

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

Submission No. .... 46 .....

### **Pathways to commercialisation**

I would like to submit our views on innovation and pathways to commercialisation with particular reference to impediments with the funding of innovation. We appreciate this opportunity to provide the Committee with a specific example of where the money fails to reach the innovation.

#### **The Technology**

This technology began with the Vaughan Cole patents. This work was performed at the microelectronics laboratory of the University of NSW. The technology is to replace the barcode with an electronic version which can be interrogated electronically. The lower the cost of doing scans opens different mass markets. Peter Cole moved to become professor of RFID systems in the Department of Electrical Engineering South Australia and has focussed on the cost reduction of RFID (Radio Frequency Identification) devices. Richard Vaughan started a company RIS to commercialise SAW devices. The basics of the technology are a microelectronic tag and an external electronic reader. This could connect to company databases.

Electronic tags have faced the massive obstacle of getting companies to actually use them. Manufacturers add tags to products and then require matching readers to interrogate the tags. The additional costs are seen to be the obstacle. Wal-Mart is pushing its suppliers to provide this feature for inventory tracking. It is the cost of a tag that is the biggest obstacle. RFID tags start at a few dollars. The holy grail is the 5 cent tag. The possibility of achieving this cost is reinforced by the work performed at the Auto-ID Centre of the US MIT and which further identifies billions of such units in the supply chain for major end users.

#### **The people**

Dr Richard Vaughan has been a key player in this field. His patents have been granted and are innovative in his methods of placing more tags on a wafer thus yielding more tags at a lower cost per tag. These patents have been fought over as various investors have come in with money. Some have slipped in to the public domain by the non payment of renewal fees. The present situation is that they are close to the end of their patent life and defensible only in limited countries. A new patent offers a clean slate for protection of IP. Bruce Williams was with the IR&D Board and evaluated this technology. He has seen the various failed attempts to commercialise the technology by investment backers. One failed attempt was to on sell the source code to other countries such as Israel. The trade in innovation is world wide. IP is a hard case to argue in overseas courts.

### **The schemes**

The technology has received some funding under the various IR&D schemes. One scheme was the incubation scheme. Dr Vaughan's company RIS was accepted as an incubatee by Item 1 under the scheme. The number of applicants which were accepted as suitable to be an incubatee was around one in one hundred. This scheme has since been evaluated for its effectiveness in helping incubatees. The method used was that the incubators were to contact incubatees to provide responses to evaluation forms to measure the effectiveness of the scheme. This did not happen with RIS and other incubatees. The money spent on RIS was a marketing report which cost around \$40k performed by UTS. Dr Vaughan went public with his dissatisfaction of the scheme following a few articles in the Australian of incubatees critical of the incubators. These criticisms were the transactional costs of the incubators. Following the article Item 1 then withdrew from RIS. The scheme had the following promises which were not delivered. They were to support the company to reach the commercial ready stage. Item 1 was acting as the agent for the government under contract. This scheme has been criticised for its agent incubators funding associated incubatees as well as failing to provide management support. Rejection by one incubator has equated to other incubators not picking up incubatees.

### **The present situation**

There are various schemes for innovation support to start-ups and SMEs. These schemes were once government run but are now government funded with private management companies delivering the funds. The satisfaction surveys of the innovation sector are not well organised. These surveys are often tied to each scheme with the private management company screening the surveys to remove the bad news. The pathways which are envisaged to commercialise innovation are not easy to navigate. When a company does find a path it is not easy. There are about three thousand companies claiming significant R&D support. They follow pathways without someone to watch over them. When the pathway is blocked by the government the government states why, when it is blocked by companies acting on behalf of the government the accountability seems to disappear.

### **Conclusion**

To improve the pathways effectiveness it may be opportune to collect the findings of these evaluations of commercialisation schemes, assess their response rate and contact those not included. The management saying that good service is spread to a few and bad service is spread to many may be the problem. To convince innovators of the commercialisation pathways attend to the whistleblowers.

Bruce Williams  
Park Bench Technology

Dr Richard Vaughan  
Remote Identification Systems