



**The Abdus Salam
International Centre for Theoretical Physics**



2335-9

**Workshop on Entrepreneurship for Physicists and Engineers from Developing
Countries**

23 - 27 April 2012

The journey from concept to commercialisation

Anthony Bunn
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So you have an innovation?

“The journey from concept to commercialisation ”

Tony Bunn

**Joint ICTP-TWAS Workshop on Entrepreneurship
for Physicists and Engineers from Developing Countries
Trieste, Italy**

April 23-27, 2012



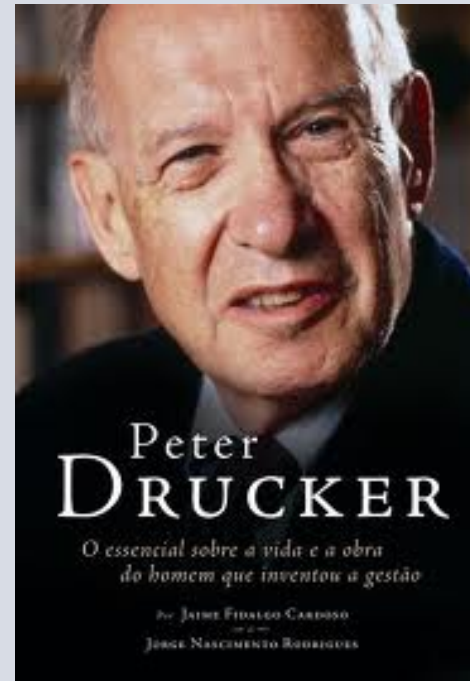
Entrepreneurship Workshop
April 23-27, 2012
Trieste, Italy

A E Bunn: Commercialising your Innovation

Your ideas are our business

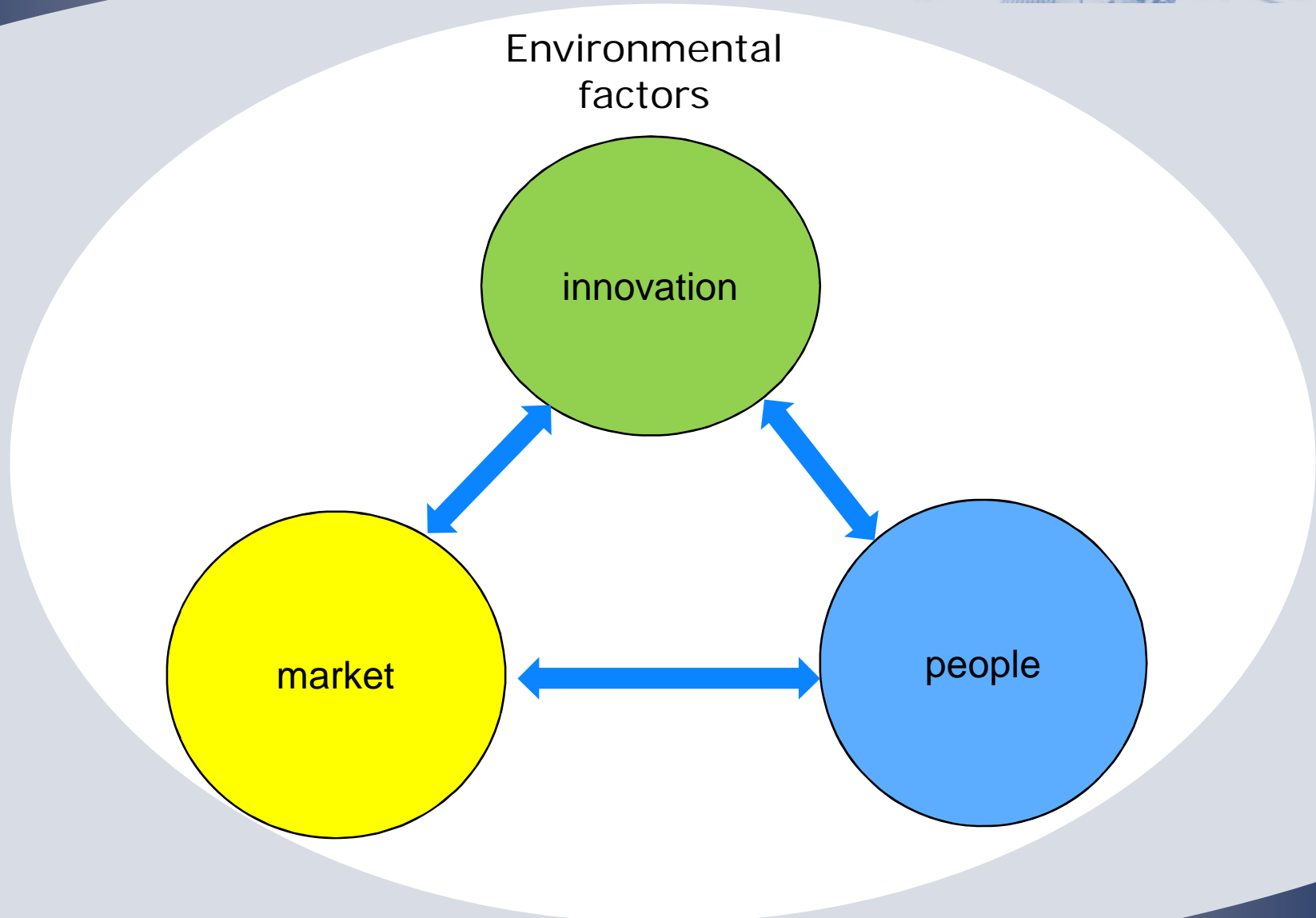


- **Decision to form your own start-up, license or sell your technology?**
- **How does a single inventor/university team/small company makes these decisions?**
- **Who is the customer?**
- **How viable is the technology and how receptive is the market?**



“Because the purpose of business is to create a customer, the business enterprise has two--and only two--basic functions: marketing and innovation. Marketing and innovation produce results; all the rest are costs..”

Peter Drucker (1909 – 2005) the father of modern Management Theory





1. INNOVATION

- Intellectual Property
- Technology/Science
- Product





INTELLECTUAL PROPERTY

Confident of ability to obtain IP protection in countries where main markets exist

Third parties unlikely to be able to evade IP claims to avoid infringement

Ability to identify copying

Alternative competing IPR absent (Freedom to Operate -FTO)

No share due to third parties

Part of related technology portfolio or strong free-standing proprietary position



THE TECHNOLOGY/SCIENCE

Uniqueness of the invention

Has both **current and future** uses

Existing issues confronting the invention's development into product are solvable

The **production** of the technology is feasible on a large scale (mass production)

There is a functioning **prototype**

The invention is a '**break-through**' technology

The invention is a '**core or platform**' technology



THE PRODUCT

Broad application/enabling technology

Product has unique benefits

Product has better performance than existing competition

Major price benefit over competition

No negative environmental impact

Known demand for product features

Long product lifespan



2. THE MARKET

A defined market is **accessible**

The product has distinct **competitive** advantage

The **size** of this market is substantial

The market for this product is **growing**

Market partners or potential **licensees** have been identified



3.THE PEOPLE

Does originator have high credibility/profile

Is originator a good communicator and able to describe the innovation in simple terms

Does originator work well with others

Can development team generate confidence with investors

Will team accept need for incoming experienced management

Is development team commercially savvy



Decisions needs to take country needs and associated government strategies into consideration

- export driven economic growth
- Technology driven enterprise development (knowledge economy)
- Government incentive schemes such as early stage seed funding and support for new ventures
- Availability of private sector venture capital
- Stimulus for SMMEs



DECISION TIME

INNOVATION	MARKET	PEOPLE	DECISION
Yes	Yes	Yes	<i>Many options open</i>
Yes	No	Yes	<i>Can you create the market or is it something that no-one needs?</i>
Yes	Yes	No	<i>Get in good management?</i>
Yes	No	No	<i>Create market and get in good management?</i>
No	No	Yes	<i>Try another innovation?</i>
No	Yes	Yes	<i>Be first to market- create brand-first mover advantage?</i>
No	Yes	No	<i>.....as above and get in some good management?</i>
No	No	No	<i>Woops! Hope you learned some lessons?</i>



ASSESSMENT TOOL

<http://innovation-tools.mrc.ac.za/>

Technology_Evaluation.html

Login: **ICTP-TWAS**

Password: **TRIESTE2012**



Thanks



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