行政院所屬各機關因公出國人員出國報告書

參加

The Enterprising University 23-28 February 2003 Scarman House, University of Warwick Coventry

返國報告

服務機關：國立中正大學

出國人 職　　稱：校　　長

姓　　名：羅　仁　權

出國地點：英國　England

出國期間：92 年 2 月 23 日~2 月 28 日

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出席The Enterprising University 23-28 February 2003 Scarman House, University of Warwick Coventry

主辦機關:

國立中正大學

聯絡人／電話:

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出國人員:

羅仁權　國立中正大學　電機系　校長

出國類別: 考察

出國地區: 英國

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分類號/目: C9／國際文教關係　C9／國際文教關係

關鍵詞: 產學合作,衍生公司

內容摘要: 英國British Council 特別邀請各國一位大學校長參與討論，如何經營一所具科技發展前瞻性意義的國際化大學，討論內容可供本校及國內大學院校作爲校務規劃的重要參考。主要內容包括英國大學在企業化經營的遠景，其中提到有關獎勵各大專院校理論與實務並重之教學或研發成果，大專院校協助產業研究發展，鼓勵學校教師駐廠研究，利用大學資源（專利智慧財產權---）來建立衍生公司（Spin-off company），在學校之間建立育成中心，以達到技術轉移等事項。

本文電子檔已上傳至出國報告資訊網

The Enterprising University 23-28 February 2003 Scarman House, University of Warwick Coventry 國際會議與會報告

羅仁權教授
中正大學校長

英國大學具有企業策略的遠景中，為追求大學符合創新，發明的長期競爭優勢，而非以往大學僅以教學研究目的，創造大學更具競爭的優質文化，在發明與創新方面，從各大學的實驗室中所具有的技術，藉由此種方式來開發新技術，這是高等教育的轉型，這樣的方法有許多的好處：

1、可藉由大學提升國家/區域的經濟
2、促進產學發展（產學合作）
3、多元化的教學規劃
4、增加學生收入、減少政府資金補助

從這樣子的觀點而言，大學是可以扮演一個創造的工作機會與繁榮的角色，在英國，大學這樣子的策略正在萌芽，目前尚有 43% 的學校都打算跟進，因為大學擁有許多的技術和專利，如果可以用企業經營的角度來做的話，可達大學永續經和減少政府財政支出並可充份表現出大學創新發明的特質。

一、產學合作之間的關聯

傳統上，大學在一個國家創新體系內所扮演的角色主要是知識的創造者和教育各種專業人才以供社會之用。在大學裡的教授或研究人員，基於對自然原理的好奇和探索，創造和累積了許多有用的知識，這些知識或是透過公開發表為社會大眾知道，並為社會大眾所用，或是透過教學、訓練出具備充分知識的學生，以為社會所用。透過以上兩種管道，大學對社會做出了具體的貢獻，也得到社會各界的認同。利用圖 1 可以清楚說明大學、企業界和政府之間的傳統關聯。為了維持學校教授追求真理和學術研究的獨立自主性，政府預算一向是大學研究經費的主要來源，少部份經費才是由企業界和其他慈善機構捐助。以美國為例，1995 年美國政府提供的經費佔大學 R&D 投入的 60%，企業界僅佔 7%；企業界除了直接由學校得到人才的供應外，其取得知識的管道主要是透過公開領域的學術刊物、演講和其他期刊。因此，傳統上，大學和企業界之間的關聯並不高，而且，往往相當間接。

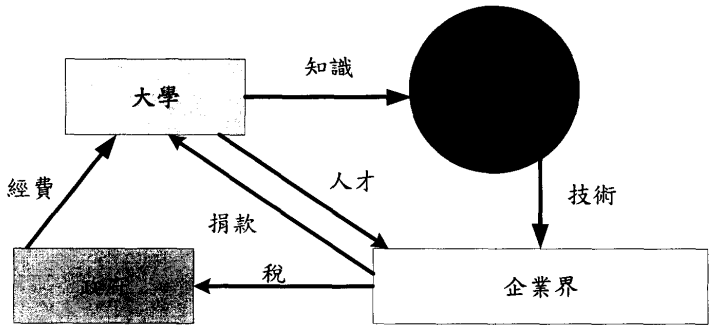


圖 1：大學、企業界和政府之間的傳統關聯

二、產學合作的發展

未來在全球競爭壓力及資訊、技術快速進步之下，基礎科學的研究為科技知識創造的源泉，如何加強基礎科學的研究，如何強化學術界與產業界的合作關係，進而有效率的將其商品化，實為關鍵之所在。產業界與學術界互動關係的本質通常是產業界提供學術研究資金，而學術界則將其研究成果回饋（技術移轉）給產業以協助發展。自 1980 年代起，產、學合作有增加之趨勢，一方面由於技術快速進步，導致產業界對大學之科技知識需求殷切；另一方面，則因研發成本的日益龐大，致使大學的研究資金更需要有大量的挹注。大學除了像以往繼續提供產業界科技研發所需的應用知識、教育訓練，以及技術諮詢服務外，有些大學甚至會直接投入商業用途之新技術開發，並成立衍生公司（spin off）或技術移轉中心，促進產、學資源的交流。

在產學合作中，大學通常被視為知識之創造源及人才的培育者；而產業界則是研究資金的贊助者及研究成果（或科技知識）的使用者。雙方各有其動機存在。學術界參與合作研究的動機主要為：

(1)取得足夠的財務支援
(2)達成社會賦予大學之使命
(3)增進學校師生的研究經驗
(4)探求問題根源及問題解決
(5)增進地區經濟發展
(6)增加師生就業機會。

而業界參與合作研究之動機主要為

(1)分享大學的研究資源
(2)取得業界所需之人才
(3)協助公司技術策略之規劃與執行
(4)獲得大學內資優之科技人才
(5)彌補公司內部研究能力之不足。

而在各自不同的參與動機下，產學合作之型式近年來也就有很大的轉變與發展，值得國內注意。依據國外的經驗，在開放大學教授參與衍生公司創業活動之同時，應注意教學本業與企業兼職間的衝突與調和，以及利用學校公共資源卻使私人分紅致富的不公平性等利益衝突問題。

另一方面，在學校可以提供對於產學合作的獎學金以達成激發學生創新的潛能以促進產學合作的發展，並此獎學金的升請必需公開，而且至少包含下面的項目：

(1)創新的發展與完成
(2)最佳的衍生公司
(3)最佳產業合作計畫

三、成立育成中心來達到技術的轉移

創新育成中心之觀念始於 1959 年的美國，是透過社區中的大學院校，協助當地之中小企業成長，以創造就業機會，育中心可作為提供企業孕育新產品、新技術及轉型升級的場所，育成中心他所提供之產品絕不僅限於硬體之空間或設

備而已，而必須是能夠確實針對進駐客戶之需求提供全方位的產品規畫，而且可提供企業所需的設施、諮詢、服務與技術四項資源。

(1)育成中心目標

滿足廠商在新技術新產品的研發和商務經營管理等多方面需求，達成孕育企業成長與整合運用高等人力資源的目標，降低中小企業在經營與轉型的風險，協助企業全面升級。育成中心也可以利用網路資源去增加與產業界接觸的機會，例如以網路為主的架構產生企電子化的共同體。

(2)育成中心在產學合作互動上發展成為高科技企業的技術開發中心、人才培訓中心及企業養成中心和科研成果轉化中心。

大學育成中心技術轉移發展方向與展望

(1)鼓勵與推動創新研發新技術。

(2)有效管理與維護智慧財產權。

(3)推廣研發成果的利用，充分發揮研發成果的潛在價值。

(4)建立技術移轉的機制與提供服務的窗口。

(5)創造衍生利益，激發研究人員從事產業科技研發之創新誘因。

(6)落實產業科技化，導入先期技術移轉的概念，發揮研發資源的最高效益。

四、成立衍生公司

(1)大學成立衍生公司可促進產學資源交流。

(2)資產分派（Spin-off）。

公司將其部分資源分出，另行成立一家新公司，再將新公司的股份按原有股東的持股比例，分派給各原有股東。

(3)科技產業的衍生過程，可視為原先在高科技組織（研究院所、研發處）工作的人創立公司，這種公司可以看做這個高科技組織的衍生公司（Spin Off Company）。

五、衍生公司發展策略

(1)加強前瞻技術研發

為加速產業技術的發展，掌握產業發展先機，及建立領導型技術，協助國內業者擺脫技術追隨者的弱勢。

(2)強化產業服務

主動發掘業界技術需求及協助研發、運用開放實驗室與育成中心，推動以創新技術為基礎的投資提供及多元研發組合方案。

六、建構產業聚落

(1)產業聚落的最重要功能，是提供了相關產業生存發展所需的潤土。

(2)某個產業的成功，往往又帶起其他關聯的產業整體發展，而且這種由供應商、客戶聯結起來的產業「聚落」（clusters），常集中在某個特定的地理區域。

(3)眾多相關企業一旦形成「產業聚落」（Industrial Cluster），產業將結成戰鬥體，從上游到下游互相支援作戰。

(4)在產業聚落中，資訊與情報快速交流、技術與創意高度激盪，人才、技術、支援體系環環相扣，能打造出更具競爭力的專業戰鬥體。

(5)產業聚落的結合，可以激發出新技術、新科技，與能帶動產業成長與發展。

(6)利用產業聚落提升產業競爭優勢。

(7)新竹科學園區的成功例子。

七、凝聚競爭力，增進台灣產業優勢

(1)聚落成員多元，不限於製造業，甚至還包含服務業。

(2)競爭效果將被加速，對品質與創新造成強大效果。

(3)企業距離的接近與人才的高同質性，帶來的是技術與情報的融合與交流，整個聚落可視為一家公司。

(4)產業聚落成立的最重要條件還是在「人才」，所以企業的設廠策略應選擇在大學附近。

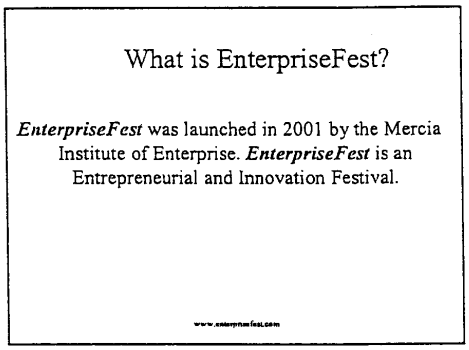
(5)建構健全產業聚落，開創科技創業優勢。

Burton Clark

Tel. 0044 1865 843830

Oxford fax. ... 85-3333

Workshop. Foyles



The principal aims of ***EnterpriseFest*** are:

- To encourage students and staff to think about setting up their own business
- To introduce academic staff to Enterprise issues
- To promote working in SMEs in the West Midlands
- To increase the number of exploitable inventions coming out of universities
- To develop mechanisms for licensing, patenting and spinning-out

www.enterprisefest.com

Who is EnterpriseFest for?

- Undergraduate & postgraduate students
- University staff and researchers
- Entrepreneurs themselves and the business support community

www.enterprisefest.com

What happens at EnterpriseFest?

- Keynote speeches from entrepreneur millionaires
- Programme of seminars and workshops on all aspects of setting up a business or running Enterprise programmes at Universities
- Opportunities for confidential one-to-one consultations with business advisors
- Exhibition of Enterprise opportunities

www.enterprisefest.com

What happens at EnterpriseFest

- Opportunities for undergraduates to gain accreditation (Warwick University skills certificate)
- Business Ideas Competition link
- Gala Dinner with entrepreneurial keynote speaker

www.enterprisefest.com

Building on the success of EnterpriseFest 2001

- EnterpriseFest 2001 attracted over 300 students and 60 academic staff from the Region's universities.
- We are keen to build on this success by making ***EnterpriseFest*** even more popular and effective in raising awareness of Enterprise in the region's universities.

www.enterprisefest.com

EnterpriseFest 2002

- EnterpriseFest with Anita Roddick as plenary speaker as held at University of Warwick in June 2002
- Successful wine tasting exercise
- Birmingham University held another EnterpriseFest during December 2002 specifically dealing with Cluster Policies
- With a total of 420 attendees

www.enterprisefest.com

EnterpriseFest 2003

- EnterpriseFest 2003 will be taking place at:

Staffordshire University 22 March 2003
University of Warwick 17 & 18 June 2003
Coventry University in Autumn 2003

- There are another three planned per annum for the next three years

www.enterprisefest.com

Benefits

- Free delegate pack on how to start your own business
- Travel bursaries for students from outside the University venue
- Registration fee for students of £5.00 (on-line)
- Registration fee of £75.00 for staff, which can later be claimed back though AWM
- Gala Dinner at Scarman House, Friday 21st June, 8pm

www.enterprisefest.com

Help needed

- **Promotion** of ***EnterpriseFest*** at respective universities through one representative at each institution - who may invoice Mercia for £150
- **Attendance** at the event. Seminars on technology transfer and selling services to business through "Contact" may be of interest.
- **Networking** opportunities at the Fest, especially at Gala Dinner

www.enterprisefest.com

What support is required from each representative?

- Main point of contact at each university
- Liaison with students union, careers service & IT services for distribution of promotional material
- Event promotion through university publications and websites
- Make suggestions for case studies of successful spin outs from Universities (e.g. Lord Stafford Award Winners, t@steonline Wolverhampton)

www.enterprisefest.com

Useful resources

- http://www.venturefestoxford.net
- http://www.efs.ac.uk
- http://www.ventures.warwick.ac.uk

www.enterprisefest.com

EnterpriseFest

mercia institute of enterprise

WARWICK

ASTON UNIVERSITY

Staffordshire University

UCE Birmingham

WOLVERHAMPTON

KEELE UNIVERSITY

www.enterprisefest.com

The Enterprising University

Dr Jonathan Nicholls – Registrar

THE UNIVERSITY OF
WARWICK

The Enterprising University

10 Essential Steps to become an Enterprising University

Burton R Clark: **Creating Entrepreneurial Universities**

"Pathways of Transformation"

- ❑ The strengthened steering core
- ❑ The expanded developmental periphery
- ❑ The diversified funding base
- ❑ The stimulated academic heartland
- ❑ The integrated entrepreneurial culture

WARWICK

The Enterprising University

10 Essential Steps to become an Enterprising University

Frank T Rhodes (former President of Cornell): **The Creation of the Future: the Role of the American University**

"The American university remains an organisational enigma, whose loosely coupled structure and collegially based organisation defy the established canons of management. But the very flexibility of the internal organisation of the American university has nurtured its entrepreneurial spirit."

"Today's university has no acknowledged centre. It is all periphery, a circle of disciplinary and professional strongholds, jostling for position, and surrounding a vacant centre. Among the neighbouring fiefdoms, there is little meaningful contact."

WARWICK

The Enterprising University

10 Essential Steps to become an Enterprising University

A Warwick View:

1. Don't over-rate strategy
2. Cultivate opportunism and innovation
3. Be decisive, quick and nimble
4. Make the best appointments

WARWICK

A Warwick View continued:

5. Balance independence at the periphery with strength at the core
6. Reward and celebrate successes
7. Be ruthless with your (inevitable) failures
8. Cultivate a diversity of activities
9. Spread the benefits and the culture
10. Enjoy the experience!

WARWICK

Approaches to Entrepreneurship Education

Professor Michael Taylor
University of Birmingham

Entrepreneurship is a significant engine of growth in the economy

- The foundation of manufacturing growth in the West Midlands - Metal bashing and SMES

Entrepreneurship involves:

1. The identification of new business opportunities
2. The commercial exploitation of those ideas

QUESTION

Is entrepreneurship teachable – can it be learned? Is it an innate capacity?

- Indeed, by definition, can academics teach it

New emphasis on Entrepreneurship in government views on building competitive advantage and promoting the knowledge economy

- Need to build Entrepreneurship capacities
- Modernise the Science base of UK business
- Create an enterprise culture
- Foster a new entrepreneurial spirit

Challenge for the universities to contribute to this agenda through entrepreneurship education:

- Help build entrepreneurship competences
- Facilitate and encourage graduate and academic entrepreneurship and spin-out
- Promote enterprise culture
- Encourage knowledge transfer

What Entrepreneurship education might embrace

Basic Level:

- Marketing
- Understanding Accounts
- Managing People
- Knowing the Law
- Preparing Business Plans
- Basic Calculation
- Basic Report Writing

Higher Level:

- Finance raising of Management
- Management Accounts
- Market Research
- Product Innovation
- Distribution & Networking
- Entrepreneurship Theory
- Exporting & Importing
- SME Research
- Managing Growth

Broad agreement in the literature of the need for a mix of theory and practice

Four distinct markets or constituencies for Entrepreneurship Education

- Enhanced Business School Teaching
- The Third Task Agenda – Capitalising on IP
- Extending Undergraduate 'Enterprise Literacy' beyond Engineering Science and Medicine enhancing
- Regional Economic Agenda

Enhanced Business School Teaching

- Add Entrepreneurship to MBAs
- New Masters Degrees in Entrepreneurship
- Taking business and Entrepreneurship Teaching into Science, Engineering and Medicine

The 'Third Task' Agenda

- Universities encouraging business spin-outs and the licensing of ideas/innovations by academics and researchers.
- A potential new income stream.
- Needs supporting with at least basic level entrepreneurship competences.

Extending Undergraduate 'Enterprise Literacy'

- Arts, Humanities and Social Science graduates most commonly go into employment in large corporations or government.
- They affect the business environment for Entrepreneurship.
- Need to sensitise graduates to their impact on the entrepreneurship environment.

Enhancing the Regional Economic Agenda

- business failures because entrepreneurs lack the business skills they need
- Take entrepreneurship education into the community
    - CPD
    - Life-long learning
    - E-learning
    - Web-base enterprise discussion groups

Mercia Institute of Enterprise – education component

- TEEE project about to begin
- £750,000 for partner institutions to develop e-learning modules on enterprise and entrepreneurship
- Sharing the expertise
- Making the expertise available to the regional community

Sandra Sparks

From: Ederyn Williams [Ederyn.Williams@warwick.ac.uk]

Sent: 26 February 2003 10:25

To: Sandra.Sparks@warwick.ac.uk

Cc: HAGEN_S@wmgmail.wmg.warwick.ac.uk

Subject: COAP

Dear Sandy,
The delegates at today's HEMP course seemed interested in this. They are welcome to use it as long as they acknowledge Warwick copyright.
Yours
Ederyn

Ederyn Williams
Warwick Ventures, University of Warwick
Barclays Venture Centre
Sir William Lyons Road
Coventry CV4 7EZ
Tel 02476 323 313
Mobile 07989 578572

Commercial Opportunities Appraisal Process (COAP)

What is COAP?

COAP is a system for managing commercial opportunities arising from research. It is especially suitable for university technology transfer operations, as it is based on experience at the University of Warwick, one of the UK's leading technology transfer operations.

How will COAP help me?

COAP has the following advantages for a technology transfer manager:

- It ensures that all commercial opportunities are systematically recorded, so that opportunities are not lost if your staff move on
- It ensures that decisions to pursue or drop projects are made in an open, consultative manner, which can be justified subsequently
- It includes the COAP Scoring System, so that each opportunity has a priority score at all times. This allows you to accelerate or delay projects in a systematic manner.
- It generates statistics, which help you to track your progress over time, benchmark your performance against other universities, and report to your Board.
- It allows you to estimate current and future workloads for your individual exploitation managers and your team as a whole, which is invaluable for smoothing the workload and for drawing up budgets
- It can be easily introduced into a busy technology transfer unit, as only a limited training period is necessary

The two key documents to get started on COAP are the Initial Opportunities Description (example follows) and the COAP Scoring Scheme (see later)

For more details: Contact Dr Ederyn Williams on 02476 323 313 or e-mail ventures@warwick.ac.uk

An example of an *Initial Opportunity Description*

"PURE-BLUD": CULTURED RED BLOOD CELLS

COAP Number: 00004 **Academic:** Prof Genius, Biology
Date: May 31st, 2000 **Project Manager:** EW

Background

Tissue engineering is now becoming well established, with artificial skin and cartilage now on the market. Blood is in constant demand, but there is no well-established method of producing artificial blood which is anywhere near as good as the real thing. Although supplies of blood from blood donors is in fairly plentiful supply, there will always be significant health risks due to unidentified viruses: the recent scandals with blood contaminated by AIDS and Hepatitis C viruses are likely to recur, as new viruses emerge.

The Invention

Professor Genius and co-workers in the Human Biology Department have been researching for the last 10 years into methods of culturing human red blood cells. Funding has come from the MRC and Wellcome Trust, so the IPR probably belongs to the University. They now have a technique that allows them to produce cells in 1 litre vats within a week, and feel that this could be developed to produce artificial blood for transfusions on a large scale. Prof. Genius states that since his red blood cells are bred from a pure strain, they are guaranteed virus-free. They are also free of blood-group factors (O, A, B) and so can be used for all patients.

The Market

According to Prof Genius, over 1 million units (litres) of blood are used in the UK per year. He reckons that his "Pure-Blud", as he calls it, will entirely replace blood from blood donors. He is not sure what price it will sell for, but thinks at least £50 a litre, making a market of £50 million p.a. in the UK, and perhaps £500 million worldwide. However, in the UK, donors currently give their blood free, so hospitals don't have any budget to pay for "Pure-Blud". Like other medical inventions, there will be a requirement for a prolonged clinical trials process, which could be very expensive and time consuming.

Next Steps and Grant Requested

Prof Genius is a leader in his field, well-funded by prestigious organisations, so this could be a breakthrough. We believe that it can be patented, though we have not yet been able to undertake a patent search. Our patent agents (Brainey & Misterius) have offered to undertake a search and report on patentability for £1,000 plus VAT.
Since there is no established market, we will have to do significant work to get a sensible idea of the market size. A consultancy firm, NuMarkets, have offered to undertake a market analysis for £4000 plus VAT, reporting six weeks from commissioning.

COAP Score:

Uniqueness	3	Readiness	3	Value	5	Profit Margin	4	Competition	5
Edge	3	Access	3	Conservatism	3	Commitment	4	Experience	1

Initial COAP Score 34x2 = 68%

The Warwick Commercial Opportunities Appraisal Process (COAP)

The COAP 10-Dimensional Rating Scale

A key part of COAP is the 10-dimensional rating scale, which is used as a standard method for rating, and thus comparing Projects.

We do not claim that this scale is the only, or even the best way of scoring Projects. However, it does clearly cover the major points of interest, and consistent usage will bring many benefits including:

- Comparisons, for prioritisation, between one Project and another
- Comparisons of scores for an individual Project over time. A rising or falling score will suggest a course of action
- Highlighting strengths and weaknesses
- Highlighting areas where additional work could improve the overall Project score

The 10-dimensions chosen are:

A. Uniqueness of the technology
B. Readiness of the technology for production
C. Value of the market
D. Anticipated profit margins
E. Intensity of competition in the market
F. Competitive edge of the product or service
G. Ease of access to the market
H. Customer conservatism
I. Commitment of the team
J. Commercial experience of the team

Each Project should be scored from 5 (excellent) to 0 (very poor) on each dimension

My thanks go to David Catton, of Sheffield University Enterprises Ltd, whose original idea was the genesis of the COAP Scoring system.

SCORING GUIDELINES

The following guidelines give an indication of what characteristics lead to higher or lower scores. In some cases you will need to use your judgement, as the descriptions will not correspond exactly to the situation which you find. If a particular project has some aspects of a 2, and some aspects of a 4 on a particular scale, then just give a 3 and stop worrying! If you have no information at all, give a 2 (the Default Score).

Scores on each of the ten scales can be totalled and doubled, to give a score out of 100. This can be useful in prioritising. Do not be surprised if quite promising projects get an initial score of less than 50%. This just indicates that there is a lot of work between the initial stage and, for example, the level required in a well-rounded spin-off company which is able to raise venture capital and start trading.

THE 10 COAP DIMENSIONS

A. Uniqueness of the technology

Score of 5: for a family of patents, granted worldwide, which covers several interlinked aspects of the technology
Score of 4: for a single patent, granted worldwide, which covered the fundamentals of the technology, or for a very major suite of software which would take many man-years to duplicate
Score of 3: for a strong patent application, or for a significant suite of software
Score of 2: for smaller software suites, or extensive know-how
Score of 1: for an interesting research result which might be protectable
Score of 0: for a bare idea, with no evident uniqueness or protectability

B. Readiness of the technology

Score of 5: the technology is well proven and bug free, and a process for volume manufacture has already be proven by manufacture of significant quantities (or is trivial, as for example, with software duplication)
Score of 4: the technology has successfully completed beta-testing (i.e. field testing with real customers) and is thus relatively bug-free, and a small-scale manufacturing process has been demonstrated.
Score of 3: the technology works well in the laboratory, but has not yet been tested by customers. Manufacture seems to be relatively straightforward in theory
Score of 2: the technology can be made to work sometimes in the laboratory, though this is still considerable "black art" in doing it repeatedly. Not much thought has yet been given to larger scale manufacture.
Score of 1: closely related technologies have been made to work in this lab, and there seems to be no theoretical reason why this one shouldn't work too
Score of 0: the technology should work in theory, but hasn't yet been tried

C. Value of the Market

Score of 5: the worldwide market for this product and its direct competitors is likely to be in excess of £20 million p.a
Score of 4: the worldwide market is likely to be £5-20 million p.a
Score of 3: the worldwide market is likely to be £3-5 million p.a
Score of 2: the worldwide market is likely to be £1-3 million p.a
Score of 1: the worldwide market is likely to be £250k to £1 million
Score of 0: the worldwide market is likely to be less than £250k p.a.

D. Anticipated profit margins (if considering a license, score on the anticipated royalty rate)

Score of 5: the gross profit margin per sale is likely to be over 70% (royalty >7%)
Score of 4: the gross profit margin per sale is likely to be over 50% (royalty >5%)
Score of 3: the gross profit margin per sale is likely to be over 30% (royalty >3%)
Score of 2: the gross profit margin per sale is likely to be over 20% (royalty >2%)
Score of 1: the gross profit margin per sale is likely to be over 15% (royalty >1½%)
Score of 0: the gross profit margin per sale is likely to be under 15% (royalty <1½%)

E. Intensity of Competition in the Market

Score of 5: this is a brand new market, and there are currently no actual or potential competitors

Score of 4: the market is relatively new, and the competitors are very small firms which have no current technological or marketing lead.

Score of 3: the market is relatively new, and the competitors are still relatively small, though some may have a small lead in some areas, or have access to significant venture funding.

Score of 2: the market is becoming established, and competitors have grown to medium size (£5m plus sales p.a.) and gained a reputation as market leaders.

Score of 1: the market is well established, and the competitors are already substantial companies with the ability to quickly adopt or duplicate new technologies.

Score of 0: the market is mature, and is dominated by a few multinational companies with major research capabilities, marketing reach and financial muscle.

F. Competitive Edge of your product or service

Score of 5: the product/service is several times as good as the competition in one or more customer-critical areas, and is not worse in any other areas.

Score of 4: the product or service is significantly better than the competition in at least one customer-critical area, and is not worse in other areas.

Score of 3: the product or service is marginally better (e.g. 25% better in at least one customer-critical area), and is not worse in other areas, or is significantly better is one area, but has minor disadvantages in other less critical areas.

Score of 2: the product or service is marginally better (e.g. 25% better) compared to the competition in at least one customer-critical area, but has disadvantages in other less critical areas

Score of 1: the product or service has advantages over the competition in one or more areas, but they do not appear to be areas that are critical to the customer

Score of 0: the product or service has no evident advantages over the competition

G. Ease of access to the Market

Score of 5: the potential customers worldwide have already been listed (or can very easily be listed) and sales contacts can be initiated as soon as the product is completed, or well-established worldwide distributors are enthusiastic.

Score of 4: the potential customers or enthusistic distributors can be easily listed in some territories, and it appears that with enough work, other territories can be brought up to the same level.

Score of 3: the potential customers and distributors can be described in general, and there are no evident barriers to accessing them, though generating the lists would be significant work

Score of 2: it is still fairly unclear what the profile of the potential customers is, or the profile is clear but there are some significant barriers (e.g regulatory approval) to reaching them.

Score of 1: some potential customers can be described, but there are substantial barriers (e.g. regulatory approval) preventing short-term access to them

Score of 0: some potential customers can be described, but the barriers to reaching them are very substantial.

H. Customer conservatism

Score of 5: the customer group is very innovative and experimental, buying new products or services just to try them out

Score of 4: the customer group is fairly innovative, and are willing to try out new products and services which seem to have some advantages

Score of 3: the customer group is not especially innovative, but is willing to give a fair hearing to any product or service which seems to offer clear advantages

Score of 2: the customer group is relatively conservative, preferring to stick to established methods unless new ones offer a strong advantage

Score of 1: the customer group is very conservative, tending to prefer "tried and trusted" methods and resist new ones for years even, though they offer strong advantages

Score of 0: regulatory, legal, moral or religious reasons lead to new methods being rejected irrespective of their advantages

I. Commitment of the team

Score of 5: the inventors and other members of the team are glad to leave their current jobs, invest their life savings and mortgage their houses in order to see the commercial opportunity realised.

Score of 4: the inventors and other members of the team are willing to take full-time leave of absence from their current jobs, and invest meaningful sums (e.g. 25% or more of their annual salary).

Score of 3: the inventors and other members of the team are willing to take spend 50% or more of their time on the commercial opportunity, on an agreed split with their current jobs, and to invest modest sums (over £1,000).

Score of 2: the inventors and other members of the team are willing to take spend a small portion of their time (20% or less) on the commercial opportunity, but are not willing to make even a modest investment.

Score of 1: the inventors and other members of the team are willing to act a consultants, in addition to their normal jobs, providing they are paid consultancy fees, but are not willing to make even a modest investment.

Score of 0: the inventors and other members of the team believe that their job is now finished, and are unwilling to spend any further time on the opportunity.

J. Commercial experience of the team

Score of 5: the inventors and other members of the team have a previous, very successful, experience in the commercial exploitation of a new technology.

Score of 4: the inventors and other members of the team have a previous, not very successful, experience in the commercial exploitation of a new technology, and feel that they have learnt to do it better this time.

Score of 3: the inventors and other members of the team have worked for commercial companies in a management role, though this role was relatively narrow (e.g. managing a research team, rather than general management).

Score of 2: the inventors and other members of the team have worked for commercial companies, though not in a management role, and have maintained good contacts with various commercial companies since joining the University.

Score of 1: the inventors and other members of the team have not worked for commercial companies but have had regular contacts with a number of commercial companies through, for example, joint or sponsored research projects

Score of 0: the inventors and other members of the team have not worked for commercial companies and their University research has almost all been publicly funded.

Business Ideas Competition

www.bizcompetition.com

mercia
institute of enterprise

Sandy Sparks
Development Manager

bizcom

- How does bizcom fit into Mercia Institute of Enterprise
- What is bizcom?
  - Aims and objectives
  - Who can enter?
  - What are the benefits?
  - Stages of bizcom
  - What do I win?
  - Rules & regulations
  - Judges
  - Confidentiality
  - Future

How does it fit
Mercia Institute of Enterprise

- UKSEC
- EnterpriseFest
- Skills Certificate
- EFS – Enterprise Fellowship Scheme
- Curriculum Development

mercia
institute of enterprise

What is bizcom?

Aims:

- to encourage students to think in terms of setting up their own business
- to promote and develop a positive climate for small business in the West Midlands.

Objectives:

- promote entrepreneurship & develop next generation of entrepreneurs
- enable people to start own business
- explore entrepreneurial dream
- learn about venture formation

designed to be locally managed and owned by each University/College.

Who can enter bizcom?

any registered student
full-time or part-time
individual or team
one of the participating institutions

Universities:
Aston
Birmingham
Central England
Coventry
Keele
Staffordshire
Warwick
Wolverhampton

University Colleges:
Harper Adams
Newman
Worcester

What are the benefits?

- High level of feedback
- Chance to learn more about the processes of business
- Prestigious platform for successful launch of your business idea
- Access to networks & valuable contacts
- Greater understanding of the investment process
- Generation of a more realistic & marketable idea
- Financial benefit

Stages of bizcom

Stage I

Create the executive summary of your business idea (max 1200 words)

Submit your entry to the University representative

Winner selected for each University /College

Winner will receive University Business Award (UBA) £1000.00

Mercia Business Merit certificates

Request from online web form a "starting your business" pack

List of winners posted on the website

Stages of bizcom

Stage II

Winners from each University/College submit more detailed Business Idea "Plans" (max 4500 words)

Short list of finalists selected by regional panel of adjudicators

Presentation to the panel of judges (b)
- 15minute presentation
- 5 minute questions & answers
Judges to provide feedback & advice

Final selection

Winner receives £4000 plus in-kind support*
Mercia Top Business Award (MTBA)
and Lord Stafford Student Award

Runner-up receives £1500 plus in-kind support
* this must be used for a business related purpose.

What do I win?

- Stage I
  £1,000
  University Business Award – UBA
- Stage II
  Winner £4,000
  Mercia Top Business Award - MTBA
  Runner-up £1,500
- Stage III
  Support

Rules & regulations

- registered student - full-time or part-time – participating institution – individual or team
- idea needs to be innovative
- no existing funding ('ground-bait') to date.
- financially viable
- between Stage I & Stage II the team members can change
- submission can include pictures / graphics
- Submission by post or electronic
- prize money must be used for a business purpose related to your idea.

Judges

Panel

University/ College panel
each University/College selects a judging panel
at least 3 members, and a maximum of 5 members

MIE regional panel
The judging panel will consist of:
a business representative
venture capitalist
entrepreneur
University staff member
banker and/or lawyer
chaired by the Director of MIE.

Confidentiality

Confidentiality

judges agree to treat entries as confidential

judges to sign confidentiality of disclosure agreement beforehand

copyright - the content is owned by the individual or team applicants, not MIE or University/ College

IPR – falls under each individual University/College rules and regulations

posted or submitted online.

Winner's citation will contain jointly worded text to protect confidentiality of idea.

Future

- Open to all staff
- Different categories

"It all starts with an idea..."

bizcom

Business Ideas Competition

www.bizcompetition.com 13

Useful resources:

- http://50k.mit.edu/
- http://50k.mit.edu/asw/2003
- http://bases.stanford.edu/echallenge.html
- http://www.muec.org
- http://mbp-www-1.mpservers.net/mbpw/
- http://www.venturecup.org
- http://concours123go.org/default.html
- http://www.shell-livewire.org

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some crazy ideas on the web

www.halfbakery.com

Useful resources: continued

- http://science-enterprise.ox.ac.uk
- [illegible]
- [illegible]
- [illegible]
- http://www.shell-livewire.com
- [illegible]

www.bizcompetition.com 15