

EXPLORE

News from the forefront of business research

Future-proofing the fishing industry

With decreasing fish numbers, change is critical for New Zealand's seafood industry

New Zealand's seafood industry plays an increasingly vital role in the economy. In addition to supporting 26,000 jobs throughout the country, exports have tripled in the past 20 years from around \$500 million to \$1.4 billion, with the industry forecasting growth to reach \$2 billion by 2010. "A large part of this increase in value", explains Dr. Manuka Henare, "can be attributed to innovative value-added products and processes, including the development and rapid expansion of new aquaculture activities". Henare, Associate Dean for Maori & Pacific Development at the University of Auckland Business School and Director of the Mira Szászy Research Centre for Maori & Pacific Economic Development, is managing a research project to understand how innovation and growth occurs in the seafood sector.

The research is a collaboration with the National Institute of Water and At-

mospheric Research (NIWA). Having completed an econometric study, the partnership was established in 2003 to build case studies on value chain innovation and agriculture, establish contacts with various companies in the fishing sector, and to build a website (www.business.auckland.ac.nz/seafood). "The website is a one-stop shop for the fishermen and researchers", Henare says, "and includes everything there is to know about the industry".

A feature of the industry in New Zealand is that Maori are major stakeholders and beneficiaries of the economic growth in this sector. According to Henare, this has particular social and economic significance for the future. "The size of the economy" he says "is such that even within the seafood sector a small increase in effective applied innovation has the potential to create a marked increase in wealth and so-

cial well being, especially for Maori". One of the primary aims of the project therefore, is to identify and articulate the role of Maori in innovation, and to formulate strategies and develop and enhance current thinking about value-added products and processes.

In association with the ICEHOUSE, the research group is also working on the idea of creating a virtual incubator for seafood businesses. "Most fishing communities are small", Henare says, "and if the incubator can reach out to the fishermen in their communities, they can form clusters with people from the same town and reap the benefits".

On a global basis, the number of fish is on the decline. "This means change is necessary if the industry is going to survive", Henare says. "There are various types of fish farming being utilised. A culture of innovation will create new value-added products and processes across the supply chain, including the continued expansion of new aquaculture activities, which will support greater research capabilities, linking New Zealand's fishing sector with cutting-edge research in global markets".

At some sites, recent improvements have emerged by simply testing the supply chain, including adapting daily routines and processes to ensure fish are delivered to customers with maximum freshness. Other projects have focused on the development of new products and the elimination of waste. "Traditionally", Henare says, "only part of the fish has had commercial utility. A large percentage of the fish was thrown away. But they're now developing fertilisers and health products that ensure value is created by using the entire fish".



Dr. Andrew Jeffs, head of NIWA, and Dr. Manuka Henare inspecting the latest catch.

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Innovation through collaboration

A multidisciplinary research approach is attracting industry partners

Steve Barnett, based at the University of Auckland's Tamaki campus, is a Senior Tutor in the Bachelor of Business Information Management (BBIM). He's also actively involved in a scheme that will provide a range of businesses with a home at the campus. "The key", he says, "is establishing collaborative relationships, firstly across our disciplines but also with companies and industries". These on-site industry partnerships will create clusters for identifying and launching research projects.

Recently, the new School of Population Health—a first in New Zealand—was opened on Tamaki campus. The school is part of the Faculty of Health and Medical Science, and its presence at Tamaki will create further opportunities for collaboration with businesses. "The timing of the inception of the school", says Barnett "provides immediate opportunities for building relationships with the health sector".

One of Barnett's initiatives has produced a collaborative research partnership with the Hamilton-based Pinnacle Group Ltd (a Primary Health Organisation). The initial phase provides three projects for cross-disciplinary student teams, including BBIM students majoring in Human Resource Management, Information Management and Health Science. Their projects are part of larger initiatives that will help to establish a nurse-led health service; a community centre-based primary health service; and a pharmacy review service, which involves pharmacists reviewing patients' medication regimes.

"We are looking to build something that is cohesive", explains Barnett, "where our students have the opportunity to be part of a much greater coherent picture. It's a win-win for our students and the organisations."

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The pursuit of IT talent

A project-based class has proven its value as a training ground for IT professionals

With the aim of building connections between the university and the corporate sector, a long-running course in the University of Auckland Business School's Department of Information Systems and Operations Management (ISOM) has connected hundreds of students with industry. The course, which was pioneered in 1986 by Associate Professor Dr. Lech Janczewski, is now called Information Systems Project INFOSYS 340, and involves students in an intensive company-oriented IT-related project.

Students begin the course by undergoing intensive training, which includes class presentations and a 3-day retreat in the bush. Janczewski insists that this preparation time is critical in terms of developing interpersonal and corporate skills. He then divides the class into groups of three students, and they begin to work on an array of projects that have been identified by companies. Students work through two semesters, and provide reports and feedback to the company.

"In the early years", Janczewski says, "getting projects was a nightmare. I spent a month at companies pleading, begging and cursing. Now, however, more than half of the projects are being offered to us". Host companies have included Cap Gemini NZ, Augen, Microsoft, Clearfield, Farmers, and Kinetics. Many of the projects are utilised by the companies. Sky City, for example, is currently using software for their restaurants that was developed by students in the programme.

Seemingly, the programme has developed a strong reputation among the IT community. "Students from the 340 class", Janczewski says with a laugh, "get some of the best possible jobs you can imagine". About 20 percent of students stay with their project company, and a further 20-30 percent go to other project-hosting companies. "I am practically running an employment agency", Janczewski says. Former students

have also gone on to build their own companies, which now act as hosts to students in the programme. Donations from the company (not obligatory) go back into the programme to fund upcoming events and projects.

In an attempt to further grow corporate connections, next on the agenda (12th October 2004) is "An Evening with the Industry". This is a meeting jointly organised by the ISOM department and the New Zealand Computer Society. Janczewski describes it as the only gathering that brings together all computer/information system students from the Auckland region. The aim is to bring together academics and students to discuss employment prospects and the state of the marketplace. The event is also open to recruitment companies.

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Golden opportunities with the Dragon

Local businesses are seeing the potential of the growing Chinese market

The recent Gateway to China Trade Summit presented a forum to learn more about the business opportunities with China, a rapidly developing nation of 1.3 billion consumers. The conference was further recognition of China's status as a free market economy, and was hosted by several organisations, including the Auckland Chamber of Commerce and the New Zealand Asia Institute (NZAI). The forum brought together a multitude of political, diplomatic and business experts.

The NZAI was founded by the University of Auckland in 1995 to recognise the growing importance of Asia to New Zealand and the University's changing socio-cultural context. "The importance of the Trade Summit", says Dr. Xin Chen, Research Fellow and Programme Officer at the NZAI, "was the long-term focus and in-depth view it provided. It delved into the vital social and cultural values, and the people-to-people dimensions of conducting

trade—which are sometimes more important than the money value alone”.

A Free Trade Agreement with China, given its proliferating consumer base, boasts the potential to significantly increase export opportunities. New Zealand’s dairy product sales to China have been doubling every three years, and with an agreement in place, they are likely to increase even more rapidly.

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Headstart for young scientists

A school-based awareness initiative is planting the seeds for future Biotech leaders

Biowiz, a wide-ranging initiative to develop entrepreneurs and scientists in the biotechnology industry, provides school and university students with early opportunities to experience the industry. Funded by the Enterprise Skills and Culture Activities Funds of New Zealand Trade and Enterprise, Biowiz was established to ensure the country develops skilled leaders in the ever-changing fields of bio-sciences and bio-technologies.

The programme, led by Dr. Shantha Liyanage, an Associate Professor at the University of Auckland Business School, provides students and schools with e-learning opportunities and teaching resources. The schools programme involves five intermediate and 15 secondary schools and includes an experiential biotechnology programme run during the summer holidays. It includes ongoing biotechnology awareness workshops for students, and professional development opportunities for teachers. The Biowiz website (www.biowiz.auckland.ac.nz) has been developed as a public resource, and teachers can register on the site to access expanded e-learning areas.

The programme is not limited to schools. For university students, there is an ongoing internship programme which connects students with the industry. For industry professionals, development and support has occurred



Dr. Shantha Liyanage, Project Director of Biowiz

through three courses, that to date have brought together more than 90 industry executives.

Biowiz is helping to establish a collaborative and interactive network between schools, industry professionals, research institutions (including the Liggins Institute) and government agencies. Liyanage, who teaches in the Technology, Knowledge and Innovation Management Programme at the Tāmaki campus, says “the cumulative effect of this programme is linking young people with leading edge biotech companies through a variety of resources”.

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Management skills for SMEs

A new research agenda promises new insights about the leadership of smaller businesses

Research to develop a framework for building management capability in SMEs (small and medium enterprises) in New Zealand is underway. The project is being conducted for the Ministry of Economic Development through the SME Research Centre at Massey University,

Wellington. Dr Marie Wilson, Associate Professor in the Department of Management & Employment Relations at the University of Auckland Business School, is involved in the project and sees it as critical to learning more about the local context for management.

In the wake of the 1993 Porter project, the government commissioned research into management competencies. A study completed by Drs. Wilson, Page and Kolb from the University of Auckland Business School provided a research-based overview of the prevailing standards and thinking on management competence. This research used concept mapping to develop surveys which were distributed to thousands of managers throughout New Zealand. The research identified a set of 21 core competencies for NZ managers. Over the last ten years, this research programme has continued investigating how those competencies work, and if there are organisational or personal differences that contribute to our understanding of the “effective manager”.

The current research partners include some members of the original team, the SME Centre at Massey University and the Ministry of Economic Development. “A lot of the competency and capability work”, Wilson says, “is done in big companies, and interna-

tional models are typically developed in big companies. Therefore our new brief is much more targeted. We predominantly have smaller companies in New Zealand, and SMEs don't have big assessment centres—so they need information that allows people to reflect and get feedback from colleagues and peers about the kinds of skills, abilities and characteristics that seem to be associated with being an effective manager”.

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Share your research news

We invite the staff and faculty of all New Zealand universities to send us information about current research and development programmes in all disciplines related to business. The Explore section reports on research activities that provide insights for businesses, and provides a forum to inform our readers about research-based programmes and opportunities for involvement. For consideration, please send brief information about projects to uabr@auckland.ac.nz. All submissions will be considered for our next issue in March, 2005.

The leaders of tomorrow

An 18-month programme offers leadership development opportunities

The New Zealand Leadership Institute, a national initiative to enhance the understanding of leadership and ensure the country has talented and skilled leaders, is currently developing a Future Leaders Programme. The 18-month programme will be focused on developing the leadership potential of young leaders, and it will take a holistic approach to leadership development. The participants build an awareness of themselves as leaders, how they relate to others and how they behave as leaders within different contexts. The multifaceted programme will incorporate diverse learning experiences including capability assessment, reflective practice, group activities, forums with established leaders, the discussion of theory, and active projects in the community. In addition to face-

to-face workshops, there will be virtual forums and self-directed learning. The programme challenges each participant to create development initiatives specific to them, within the supportive environment provided by the Institute.

Sixty participants will be selected between the ages of 17 and 25 for the first intake, which starts in February 2005. These selections will be made from young leaders throughout the country who apply directly or are identified by nomination.

In addition to the programme for young leaders, the New Zealand Leadership Institute will shortly be revealing its full programme portfolio and a research agenda. The responsibility for the Institute's creation was entrusted to The University of Auckland Business School, which provides directional, infrastructural, financial and staffing support. The Institute is supported also by a number of significant corporate and community partners.

Programme contact: **09-373-7599 ext. 87301** or visit www.leadership.auckland.ac.nz



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