

Over the course of the day, the forecourt to the Imperial City within the Citadel is transformed based on the people present and their application of use. In the early morning hundreds participate in morning exercises classes or walking the perimeter. As the day progresses, visitors arrive and it functions solely as a meeting location prior to entering the Imperial City.

However, it is of an evening when visitors have left the Citadel that the forecourt is an attraction worth visiting. Spectacular lighting creates a dramatic theatrical backstage as the forecourt again returns to a place of recreation with children playing and lovers seated in the privacy of the gardens.

SUMMARY

The Citadel of Hue is an activated place. However, the challenge is to better understand who the visitors are in Hue and how to enable them to engage and immerse in the sense of place created through these types of activations. Likewise, determining the elements of local identity that need to be preserved and what change is acceptable in a modernised world will always be debated, but change will enviably occur. And finally, the understanding of space and how people use it must be viewed from a local perspective offering an opportunity for the true cultural experience. Participation in this study was an enlightening experience that some of the simplest interventions can have a healing effect.

REFERENCES


ABOUT THE AUTHOR

Teresa Lever is the Economic Development Officer at Swan Hill in North West Victoria having returned to the profession after a sabbatical of some years and a renewed passion for representing the interests of regional Australia. Having worked as an Export Advisor with Austrade and managed the federally funded Healthy Communities program in Swan Hill, Teresa developed an interest in town planning due to the influence of the built environment on social health and commercial interactions.

After a placing making experience in the Burdekin, North Queensland, Teresa headed to Adelaide to completed a Graduate Diploma in Urban and Regional Design at the University of South Australia. In 2018, she received a scholarship from the University of South Australia to participate in a study tour to investigate place activation to stimulate tourism visitation in parts of the UNESCO listed Citadel of Hue, Vietnam. This paper reflects on the experience of a Vietnamese national treasure almost razed during the American/Vietnam War.
HOW TO GROW YOUR REGION’S SLICE OF AUSTRALIA’S TOURISM PIE BY LEVERAGING THE ENABLERS OF A VIBRANT VISITOR ECONOMY

BY SASHA LENNON AND ROGER GIBBINS

Many of Australia’s tourism icons are located in regional Australia and the visitor economy is a pillar of regional economic activity. Australia’s tourism industry continues to grow as new visitor markets emerge. In regional Australia, the visitor economy is on an upward trajectory, with the total number of visitors increasing on average by 3.4 per cent per annum over the past five years.

While this is good news for Australia’s regions, it begs the question, how can they capture a fair share of Australia’s growing visitor economy and, more importantly, how can they grab a bigger slice of the pie? The answer lies in the design and implementation of considered strategies which focus on the enablers of a vibrant visitor economy.

AUSTRALIA’S VISITOR ECONOMY - THE SIZE OF THE PIE

Tourism industry revenue growth has also been assisted by the Tourism 2020 program, which is a Federal Government strategy to improve tourism infrastructure and allow industry players to capitalise on rising demand for Australian tourism. According to IBISWorld, over the five years through to 2024, Australia’s tourism industry revenue is expected to increase by an annualised 2.8% to total over $154.3 billion.

Tourism industry revenue growth has also been assisted by the Tourism 2020 program, which is a Federal Government strategy to improve tourism infrastructure and allow industry players to capitalise on rising demand for Australian tourism. According to IBISWorld, over the five years through to 2024, Australia’s tourism industry revenue is expected to increase by an annualised 2.8% to total over $154.3 billion.

While international tourism represents the fastest growing market for industry operators, domestic tourism still accounts for over 70% of Australia’s tourism industry revenue, and for many parts of regional Australia, the real opportunity to grow the local visitor economy lies in the potential for greater domestic visitation.

Domestic visitation to regional Australia increased by 4.6% per annum over the five-year period to 2017 and 62% of all visitors to regional Australia are domestic day-trippers. According to Tourism Australia, Australian tourism isn’t just about capital city tourism because many Australian icons and ‘bucket-list’ spots are located throughout the regions.

The ‘grey nomad’ drive tourism phenomenon is providing new income opportunities for many regions throughout Australia, which are taking full advantage of the growth in demand for drive tourism experiences by promoting touring routes and associated activities such as camping, ‘glamping’, food and wine tours and walking, and providing the facilities and services that visitors seek.

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Key measures of success for regional Australia’s drive tourism market include the number of tourists embarking on self-drive journeys, the length of their journeys, the time they spend in particular places and the amount of money they spend. This market is expected to experience significant growth due to Australia’s ageing population and a corresponding increase in retirees who travel around Australia.

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However, grey nomads are not the only ones driving demand for visitor experiences in regional Australia. With millennials being the next wave of travellers, demand for travel experiences that resonate on a deeper emotional level is also driving travel brands to develop product that is more adventurous, more personalised, and more attuned to local culture, inspiring consumers toward a path of self-discovery. Regional Australia is well-placed to capitalise on this trend.

So the race is on! Nationally, the tourism pie is growing, and Australia’s regions are well-placed to share in this growth. But with competition for the tourism pie being fierce, regions need to carefully consider what to do to ensure they don’t miss out.

This takes us back to the enablers of a vibrant visitor economy.

**HOW TO GRAB A BIGGER SLICE OF AUSTRALIA’S TOURISM PIE**

Tourism Australia sets out a holistic process for preparing a Destination Management Plan for a region. Such a plan (or alternatively, a ‘Tourism Strategy’) may be framed around what we term the ‘enablers of a vibrant visitor economy’.

These enablers refer to the things that local and regional Councils, in concert with tourism organisations and other key stakeholders, including regional development organisations, may take strategic actions to influence key economic development outcomes.

**Figure 2. The Enablers of a Vibrant Visitor Economy**

1. **A Conducive Environment**: In order to attract and hold visitors there are three aspects of the environment that must be attended to:
   - The *natural environment* must be as close to pristine as possible with appropriate management of all aspects of land, air and water - and habitats for flora and fauna;
   - The *built environment* must be attractive and safe (i.e. liveable) and based on the principles of ecologically sustainable development; and
• The social / cultural environment must provide for educational, recreation, leisure, wellbeing and artistic pursuits, and efforts to promote a region’s social and cultural heritage must be authentic.

2. Quality Infrastructure and Services: These must include both private and public sector items that are essential for accommodating, entertaining, informing and transporting visitors. There are five aspects that must be attended to:

• Entertainment and cultural attractions (both natural and built) catering for a wide variety of needs;
• Hospitality services, which must be of the highest order to be competitive;
• The quality of accommodation and ‘value for money’;
• Events, which are the key to promoting a region and cultural diversity, attracting visitors who may not otherwise come; and
• Transport by road (including cycling), water, rail and air and reliable modern communications, particularly given the generally-held expectation of the 21st Century tourist that they be connected to the world 24/7.

3. Effective Information Management: With a conducive environment and quality infrastructure and services provided, the region concerned has something to offer to the visitor market, and this will need to be effectively promoted. There are four aspects that must be attended to:

• Research is an essential aspect of business development that is best carried out centrally. Up-to-date data on visitor preferences, wants and needs is essential in delivering appropriate services;
• Marketing must be directed at the relevant market segments in an effective way using the full range of media available, including, importantly, social media;
• Visitor Information must be readily available to prospective and ‘captured’ visitors to ensure they are able to access all of the attractions and experiences on offer that suit their needs; and
• Wayfinding is an important aspect that facilitates access to attractions and experiences.

4. Collaborative Governance: This is the glue that binds it all together. There are four aspects that must be attended to:

• Stakeholder co-ordination is normally a key public sector function that can assist stakeholders (public and private sector) to work together for mutual benefit;
• Business support is required, particularly for small to medium-sized businesses that make up the bulk of visitor service providers;
• Training is an important aspect of business support and it also enables greater workforce participation; and
• Investment attraction is a key aspect of enhancing the quality and range of attractions and services that can be targeted and this is most effective when undertaken in a strategic, informed and collaborative fashion.

By focusing on these ‘enablers’, action plans can be developed that are relevant and effective, resulting in sustainable growth in the regional visitor economy.

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ABOUT THE AUTHORS

It doesn’t take too much analysis to come to the conclusion that Japan has the highest percentage of elderly citizens compared to any other country in the world. Off the back of a post-World War II baby boom, Japan reached peak population of 128 million people in 2010. Since that peak approximately 1.34 million less people now reside in Japan and trends suggest that the population decline is only going to continue. Without intervention, forecasts predict the population to shrink to 88 million people by the year 2060, a potential decrease of 40 million people in 50 years!

Currently 27.4% of the population is aged over 65. Conversely only 12.3% of the current population is under the age of 15 with the balance of the population between 16-65 making up the remaining 60%. By comparison Australia’s population is made up of 18.9% (0-14), 66.2% (15-64) and 14.9% (65+).

Japan’s new demographic paradigm is having all sorts of impacts on the traditional economic and social models. Most notably, the shrinking workforce is forcing the government and industry to look at new ways to use robotics and automation to not only keep the economy chugging along, but more importantly to help care and support the ever increasing retired/senior sector of society. The impacts of the social change are being most harshly felt in the rural and regional areas of Japan with most young people being attracted to the lure of big-city life in one of Japan’s many large urban centres. This is having a dramatic impact on population numbers and the ongoing viability of many small communities is being brought into question.

It is an unprecedented scenario, and the way Japan handles it will provide a wealth of learning to the rest of the world. The government is being optimistic and see it as a chance to drive change that will see the country evolve into Society 5.0 which is Japan’s vision for a human-centred society that will represent the next evolution of human-kind. There’s a lot to unpack in that future vision, but first let’s look at how Japan got to its current situation.
The chart above shows the decline in babies being born as a comparison to the annual death-rate. In recent years, deaths have out-numbered births and with minimal foreign migrant intakes, you don’t need to be a genius to realise that the population can only continue to decrease in this situation.

SOCIAL MAKEUP

Japan’s social makeup is different to most countries with many unique idiosyncrasies, though that too is beginning to change. The traditional social model was that once married, the man of the family was expected to be the provider while the wife would quit their jobs to stay at home and raise the children. In addition to this, the eldest son of the family was expected to live with, and care for his parents as they age in exchange for inheriting the family house and becoming the head of the family. This model can still be seen all over Japan, though it is definitely being challenged.

As a westerner looking in, the most obvious flaw in the tradition is the inherent gender bias which assumes that females will not desire a professional career and will be happy to play second fiddle while the husband provides. In recent years this has certainly been challenged by Japanese working females with many career women taking it up to their male counterparts. Indeed, the government is encouraging more women into the workforce to help cover the labour shortage. However with limited child support and workplaces that provide little to no support for female staff taking leave to start families, many women are left with making the choice of career or family. The declining birth rate suggests that many are making the choice to work.

The other recent dynamic entering Japanese society is the social acknowledgment and gradual acceptance of homosexuality as an option. There is still a massive gap in this space compared to western countries, but if pop-culture is a reasonable measure, the number of openly gay and/or transgender celebrities gracing the TV screens has increased dramatically over recent years.

RESPECT THY ELDER

A key element that makes up Japanese society is that respect for people older or more experienced than you is embedded into children as soon as they are able to interpret the world. The best example is at school where children can basically categorise all other students into three types:
Senpai: Anyone in a grade above them  
Ta-me: Anyone in the same grade level  
Kohai: Anyone in a grade lower than them

Kohais are trained (sometimes to a borderline bullying level) that they are subservient to their Senpai. They are expected to use honorific (polite) style Japanese, and in the case of school sporting clubs will be forced to do the ‘dirty jobs’ by their Senpai.

Naturally, as the cycle of years pass through and children advance through the grades they will be entitled to unleash the same level of authority on their younger kohai below them, and so on and so forth.

The one safe haven in all of this is the ‘ta-me’ or the same grade students where there are no expectations and students can treat each other equally and respect is earned more so on virtue.

This ‘respect for elders’ is embedded into all parts of Japanese society, so in effect, anyone who is older than you is your senpai. The dynamic can change a bit in a work place, where it isn’t necessarily how ‘old’ an individual is, but rather ‘how long’ they have worked at a company that determines the ‘Senpai - Kohai’ dynamic.

There are a range of positives that come out of this model, and over my years in Japan I have certainly observed that there is genuine respect for older/ageing people.

The flip side of it is that in a work place, staff are rewarded more so on ‘longevity’ rather than raw talent. This dynamic has also created a situation where people are often uncomfortable to ‘upset the apple cart’ as they know that if they can stick around they will be rewarded eventually. It also means that having mandated ‘retirement ages’ is something that people who are working up an organisations’ ranks are going to want to keep as the sooner the ‘oldies’ retire, the sooner they can assume senior leadership roles. If retirement is forced by age, then it allows for a ‘painless’ and organised process where no-body can be judged for wanting to push people out of an organisation and everyone keeps face.

*Note: this simplified explanation isn’t to say that talent counts for nothing, but talent certainly isn’t everything.

In my opinion, this ‘senpai-kohai’ dynamic, while a cornerstone of Japanese society, is something which is going to have to evolve in order for Japan to reach its full potential, and indeed, to get through the challenges presented by its shifting demographics.

WHERE ARE ALL THE IMMIGRANTS?

Japan has historically been a country that has been a difficult place for people to migrate to. There are many reasons for this, though the strict immigration policies are an obvious starting point. It also relates to Japan’s historical isolation from the rest of the word which, while being the most defining cause of Japan’s unique and appealing culture, has also made the social integration of migrants a difficult process for all parties involved. In recent years, the migration laws have been relaxed a bit, and there are some regional areas that see skilled migration as a potential silver bullet, but on the whole it doesn’t appear that migrants are going to come anywhere near close to filling the labour market gap of the declining population numbers.

AGEING - AGED - SUPER AGED

Another interesting observation over the last 15 years or so has been the gradual shift in terminology used to describe Japan’s shifting demographics.

Originally the term used was 高齢化社会(Koreika shakai) which literally translates to ‘Ageing Society’, and suggested that the change was still in process. With a large proportion of people then shifting into retirement the language shifted to 高齢社会(Korei Shakai), which translates to ‘Aged Society’ and acknowledged that the society had gone through that state of change.

More recently, all Japanese media are referring to their society as the 超高齢社会 (Cho-korei Shakai) or “Super-Aged Society”.

Looking at the demographic pyramids, and with the seemingly ever increasing life expectancies of Japanese, one wonders whether they’ll need to add another “Super” or two onto their terminology before this is all over and done with!

GOVERNMENT POLICY

Clearly something has to change if Japan is going to come out the other side of its demographic transformation.
Prime Minister Shinzo Abe, now Japan’s longest serving prime minister, has been very vocal on Japan’s need to change. His “Abenomics” policies over the past 8 years have focussed on stimulating the Japanese economy and has had some success to date, though detractors will still say not enough.

Most recently, the government has latched onto the concept of “Society 5.0” (https://www.gov-online.go.jp/cam/s5/eng/), which is essentially a description of the next evolution of organised human society. It is a fascinating and appealing concept which relies on technology and automation to do the basic functions of society while humans can focus on the higher value tasks, and in turn live a higher quality of life. There is an interesting article on the UNESCO site which explains this concept further:

A full summary of the Abe Government’s ‘Abenomics’ agenda is available here: https://www.japan.go.jp/abenomics/index.html

In February 2018, the Japanese government released a draft policy called “General Principles Concerning Measures for the Ageing Society”. Amongst other things it recommends changes to make it easier for the population to work longer if they want to and ensuring that working hours are reduced to 40 hours per week (to help prevent burnout).

Another relevant policy is related to Japan’s push to advance Robotics Technology as both a means to replace labour shortages and to provide technology that will help care for a potentially super-super-super aged society. It will also help position Japan as a world leader in the field of robotics (if it isn’t already).

There are a range of other relevant policies such as immigration and support for rural and regional areas which is mostly covered by the Japan Revitalisation Strategy 2014.

**SUMMARY**

In summary, it is clear that Japan’s situation is unique in the world……at the moment. It won’t be too long before other advanced western countries, including Australia, begin to catch up and find itself in a similar demographic scenario. It won’t be exactly the same, though the lessons we can learn from Japan should help the rest of the world prepare.

Without a strong migration policy and no signs that the birth rate will change, there is no way for Japan to fill the void of the declining population. In effect the country is in a crisis. That fact in itself actually gives me confidence that there is a strong chance that the Society 5.0 concept (or something similar) could actually be successfully executed in Japan. “Necessity is the mother of invention” after all. It is an evolution that I look forward to watching unfold, and with significant worldwide attention about to be focussed on Japan with the 2019 Rugby World Cup and the 2020 Olympics, there is no better time for Japan to step up and showcase itself to the world.

**NEXT TIME:** In the next EDA Journal we will look at some of the feature case-studies and learnings from the 2018 Study Trip which highlight Japan’s progression towards Society 5.0, while also pointing out some of the major challenges being faced.

**ABOUT THE AUTHOR**

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In 2018 Bruce was a recipient of the EDA International Study Tour scholarship. Bruce’s 10 day trip to Japan included attendance at the Aging and Society Conference in Tokyo, and featured various site visits and interviews relevant to Japan’s aging & shrinking population. A full copy of the study tour report is available on the EDA website.

Alternatively you can learn more about the study trip and other related stories on Bruce’s blog: http://superagedsociety.blog
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