Education of next generation engineers – quality, innovation or entrepreneurship?

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What is (or shall be) an Engineer?

We are the champions, my friend…

- makes something,
- way of thinking,
- doing things in a way that is intelligent,
- using intelligence and listening carefully,
- solving real world problems,
- …

http://techtv.mit.edu/videos/2537-what-is-an-engineer

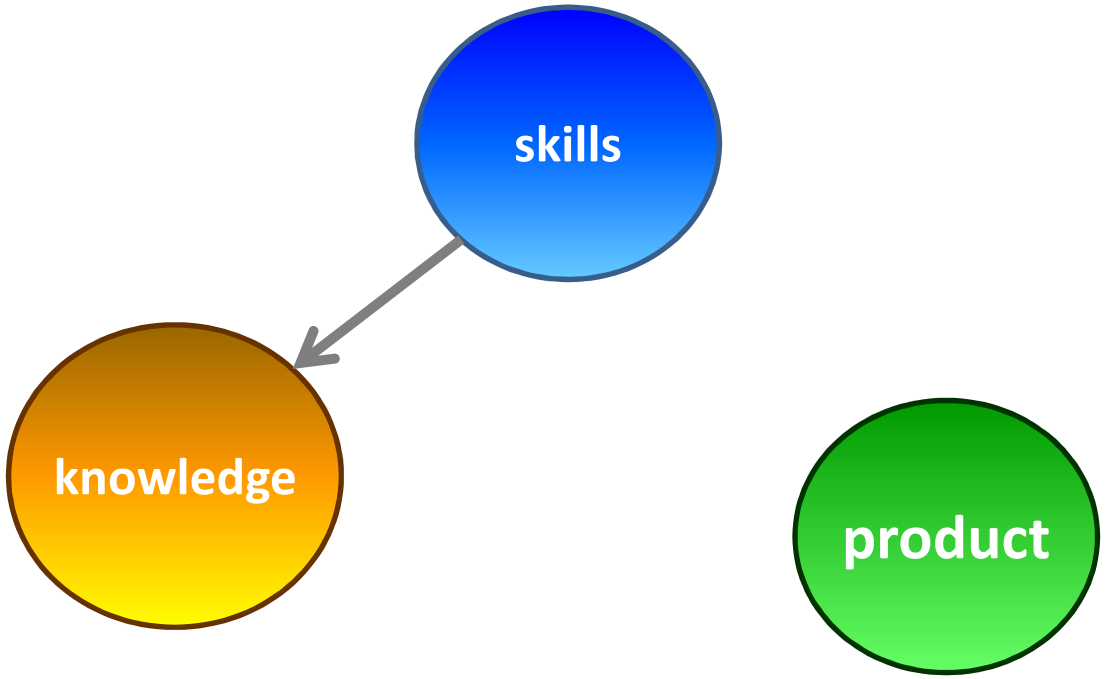
Engineers

have skills to put knowledge into a product

Brussels, 13.9.2006
COM(2006) 502 final
COMMUNICATION FROM THE COMMISSION TO THE COUNCIL, THE EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS
Putting knowledge into practice: A broad-based innovation strategy for the EU

"a broad based innovation strategy for Europe that translates investments in knowledge into products and services"

How, when and where?



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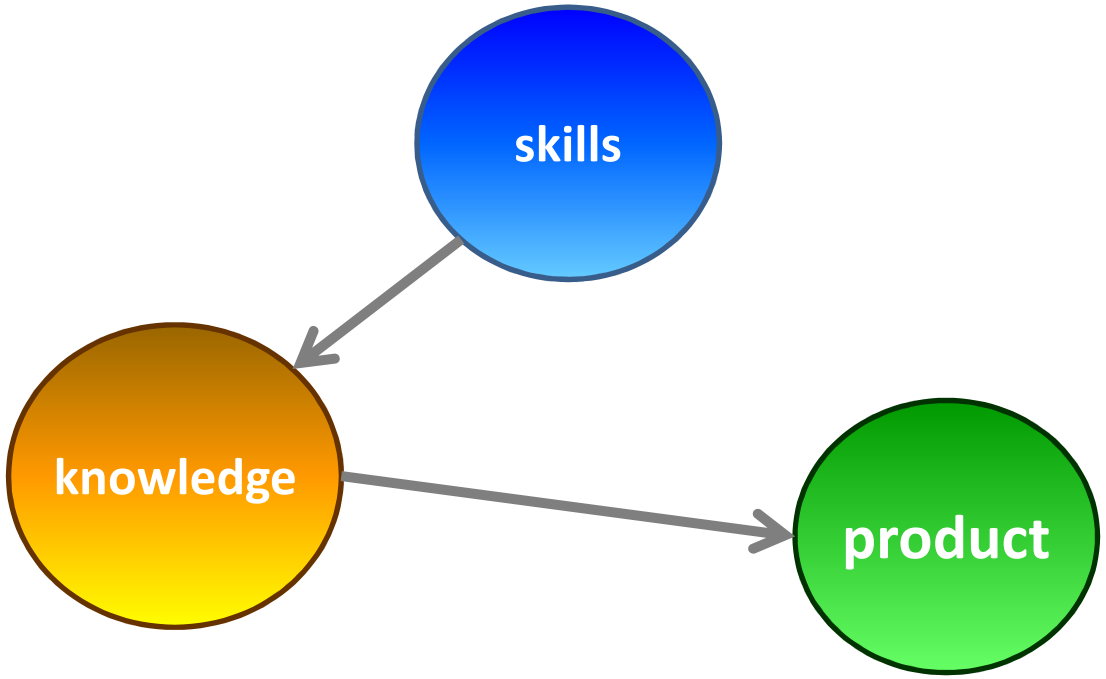

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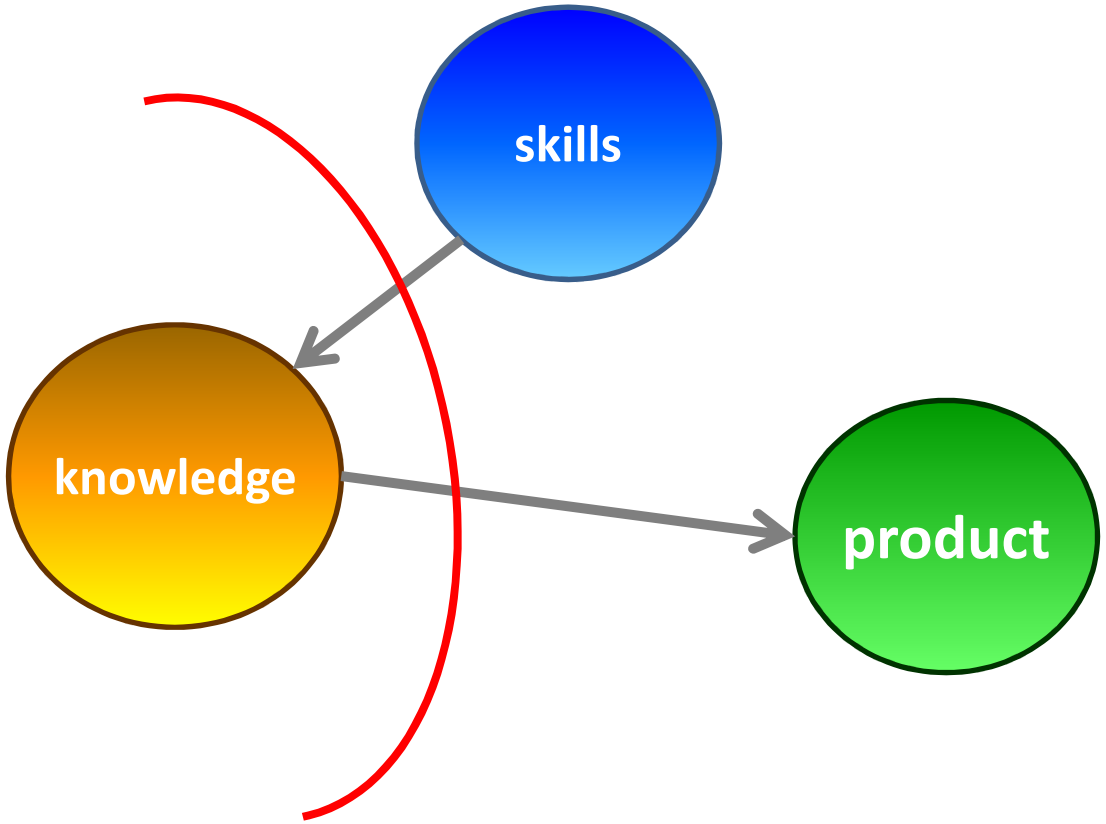

How, when and where?

curricula, eg. ACM:

Computer Science:

- CC2001, CS2008, CS2013,

Computer Engineering

- CE 2004:

Information Systems

- IS 2002, MSIS 2006 , IS2010

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- IT 2008

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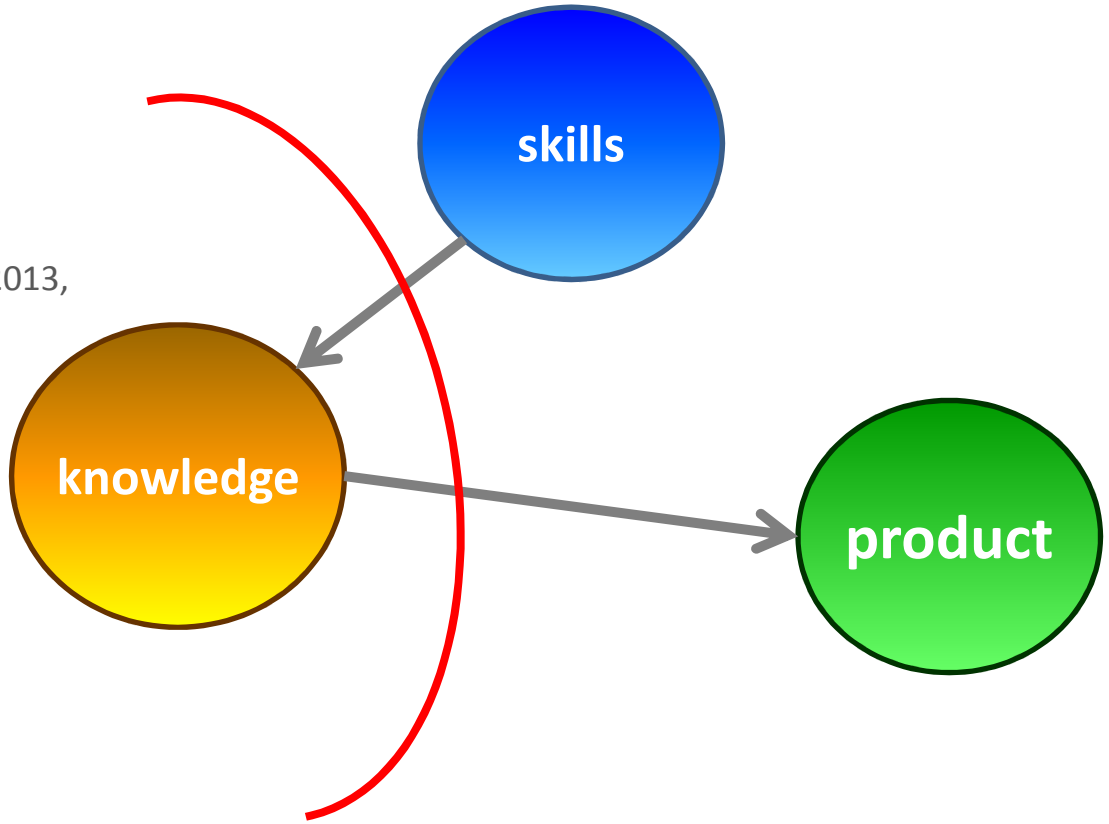

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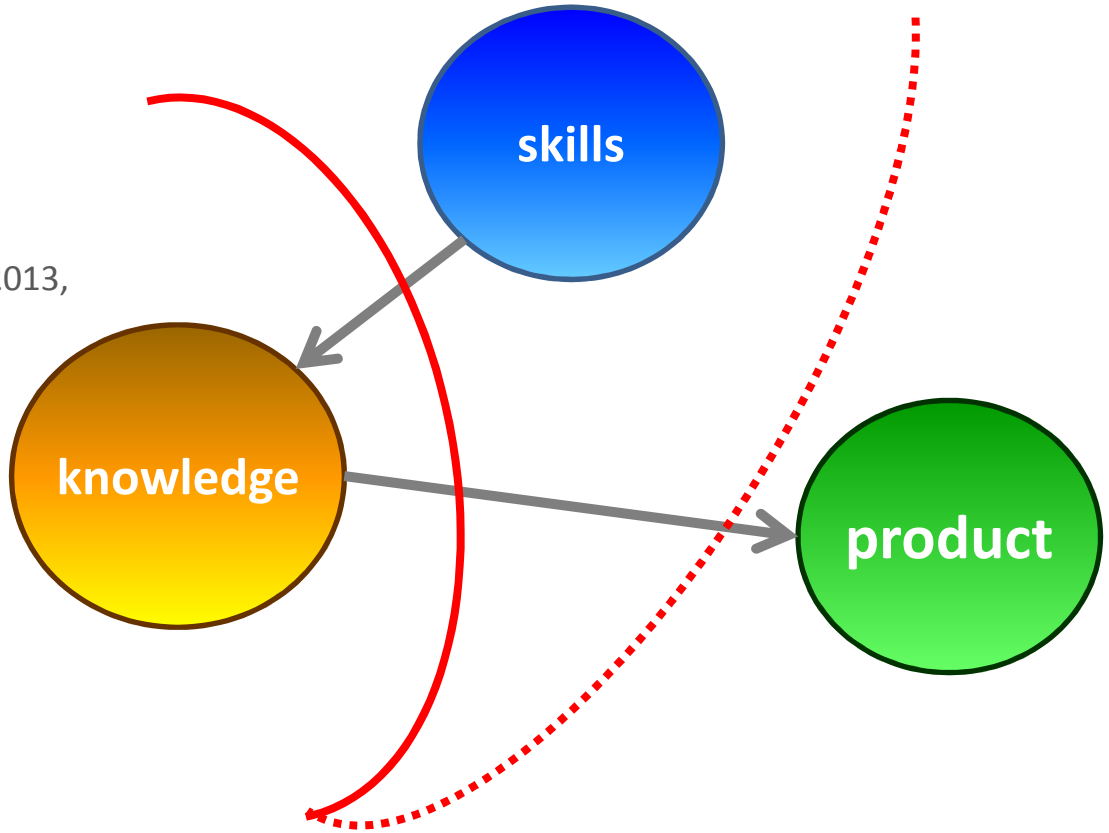

How, when and where?

CDIO, internships, technical placements, etc.:
e.g. Telecom Bretagne, France

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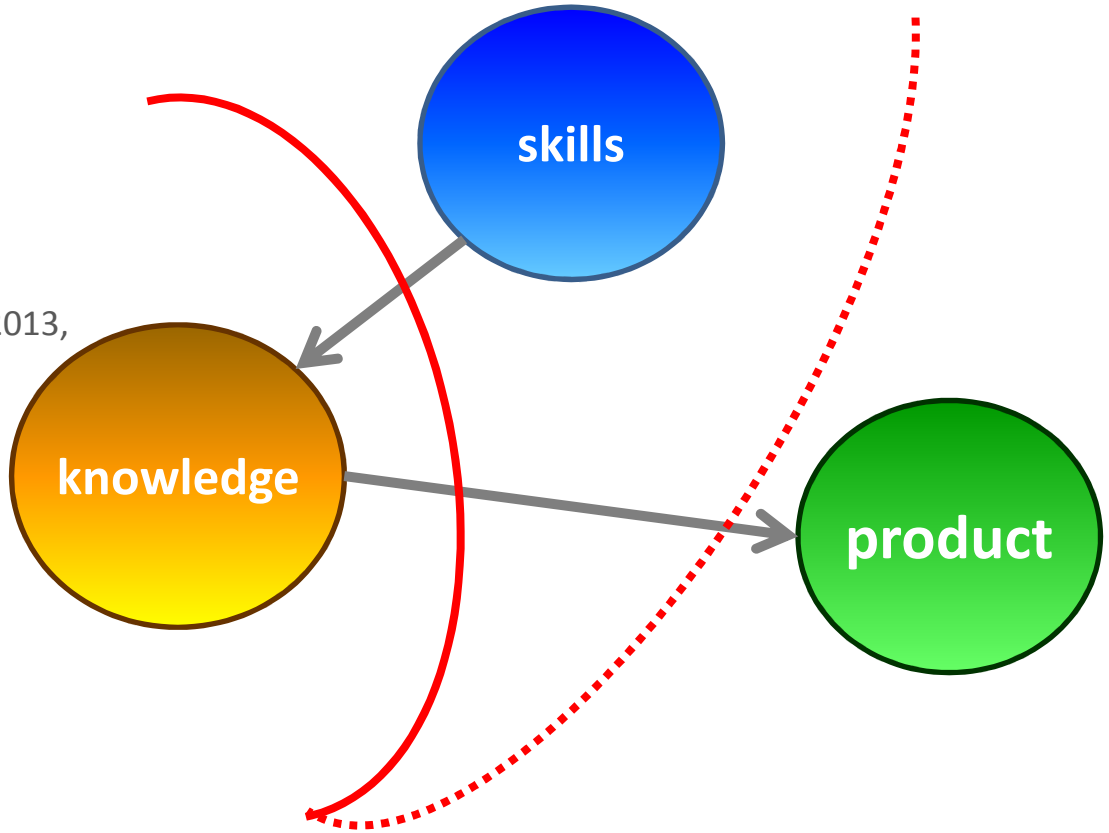

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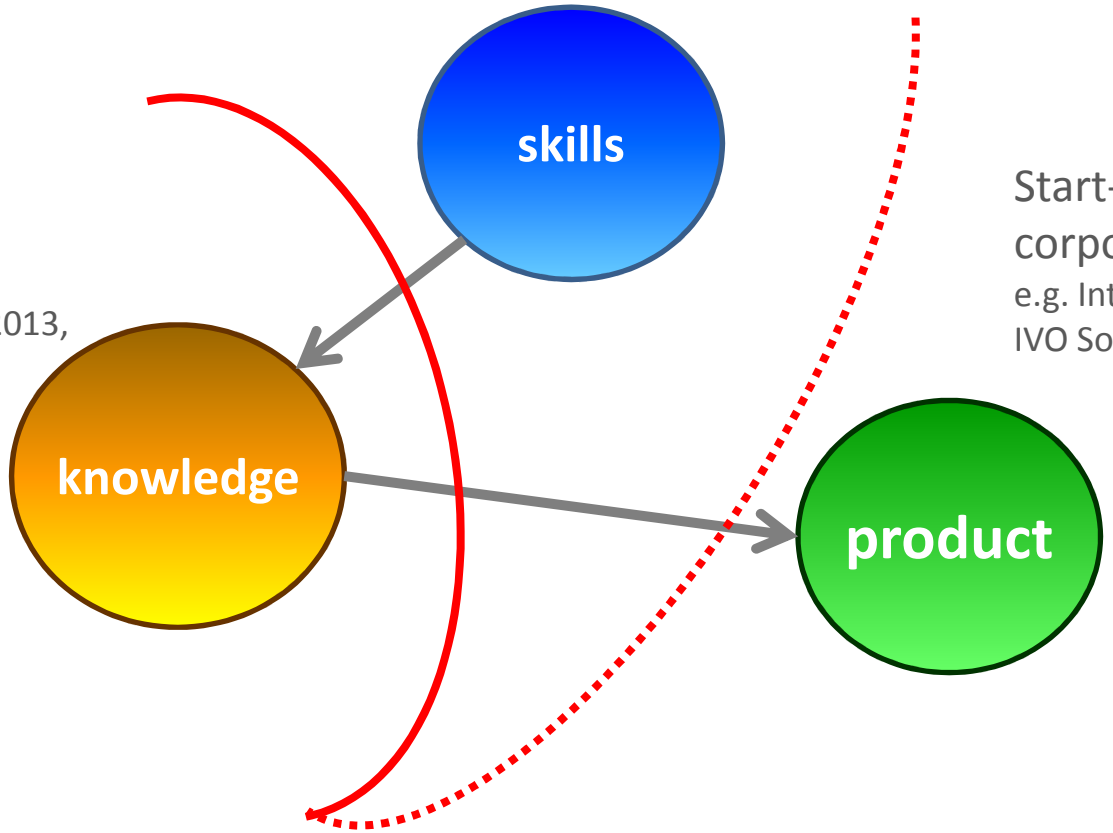
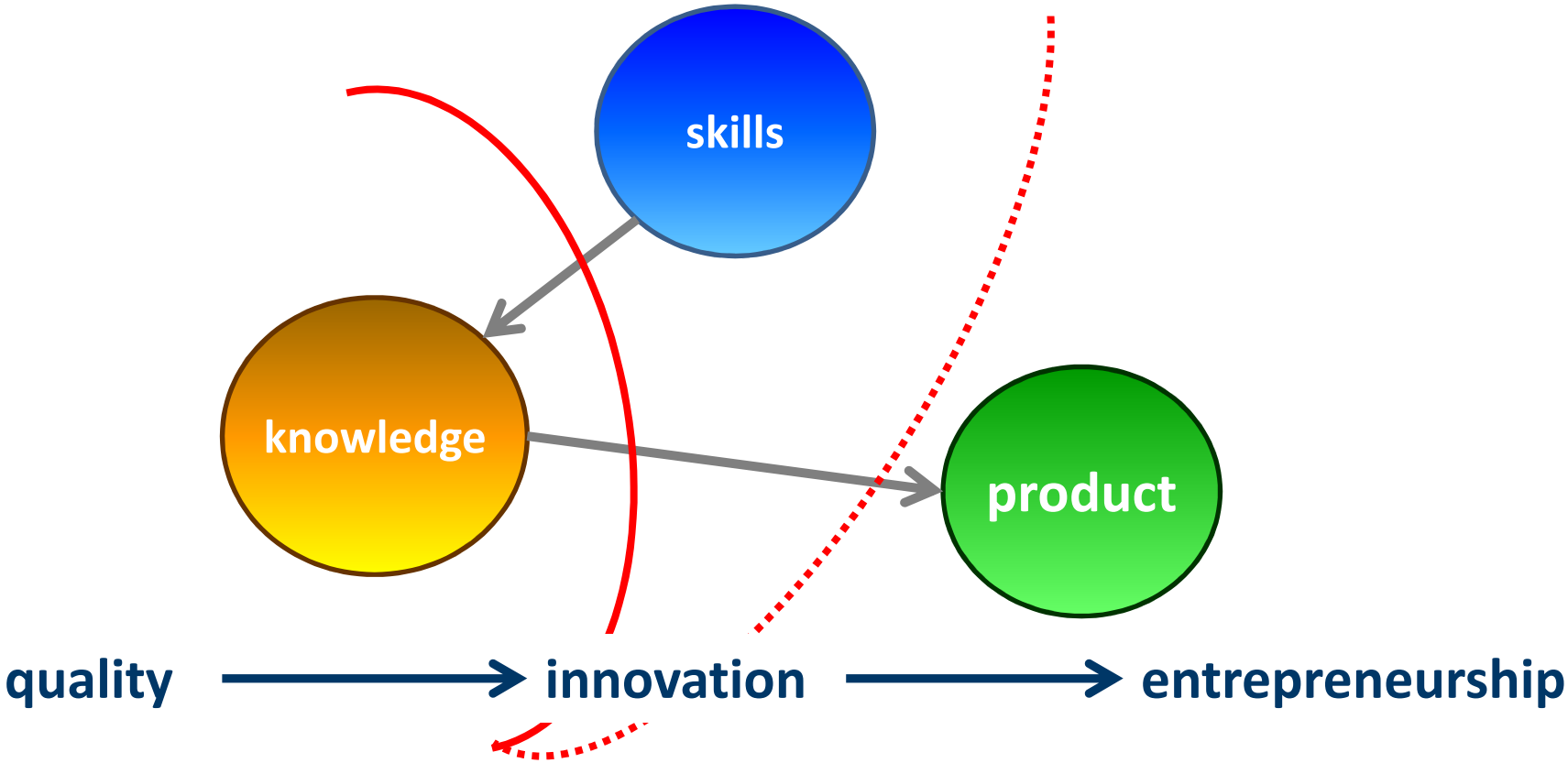


Start-ups or corporate carriers?
e.g. Intel Technology Poland, IVO Software, YDP

How, when and where?

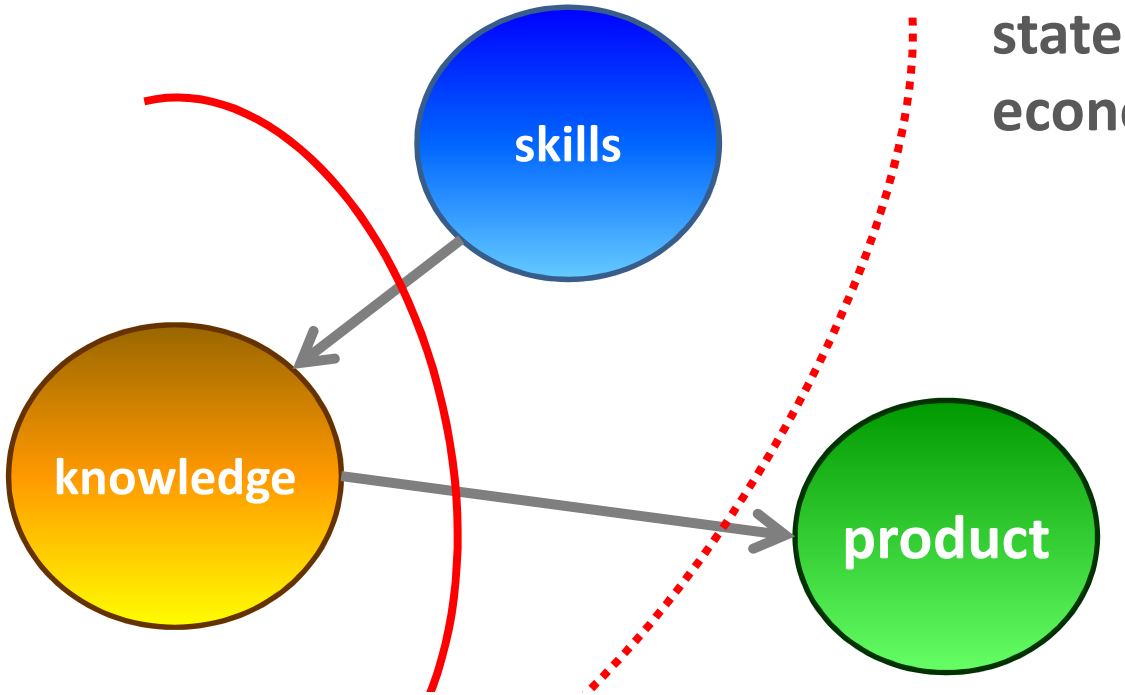


How, when and where?

capable academic staff

organization of studies

investors,
state policy,
economic freedom



quality → innovation → entrepreneurship

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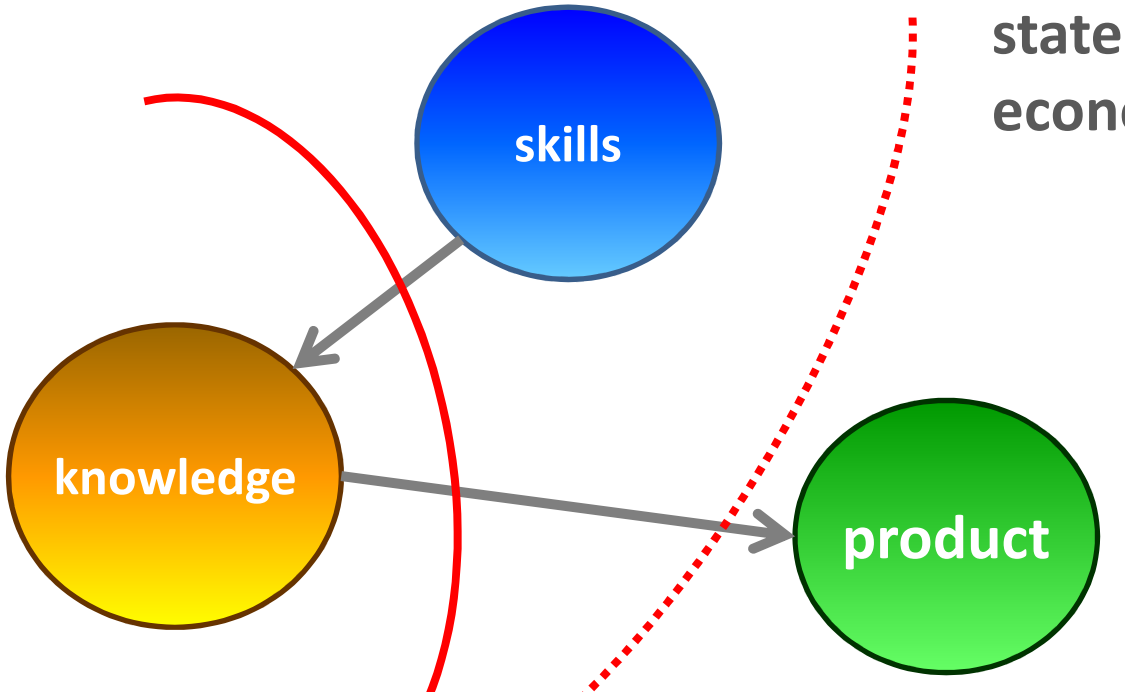

IEF (2014):
Hongkong 1/178,
Switzerland 4/178,
Ireland 9/178,
Poland 50/178
North Korea 178/178

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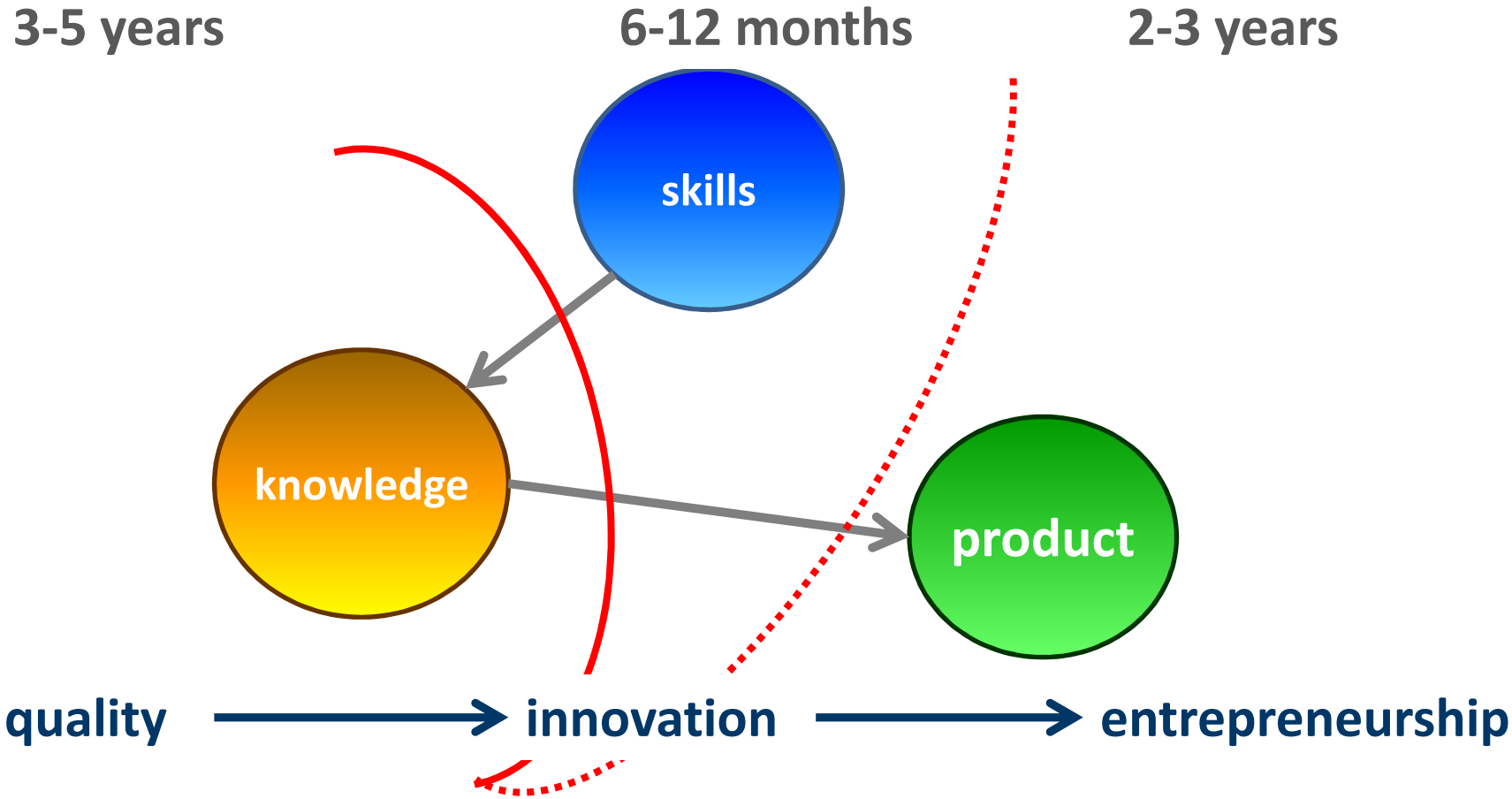

Conclusions

A lot of work to be done (a slightly biased view…)

- academic staff staying ahead of the wave (or at least kept current)
- long-term working experience for students near graduation
- enterpreneur-friendly state and/or region

GDAŃSK UNIVERSITY OF TECHNOLOGY

Thank you!