

CELENTIS DEVELOPING AN ENTREPRENEURIAL CULTURE INSIDE A CROWN RESEARCH INSTITUTE

Prepared by

**Dean Prebble, Senior Lecturer, Unitec Institute of Technology[©]
and
Alex Maritz, Senior Lecturer, Unitec Institute of Technology**

INTRODUCTION

In 1992, the infrastructure of New Zealand government departments and ministries that supported research and development and technology transfer, were dismantled. In its place was established a series of Crown Research Institutes (CRIs). AgResearch is the largest of these institutes.

In 2001, Celentis was established as the commercial arm of AgResearch to deliver products and technologies to the market.

This case study involved the writer gaining a deep understanding of the Celentis business from his involvement as a consultant from March 2001 through to May 2001. This included facilitation of the strategic planning process, documentation of the plan and involvement of the team in aligning organisational structure with strategy. In May 2003 after no contact for two years, the writer spent four weeks analysing the current state and comparing it with 2001. The result of this analysis has provided insight into the key drivers of cultural change and a detailed account of the development of entrepreneurial capability in a highly innovative environment.

It was found that significant changes had been made over the period with respect to processes and people. The study describes the challenges faced when incorporating a commercial focus into a predominately “science” culture and provides insight into the type of results that can be achieved.

The Celentis Business

Celentis’ purpose is to create value for its shareholder by commercialising technology. It does this primarily through:

- Creating, incubating and strategically growing standalone companies, either to be sold, or to provide an ongoing source of dividends
- Licensing technologies

In addition to their primary purpose of creating companies and licensing technologies, the capabilities of Celentis can be leveraged to generate secondary sources of revenue by providing third party services. These include:

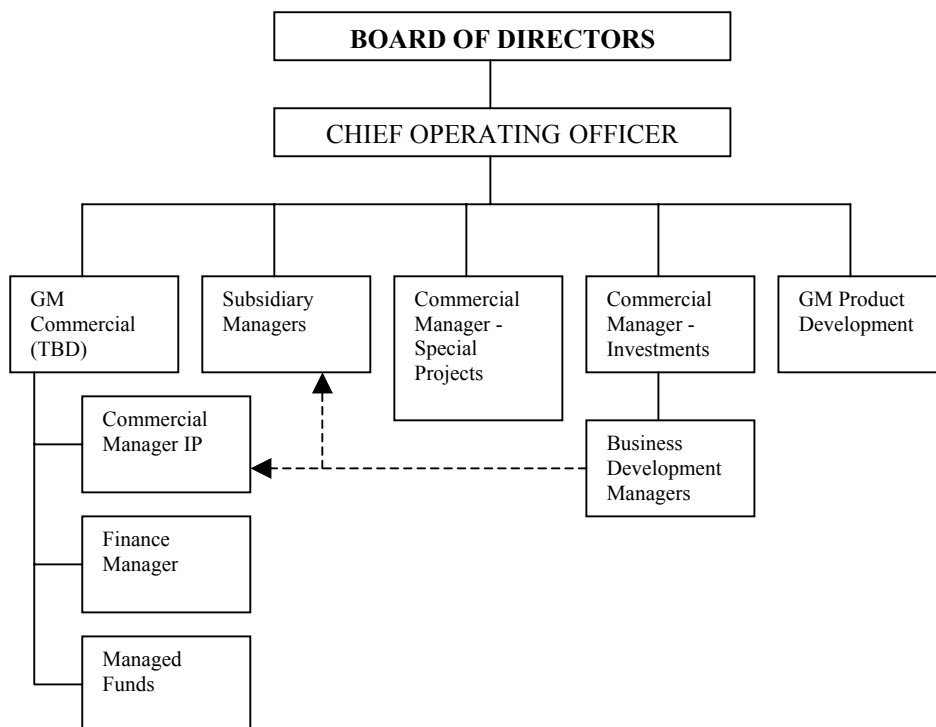
- Consulting revenue from intellectual property management services
- Brokering fees for arranging finance
- Brokering fees for arranging contract R&D

March 2001 – Situation Analysis

In March 2001 Celentis, a division of AgResearch, was undergoing significant change under the guidance of their newly appointed General Manager. The majority of staff had worked previously for AgResearch. Their new roles and responsibilities in Celentis were not well defined and accountability was poor. Celentis had yet to be incorporated and operations were significantly influenced by AgResearch senior management.

The organisation chart is shown below:

Figure 1: Celentis Organisation Chart, March 2001



It is important to note that the above structure was evolving as at March 2001 and there was considerable overlap between the positions of Commercial Manager (Investments) and the General Manager (Product Development). The GM Commercial had not been appointed and the Chief Operating Officer spent considerable time in subsidiary affairs and dealing with operational issues.

Celentis was located in Ruakura, Hamilton alongside the scientific research facilities of AgResearch. The emerging commercial culture was dominated by the surrounding

scientific culture and there was deep suspicion amongst the AgResearch scientific community with respect to the Celentis value-add.

Capability - 2001

A survey carried out by senior management at Celentis identified the following capability deficiencies:

1. Capability in Science Commercialisation scored 4 out of 10. This process focussed on capabilities such as:
 - The process of taking a science concept through the product development process.
 - The process of launching new products through subsidiaries and investments.
 - The process of collecting and using market intelligence in a timely manner.
 - The process of aligning science with the market
 - The process of protecting and managing intellectual property.
2. Capability in establishing new business arrangements scored 5 out of 10. This process focussed on capabilities such as:
 - Establishing new start-up companies.
 - Negotiating partnerships with larger industry players.
 - Establishing license agreements.
 - Valuing intellectual property and businesses and scenario analysis.
3. Capability in investment management scored 4 out of 10. This process focussed on capabilities such as:
 - Managing businesses
 - Investment management
 - Arranging Finance
 - Analysing risk – portfolio management
 - Negotiation
 - Forming and managing strategic relationship

In addition to the capability gaps above, the following weaknesses and risks were identified:

Weaknesses:

- High uncertainty with respect to intellectual property competitiveness
- High business development compliance costs within New Zealand
- Lack of seed capital funders within New Zealand
- Under developed linkages between research institutes, investors and businesses
- Lack of a commercial focus
- Constraints imposed by AgResearch shareholders

Risks:

- Risk of product failure – where products Celentis are connected with fail in the marketplace
- Commercial risk – where Celentis fails to deliver commercial outcomes
- Intellectual property risk – where Celentis misses out on opportunities
- Lack of succession planning – where loss of key staff impact on performance
- Financial risk – where Celentis fails to fund its business expansion

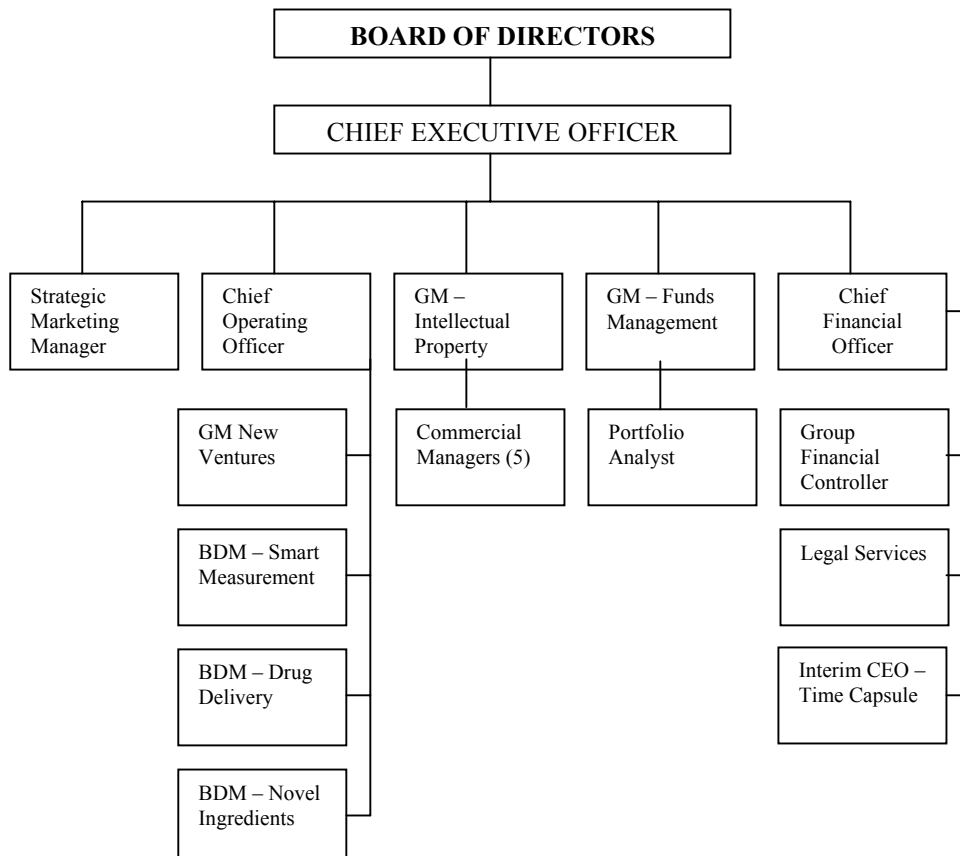
May 2003 – What has changed?

In May 2003 Celentis is a stand alone entity with a strong commercial identity and focus. The company is now located in Auckland. A new Chief Executive Officer was appointed mid way through 2002 with significant Biotech start-up and wealth creation experience. This was followed by the appointment of an experienced Chief Financial Officer and a Strategic Marketing Manager.

Subsidiaries now all have their own independent Boards of Directors with Celentis representation. Funds are sourced both internally and externally and invested in portfolios of science projects (product development) and new start-up projects. Dealflow is now being sourced from outside of AgResearch and consultancy and brokering services can be offered to external parties.

The new organisation chart is shown below:

Figure 2: Celentis Organisation Chart, June 2003



Capability – 2003

The self-assessed ranking of the capability gaps identified in 2001 are now rated as follows:

- Capability in Science Commercialisation scored 7 out of 10.

“We are now good at forming new companies around technologies and then encouraging their ongoing work with AgResearch science. We still have plenty of room for improvement in the area of setting obtainable milestones. Linking funding to milestones has been a major breakthrough” Stewart Washer, CEO, Celentis

- Capability in establishing new business arrangements scored 7 out of 10.

“We have launched five new subsidiaries over the past year and now have a much better link between our product pipeline and market opportunities” Stewart Washer, CEO, Celentis

- Capability in investment management scored 6 out of 10.

“We still haven’t got a track record yet. In two years we should be able to say, 8 successful deals, \$24m invested successfully plus proof of successful exit. We have had three successful exits over the past year” Stewart Washer, CEO, Celentis

In response to the weaknesses identified in 2001:

- With respect to competitiveness, the company has increased its customer responsiveness and speed to market. This is demonstrated by the focussed nature of meetings and the improving performance measures.
- With respect to intellectual property, the company continues to build its portfolio and is now inviting other research institutes to utilise the services offered by Celentis.
- With respect to the costs of doing business in New Zealand, the company is thinking internationally with respect to all operating, financing costs and taxation. It will relocate where it makes economic sense to do so.
- With respect to commercial focus, the company has built a strong commercial team and culture with the introduction of new staff and the relocation to Auckland. The previous GM, Product Development has been appointed to specifically develop relationships with investors in New Zealand under the GM, Funds Management Role.

In response to the risks identified in 2001:

- Risk of product failure – Celentis is moving toward an ISO or similar type quality rating
- Commercial risk – all incentives for employees, science and managers are aligned around commercial success. All transactions between related parties are full arms-length commercial with written agreements.

- Intellectual property risk – a focussed team of four intellectual property specialists is in place
- Succession planning – depth is now held in all senior positions. There are now no serious key man risks.
- Financial risk – Celentis is well on the way to securing a pre-seed funding mechanism and has built considerable relationships in the capital markets with respect to post start-up funding. In addition their CEO has significant previous experience in attracting funding from angel investors.

Cultural Shift

There has been a significant cultural shift brought on by the new appointments and commercial clients becoming increasingly more demanding. Benefits of this cultural shift include:

- There is clarity with respect to future direction
- A new, positive mindset created by the shift to Auckland – the office and external environment spell out that they are here to do business
- Meetings held are strongly centred around the dollar – far more efficient and focussed than in 2001
- There are minimal politics in the structure “it is all about people focussed on the dollar”
- There is a deeper understanding of the investors perspective i.e. what they want deals to look like
- A science “involvement and incentive” scheme ensures that 14% of royalties collected go straight back into science (10% to the science platform and 4% to the individuals). A philosophy of milestone-based payments with bonuses attached has been established.
- Business development managers concentrate on a specific focus areas and are building international relationships and sourcing deal opportunities
- A focus on leveraging existing offshore partners and targeting specific individuals ensures a growing web of international networks
- The marketing team provide a strong research function which feeds directly into market assessment studies

Capability going forward

Celentis is now well positioned to offer its services to other science agencies and to replicate its commercial model offshore.

Key capability can be summarised as follows:

Market analysis and business development

Celentis’ resources in this area include:

- A team of three business development managers
- A dedicated strategic marketing manager
- Two marketing analysts

In addition, a Chief Operating Officer is currently being recruited to optimise the returns from customers in the focus areas with the business development managers.

The business development team is capable of identifying new customers within and beyond New Zealand, building relationships with them and building revenue by packaging contract R&D, new product development, and co-investment.

The marketing team is capable of evaluating markets and gathering customer intelligence to ensure that science projects are only undertaken if there is a strong likelihood that there will be a strong demand for the outcomes.

Intellectual property management

Celentis' resources include:

- A general manager of intellectual property
- A four person in-house intellectual property team
- A strategic relationship with James and Wells, Intellectual Property Attorneys
- Access to external databases

In addition to their primary role of supporting the wider AgResearch Group, the intellectual property team is capable of generating revenue by out-licensing AgResearch technologies and brokering technology transfers between third parties. In addition they can consult to third parties on intellectual property commercialisation.

Fund raising and management

Celentis' resources include:

- A general manager of investment
- A senior portfolio analyst

The investments team maintains a network of contacts covering most of the venture capital firms in New Zealand and is rapidly building networks of venture capital firms based overseas. They are capable of evaluating and packaging science projects for investment by external fund providers. Furthermore, they can oversee the management of these projects through to proof of concept stage where they can be developed as standalone companies or licensed to third parties.

Business incubation

Celentis' resources include:

- A dedicated general manager for new ventures
- All new businesses have, or are in the process of recruiting, their own CEO/General Managers and Boards of Directors¹

The general manager of new ventures draws upon the resources of the rest of Celentis and AgResearch, as well as external consultants to provide the infrastructure necessary to support incubating businesses.

¹ CEOs are usually appointed by the Boards via a professional executive search

Maximising return from maturing subsidiaries

The corporate team at Celentis (consisting CEO, CFO, manager of human resources and accountant) oversee the operation of four mature subsidiaries (profit making in 2002/3) and five incubating businesses.

The corporate team draw on extensive experience from the financial, banking and agricultural sectors in order to put in place an investment strategy to maximise the return from dividends or increase in equity value.

RESULTS TO DATE

In addition to the significant capability building programme described in this case study the following commercial results have been achieved over the two year period:

- Founding of nine subsidiary companies covering areas such as anti-ageing nutraceutical development, animal health, food processing technology, asthma prevention drug development, human health products and biocontrol solutions.
- Development of commercial alliances with global heavyweights in the biotech industry.
- Over fifteen licensing deals.
- Revenues of \$33,275,700 for the current financial year.

The study provides insights into the transition from a government-owned science agency into a dynamic commercial entity.

WHAT WOULD THEY DO DIFFERENTLY?

In its first year, Celentis was deeply involved in the product development process. It had many unfocussed meetings with Scientists. It is now very focussed on establishing new companies that have natural incentives to drive product development to meet the needs of specific target markets. Celentis has become a commercial facilitator, matching “proof of concept” research with the market demands of spin-out companies. Product development is now the domain of subsidiaries.

THE YEAR AHEAD

Celentis will concentrate on five activities in 2003/4

1. Building revenue through licenses, collaborative investment and contract R&D

Celentis will work to expand its customer base in 2003/4. Business development will be focussed in three areas:

- Novel ingredients from nutraceuticals and functional foods
- Smart measurement systems for the food industry
- Drug delivery for animal health

The target customer base will be mainly outside of AgResearch's established clients and will include a substantial number of non-New Zealand companies. The Business Development Managers all have a deal pipeline. They must complete or replace failed deals with equivalent deals.

2. Forming and incubating new companies

A key priority for business incubation in 2003/4 will be the establishment and growth of the company formed to commercialise the production of high value proteins from transgenic cows.

In addition, five established but relatively young subsidiaries will be assisted in their business building process. A priority will be to recruit an executive team and expert Board of Directors for each business.

3. Creating ScieNZe

The ScieNZe fund will be established during 2003/04. Celentis, in combination with its partner New Zealand Asset Management plan to raise a fund of \$20m. Celentis Funds Management will put together a portfolio of projects for ScieNZe investment and manage the investment into these projects.

4. Developing new products

The medium to long term viability of Celentis depends on a steady and growing product pipeline for four applications:

- i) subsidiaries
- ii) licensing out
- iii) ScieNZe fund investment
- iv) new venture developments

5. Accelerating growth of mature subsidiaries

Subsidiary companies will be the largest growing contributor to the Celentis Group EBIT. Consequently, ensuring that these subsidiaries are able to maximise their profit potential will be a key priority in 2003/4. This will be achieved through Celentis forming subsidiary Boards with independent high value Directors and setting clear growth targets and strategies for these companies.

The long term future will see Celentis establishing their track record and then applying their capability and business model across other science disciplines and in other countries.