



6 May 2005

Committee Secretary  
Standing Committee on Science and Innovation  
House of Representatives  
Parliament House  
CANBERRA ACT 2600

Dear Sir

I have attached for your consideration the AIIA Submission relating to the Committee's Inquiry into pathways to technological innovation.

Yours faithfully

Rob Durie  
CEO

**ALLA Submission**

**House of Representatives Inquiry  
into Innovation Pathways**

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Date: 6 May 2005

Prepared By: Australian Information Industry Association

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## **1 Executive Summary**

The Australian Information Industry Association (AIIA) welcomes the opportunity to provide input into the House of Representatives Standing Committee on Science and Innovation inquiry into the pathways to technological innovation.

AIIA believes that a key role of government is to ensure the development of an industry policy and investment environment that facilitates the growth of an innovative ICT industry sector that is capable of competing globally.

It is clear from consultation between the Association and our members that numerous issues need to be addressed by companies as they proceed down the path of commercialising products and services for the global ICT marketplace.

The local ICT industry exhibits excellent strengths in some areas and deficiencies in others.

Some of the issue will require Government intervention – others will require targeted responses from the companies themselves.

All stakeholders - industry and government - have a role to play.

One specific action the Government can take is to ensure that it gives innovative Australian companies genuine access to Government markets when value for money and fitness for purpose criteria are satisfied.

AIIA stands ready to work with all stakeholders to help achieve the objective of developing an ICT industry sector in Australian that is sustainable and able to compete effectively in the global market.

## **2 Introduction**

AIIA is the peak national body representing suppliers of information, communication and technology goods and services. AIIA has over 370 member companies that generate combined revenues of more than \$40 billion, employ over 100,000 Australians and have exports of over \$2 billion. AIIA's members represent a significant proportion of the Australian hardware and software industries.

One of AIIA's key objectives is to influence the creation of a policy and investment environment in Australia that facilitates the growth of an innovative ICT industry sector that is able to compete globally.

A key feature of the Australian ICT sector is the significant number of small and medium sized companies involved. The following chart from the ABS (Catalogue 8126.0) shows the distribution of firms by number of employees – some 82% of all ICT firms have 4 employees or fewer.

### ICT Industry by Firm Size

<b>Employees</b>	<b>0-4</b>	<b>5-19</b>	<b>20-99</b>	<b>&gt;100</b>	<b>Total</b>
<b>Computer Services</b>	16092	1744	458	67	18361
<b>Total ICT</b>	18396	3048	845	187	22475

Source: ABS, Information Technology Australia, 2002-03, Catalogue No. 8126.0

Clearly, the growth of the ICT sector in Australia will be largely dependent on how successful we are as a country in growing these smaller companies into globally competitive enterprises.

Another characteristic of the Australian market is that virtually all of the major multinational ICT companies have a presence in Australia. This provides local companies real opportunity to leverage off the activities of these large companies. The development of sustainable relationships with multinational companies can be an important vehicle to growth and market penetration for innovative companies.

Aside from being a major sector in its own right, the ICT sector plays a key enabling role in improving productivity in other sectors of the economy. Without the presence of a viable and robust ICT industry in Australia the growth aspirations of many other sectors in the economy will be seriously undermined.

There are many instances where Australian developed ICT solutions have proven to be globally competitive however there remains a strong perception that as a country we do not have strong ICT product commercialisation skills. To help redress this situation we need to develop, in Australia, a hub of locally grown companies that are able to sustain a competitive position in the global marketplace.

In this Submission AIIA puts forward its views on the specific areas identified in the Terms of reference for this Inquiry which need to be addressed if we are to be successful in this endeavour. The attached case studies provide an excellent Australian benchmark for local industry companies looking to develop and commercialise innovative ICT products.

### **3 Specific Comments**

#### **3.1 Pathways to Commercialisation**

The attached case studies provide an excellent example of the path two AIIA member company have taken to successfully develop and commercialise their innovative ICT solutions.

It is AIIA's view that common elements in successful commercialisation strategies will include a combination of the following elements:

- A focus on the global market;
- Consistently directing a high proportion of turnover to expenditure on R&D;
- Partnering with peer companies or larger corporations to help develop scale and market penetration;
- Effective utilisation of Government grant programs;
- High level of business acumen and attraction of the right skill set mix for the company; and
- Effective and targeted marketing programs.

#### **3.2 Intellectual Property and patents**

The basic cornerstone of most local ICT companies is the IP that they develop and own and every effort should be made by all parties to help companies commercialise and use this asset to its maximum advantage.

The Government market is a key one for many small companies looking to grow their business in Australia. Under current arrangements the "we pay, we own" approach agencies have adopted in relation to IP has restricted the ability of companies to gain the maximum traction they can get in the marketplace. AIIA has been successful in having the Federal Government commit to review this situation and we are now working to have State Governments also reconsider their position.

Patent take up has not been a big feature of the Australian ICT industry, particularly for smaller companies. A key reason for this is the exorbitant costs associated with registering a patent. Even if a patent is taken out the costs associated with litigating any infringement can quickly run into figures way beyond an innovative company's capacity.

### **3.3 Skills and business knowledge**

As noted previously Australia does have a good reputation as a country with strong innovative skills in the ICT arena. The commercialisation of the products and services that evolve from this innovative process does however require companies to develop or have on hand specialised skills in a wide range of areas – eg financial management, marketing, relationship development.

It is these soft skills which are not readily available to start up ICT companies who have often developed their offerings in a rapid timeframe. The technical skills that have underpinned the product development phase in a company's growth cycle fall short of the skills needed to now effectively take the product to market.

Substantial resources and funding are required to convert from a prototype, custom developed solution for a specific client or initial demonstration of concept to a fully commercialised and supported general market product, particularly where international markets are concerned.

Reference to the attached case studies demonstrate the steps successful companies have taken to break through this commercialisation ceiling.

Recognising the importance of this key area AIIA is giving priority to offering emerging companies the opportunity to develop and improve their entrepreneur skills.

Central to this is the AIIA Business Skills Program which is discussed at Section 4 of this Submission.

### **3.4 Capital and risk management**

Smaller start-up companies in the ICT arena often run into major hurdles when looking to acquire funding to assist them progress to the next stage of the growth cycle. They often do not have established track records and struggle to convince potential investors of their credentials.

Issues in this area confront them on a number of levels:

- Getting their business to a stage where they are “ investor ready”;
- Understanding the nature of the investment community and identifying potential investors;
- Preparation of the pitch that they will need to make to potential investors to win their confidence and input; and
- Delivering to expectations once investments have been made.

### **3.5 Business regulatory issues**

Red tape and business regulations can be a real burden to small companies in terms of time and resources allocation needed to satisfy requirements. At the same time however it is important that growing companies develop sound business practices and processes so that they are positioned to be able to progress down the commercialisation path.

One issue confronting SMEs in trying to access the various R&D programs is the complex and time-consuming process of understanding and completing the necessary paperwork. Management load in most SMEs is generally significant, without needing to complete excessively-onerous processes to access government assistance. Some SMEs feel that government R&D programs are tailored more to larger businesses and are difficult for SMEs to access. Any steps that could be taken to reduce the complexity would encourage companies to take a closer look at the business benefits of becoming involved in R&D.

### **3.6 Research and market linkages**

The links between the ICT sector and R&D are strong and well documented. Australia is particularly well positioned to influence and contribute to the development of the global ICT economy:

- Our workforce is highly skilled and relatively low cost;
- We have a culture that embraces innovation and the take-up of new technology;
- Global ICT companies have a presence in this country;
- Our research institutions are world class; and
- Costs associated with carrying out R&D in this country are low relative to Europe, Japan, and the US.

Rapid technological development, however, continues to be a feature of this global ICT economy and if Australia is to benefit from its competitive advantages in this area all stakeholders will require a much sharper focus on, and commitment to, R&D.

Greater focus on sustained R&D by SMEs with an emphasis on successful commercialisation will unquestionably improve Australia's economic performance. By encouraging innovation, employment opportunities will increase as will the level of employee skills. This improved economic performance will translate to improved living standards.

Universities and research institutes have an integral role to play in advancement of knowledge through R&D being undertaken by ICT companies.



To bring new products, technologies, services and solutions to what is increasingly a global market the Australian ICT industry needs to develop sustainable partnerships and collaborations with local universities and other public research institutes.

The development of sustainable alliances between industry and academia – alliances which have a focus on taking the engagement through to commercialisation – is a major factor in positioning Australia as a world R&D centre and we believe that the Government has a key facilitating role to play here.

The emergence of NCITA is a key development in the Australian context and AIIA looks forward to this organisation taking a key role in helping to raise the bar in relation to the culture of commercialization of R&D in the ICT environment.

There are some very valuable Government assistance programs in place in relation to R&D support - Tax Concession, BITS, and Tax Offset - but there are gaps. This is particularly the case with start-ups. For example the tax offset cuts out once companies have invested over \$1m – a figure easily breached by ICT companies with global aspirations.

One key element that will impact on the successful development in Australia of a robust and vibrant ICT industry is the ability and willingness of local companies to work in partnership with multi-national companies. Effective relationships of this nature can greatly assist local companies develop and implement their business plans and accelerate their entry into the global marketplace.

Australia is most fortunate that virtually all of the major multinational ICT companies have a presence in this country thus providing excellent opportunities for local companies to seek out partnership opportunities.

To help ensure that we retain the active presence of multinational companies here it is important that the Government gives high priority to making sure that our investment climate and incentives are at least on par on what is offer in other countries.

One specific shortcoming is the fact that multinational companies are largely ineligible to claim their Australian R&D expenditures under the existing tax concession programs.

AIIA believes the Government should undertake an urgent review to identify what more can be done to encourage multinationals to develop and commercialise their products here in Australia.

It is acknowledged that the issue of ensuring that the IP of any research that is carried out in Australia essentially remains here is integral to this whole debate but AIIA believes that measures could be taken to satisfactorily address this situation. It is significant to note that in countries such as Singapore multinational companies are able to claim concessions for their R&D investments.

One multinational company, who is also a member of AIIA, spends 5% of its Australian based revenues on R&D in Australia but only a small proportion of its work is eligible for any tax concession support.

Any measures that could be taken to make the eligibility criteria more attractive to companies like this would have a direct impact on their willingness to increase R&D and commercialisation in Australia.

### **3.7 Factors determining success**

The attached case studies provide some insight into the factors behind the success of companies who have effectively commercialised their products and services.

Some of the factors that help determine success have also been identified at Section 3.1.

### **3.8 Strategies in other countries**

The Australian Government has developed and implemented some valuable programs to assist the growth of innovative companies. There are gaps in the programs that are on offer and there are lessons to be learnt from actions taken by other countries in this arena.

Ireland and Israel are two countries that have benefited greatly in the past decade from their commitment to R&D and related infrastructure and skills, its successful commercialisation by SMEs and large corporations and an emphasis on management skills, employee training and research infrastructure.

We need to continually monitor our programs to ensure that they are at or near world's best practice if we are to successfully compete for the scarce global investment dollar. Refer to the discussion in Section 3.6 on the need to encourage multinational companies to engage in R&D and commercialisation in Australia.

There is also room for the Government to make the investment in ICT companies more attractive for potential investors and this is one issue being given priority under the AIIA local industry program.

Many other countries also have Governments more ready to purchase ICT products from their fledging ICT industry – something that the Australian Government is not good at.

AIIA maintains that one tangible step Governments could take to help innovative companies is to purchase from them when the conditions of price competitiveness and fitness for purpose are met.

There are numerous examples of Australian companies who have demonstrated their competitiveness in the market in other countries yet are unable to secure contract work from Australian Government agencies.

## **4 AIIA programs**

The ICT industry is integral to future economic development in Australia - as an industry in its own right and as a key enabler facilitating productivity growth and industry transformation in other sectors.

AIIA is focused on creating jobs and opportunities by helping our local industry companies achieve their growth potential.

If Australia can successfully develop a hub of globally competitive local industry companies there will be:

- increased attention on Australia as a desirable location by international investors;
- a heightened focus on R&D;
- improved job opportunities;
- higher levels of commercialisation; and
- increased exports.

The AIIA Board has established the Local Industry Action Group (LIAG) to develop and implement a program to assist local industry companies achieve their growth objectives.

Specific issues that LIAG is focusing on at the moment include:

- Tax issues – early stage investor incentives, R& D Tax Credit criteria;
- Capital raising – developing connections to the investment community, including Business Angel networks;
- Partnering – partnerships with larger companies to win business, clustering with peer companies or other stakeholders; and
- Marketing – development of a marketing guide for smaller ICT companies.

AIIA is also now finalising details on our Small Business Enterprise Culture Program which has been designed to help ICT entrepreneurs develop their business skills. The program is targeted at business owner/managers of established ICT companies with less than 20 employees. There will be 30 participants in the first program intake commencing in May/June 2005.

AIIA is also facilitating the work of the MultiPLIERS group which has been established as a vehicle to drive investment and export growth in that part of the ICT sector represented by multinationals. This group is working with the Government to identify investment opportunities and promote Australia's ICT capabilities internationally.

## **5 Recommendations**

It is recommended that the Government:

- assists industry growth by providing local companies genuine access to Government markets when value for money and fitness for purpose criteria are satisfied;
- moves quickly to implement election commitments to increase the commercialisation of intellectual property in Federal procurement;
- continues to support industry driven programs aimed at improving business skills within local ICT companies;
- honours its election commitment to investigate the operation of Business Angel networks in Australia and identify what more could be done to support their development;
- reviews what scope there is to streamline application procedures for Government programs;
- continually monitors steps other countries are taking to assist in the growth of innovative enterprises and assess their validity for the Australian context;
- undertakes a review to determine the scope and merit of multinational companies being eligible to make claims under the existing tax concession program
- adjusts the eligibility criteria for the Tax Offset program so that companies that spend more than \$1m on R&D annually become eligible for support under this program; and
- continually reviews what steps can be taken to facilitate better interaction between industry and academia so as to maximise the opportunities to commercialise the outcomes of public sector research.

## **6 Attachment A: Case Study – SoftLaw**

Refer separate document.

## **7 Attachment B: Case Study – The Distillery**

Refer separate document.

**THE HOUSE OF REPRESENTATIVES STANDING COMMITTEE ON  
SCIENCE AND INNOVATION**

**INQUIRY INTO PATHWAYS TO TECHNOLOGICAL INNOVATION.**



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***Company activities and history***

SoftLaw has over 15 years' experience in building enterprise rules based systems. We have become the experts in helping organisations rapidly capture their business rules from the most voluminous and complex information sources. Both SoftLaw's technology and methods have evolved to do exactly this, culminating in RuleBurst, our specialist rules approach.

SoftLaw has a comprehensive services capability based on its unique approach to rule capture and deployment. We seek to complement an organisation's existing capabilities through skills transfer and supportive services.

We can also undertake major rules based developments and ongoing maintenance where an organisation would prefer to outsource these skills.

In addition to major development services, our main service offerings include:

- Rule Capture and Related Services
- Rule Deployment
- Rule Quality Assurance
- Skills Transfer
- Rule Capture and Related Services

SoftLaw has a unique capability for rule capture built around smart people with legal and policy backgrounds that speak the language of business.

SoftLaw's people understand an organisation's business requirements and, combined with the power of RuleBurst, are experts at translating those requirements into rules based systems that deliver genuine business value.

SoftLaw's methods enable rule capture in virtual real time. The speed and accuracy of the RuleBurst method has been used in interactive workshop rule discovery processes with subject matter experts, in a number of policy domains.

Ongoing, responsive rule maintenance is also a key service provided by SoftLaw to organisations that need help staying on top of their rule changes.

### Rule Deployment

SoftLaw has over 15 years experience in building enterprise rules based systems.

We undertake major rules-based developments and ongoing maintenance where client organisations prefer to outsource these skills.

In major developments, SoftLaw usually provides software engineering services to assist an organisation in developing and deploying rules-based applications.

This includes the integration of RuleBurst's out-of-the-box deployment technologies with enterprise systems and the development of fully-fledged applications based on the RuleBurst Engine.

### Rule Quality Assurance

SoftLaw has developed a set of techniques and tools to complement the traditional approaches to drafting and checking legislation, regulations, policy and business rules. The aim is to ensure that these rules, whatever their form, are correct the first time. We call this service Rule Quality Assurance (RQA).

RQA encompasses methods that test for:

- Technical quality and effectiveness - the identification of errors and correct use of logic – identifying and fixing logical flaws such as logical holes, loops, incorrect cross-references and unintended consequences.
- Coherence to users - the identification of issues of practical usability through a perspective that may be different than that held by policy makers or legislative drafters.
- Consistency of legislation – the identification of unintended policy outcomes.

### Skills Transfer

SoftLaw offers a comprehensive skills transfer program for when an organisation wants to develop an in-house rules capability.

This program consists of class-based training, based on a comprehensive set of training materials, married with mentoring and supportive services, as required.

Our training programs can be tailored to fit the client organisation's situation.

Full support is provided with a comprehensive RuleBurst Developer Network (RBDN) Knowledgebase.

### **Current size (turnover, employment etc)**

SoftLaw currently have about 50 staff worldwide and company turnover is growing rapidly with strong international growth.

### **Details of the innovation product under review**

#### **Products - RuleBurst®**

RuleBurst is the latest version of SoftLaw's award winning software, previously known as STATUTE Expert. The name change reflects SoftLaw's recent R&D breakthroughs in automated rule capture methods and capabilities.

RuleBurst realises SoftLaw's vision for the future of business rules: automatic availability of high-performance rulebases, directly from source material prepared in Microsoft Word. RuleBurst is a fusion of method and technology. The RuleBurst method is a patented set of conventions for writing rules using a consistent, clear and logical structure. Our new RuleBurst technology automatically reads this structure and generates rules from it which can be instantly tested and deployed.

Old name	New name	Definition
STATUTE Expert	▶ RuleBurst	Collective term for our rule development and deployment technologies
Expert Developer	▶ RuleBurst Studio	Our rule development environment
Expert Runtime	▶ RuleBurst runtime technologies	Collective term for our rule deployment technologies
Expert Interactive	▶ <b>RuleBurst Interactive</b>	Our out-of-the-box, interactive user interface for rapidly deploying rules
Expert Rule Server	▶ <b>RuleBurst Rule Server</b>	Our out-of-the-box rule server product for rapidly deploying rules using web services
Expert Engine	▶ <b>RuleBurst Engine</b>	Our core rule engine which can be embedded into applications that need to execute rules
Expert Developer Network	▶ RuleBurst Developer Network	Our collection of product documentation and training materials

### ***Summary of the company's commercialisation strategy***

The strategy for commercialisation has basically been:

- Develop strong reference sites in Australia;
- Initially leverage the references from Australia to the UK, putting Australian staff into the foreign market to bring the local operation up to speed;
- From the UK, cross leveraging into the US market;
- Engaging heavily with large System Integration partners (eg EDS, IBM, Accenture, Capgemini) for international expansion;
- Continuing to invest strongly in R and D with retained earnings and government support.

### ***Key outcomes for the company***

The main outcomes for the company have been:

- More revenue from overseas than Australia, beginning with FY 2004/05;
- Increasing revenue per employee, focusing on a minimum EBITDA of 50% on each major contract.

### ***Key lessons learnt in the commercialisation process***

Lessons learned include:

- Stringency with cost control, particularly when expanding internationally;
- Using Australian staff to seed overseas operations;
- The value of relationships with Universities for ongoing talent development;
- The necessity to partner with larger players when expanding internationally.



**THE HOUSE OF REPRESENTATIVES STANDING COMMITTEE  
ON SCIENCE AND INNOVATION**

**INQUIRY INTO PATHWAYS TO TECHNOLOGICAL INNOVATION.**



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## **1. Company Activities and History**

An international leader in intelligence and investigations management applications, The Distillery designs and builds software solutions for intelligence-driven organisations. Leading-edge agile technology is underpinned by expertise and experience in law enforcement, national security, Defence and commercial fraud.

Our research and development into world class 'best-practice' technology enables security and intelligence bodies to maintain a competitive advantage over criminal and terrorist enterprises. In the corporate sector, our innovative intelligence-gathering methodologies are helping to reduce fraud, improving the bottom line and providing a competitive advantage. In all aspects of our business, outstanding personal networks, established connections and a deep understanding of the fundamental issues set The Distillery apart.

Clients include organisations at the forefront of criminal and security intelligence, Defence, law enforcement, compliance and counter-terrorism. Founded in a 3-bedroom apartment in Canberra, Australia in 1997 and growing from 3 employees to almost 100 staff, The Distillery represents a progressive, innovative and future-oriented company. During 2004 The Distillery began operating out of the UK, USA, New Zealand and Singapore. We have also established a strong partner presence in South Africa. Few businesses can claim the success and established brand image in its domain in such a relatively short period. The Distillery believes this is testament to a successful combination of a sustainable vision underpinned by a substantial global and relatively unserved market, a robust business model, dedicated staff, management and board of directors and an agile and scalable technology base. This foundation will be built upon through a sound commercialisation strategy.

## **2. Current Size**

Founded in a 3-bedroom apartment in Canberra, Australia in 1997 and growing from 3 employees to almost 100 staff today. During 2004 The Distillery began operating out of the UK, USA, New Zealand and Singapore. We have also established a strong partner presence in South Africa. This year we aim to achieve revenues of approximately AUD\$10m. We have achieved a consistent annual revenue growth of between 30% and 60%.

### **3. Details of the Innovation Product Under Review**

InterQuest Intelligence Server (IQIS) is a state-of-the-art technology for advanced intelligence analytics. Combining the power of metadata, the performance of the Oracle relational database platform and the ease of use of an intuitive Web browser interface, IQIS is an intelligence management system that when configured enables government and commercial users to uncover multidimensional linkages and shed new light on complex data sets. IQIS is a unique, configurable environment that allows solutions to be developed and deployed in many domains, including: Criminal intelligence, Border intelligence, National intelligence, Major case investigations, Organised crime, Financial investigations, Fraud investigations, Terrorism investigations, War crime investigations, Environmental investigations, Disease outbreak investigations, Disaster victim identification.

### **4. Summary Of The Company's Commercialisation Strategy**

#### **a. Pathways to Commercialisation**

The actual commercialisation of the product was undertaken in-house by our dedicated Commercialisation Division. This includes the productisation, documentation, technical writing and packaging of the end product. The Sales & Marketing Division was responsible for the branding and position within the market place through the use of both in-house and external marketing resource and professionals. The company has used a combination of a direct, (dedicated sales staff in various company offices), and indirect sales model, (the use of partners both domestically and globally).

#### **b. Intellectual Property and Patents**

The company has opted for a Trade Secret IP protection framework because in the early days, we did not have sufficient funds to pursue a patent path and as we have grown, the patent strategy is dictated by our ability to defend it against a bigger, well funded adversary. Skills and Business Knowledge

#### **c. Capital and Risk Investment**

We have attracted in excess of AUD\$10m in investment & R&D funding. Our initial strategy was to operate an organic model that saw all proceeds of sales reinvested into the company for growth. In later years, we attracted investment capital to fund more aggressive growth. We have also applied for and succeeded in getting government funded R&D funds at initially through Territory and later the Federal government programmes.

#### **d. Business and Scientific Regulatory Issues**

We operate in the security space and as such need to comply with many security standards. This places a considerable overhead in terms of commercialisation progress and the need to have suitably security cleared personnel. This foreseen outcome needs to be addresses early in the process otherwise it will lead to considerable delays at the commercialisation and sales end potentially to cash flow detriment.

#### **e. Research and Market Linkages**

We have established a deliberate strategy of partnerships with research organisations and have formal alliances with NICTA, NSW Smart Internet CRC, QLD Distributed Services CRC, University of Wollongong, University of Victoria Wellington NZ, Nanyang Technological

University Singapore. These are critical to early access to IP, problem solving and best-practice and domain expertise regarded as research and commentary leaders in their own right

### ***f. Factors Determining Success***

A robust investment community that is willing to take risks backed by a relevant governmental framework of investment and taxation incentives to ensure the next point is attainable. Adequate capital reserves from retain earnings or from debt and/or equity investment funds are critical to ensure you bridge from the research and innovation to the revenue generation stages of the commercialisation of the product or service. Otherwise, you fail commercially. Additionally, the right team is equally critical as the main execution element of the overall commercialisation plan.

### ***g. Strategies in Other Countries That May Be Of Instruction to Australia.***

U.S. as a leader in the commercialisation efforts simply by their globally demonstrable success. , Sweden and Israel as great examples of commercialisation successes with a relatively small population. This has forced to be 'born global' and build business models and product/service around a globally scalable model from the start as opposed to focusing in their domestic market. Examples of global success from these countries are Nokia and many Isrealie IP underpinning the global telecommunications industry.

## ***5. Key Outcomes For The Company***

Key Performance Indicators that reflect the degree of success of the commercialisation include profitability and ROI of prior investment and the less tangible metrics of market acceptance and external customer satisfaction and internal stakeholder satisfaction.

## ***6. Key Lessons Learnt In The Commercialisation Process.***

- **Intellectual Property Protection** - It is a business strategy these days for larger players to located IP in smaller companies and make a risk assessed decision to mount an IP takeover through deliberate infringement knowing the smaller company cannot financially mount a defence or survive a drawn out legal battle.
- **Capitalisation** - In hindsight, we would have sought investment capital much earlier, as our current commercialisation and growth has be limited by the early 'hand-to-mouth' existence that saw much opportunity missed or less than fulfilled through working capital limitation and minimal spare capacity bandwidth.
- **R&D vs. Corporate Progress** - R&D funded programmes have an inherent risk in that though the initial matched funds are critical to undertake the R&D in the first place, (ie: without it the R&D would not be financially possible), but due to many internal and external factors, R&D plans slip, change and need adjustment and at the end, the incurred infrastructure and head count do not always align with the commercialisation intent or progress thus creating a major strain on the company in terms of cash-flow and potential down-sizing to mitigate short & long term. Though the R&D may have been highly successful, it is ultimately put at risk if the commercialisation progress and company overhead are not in very close alignment.