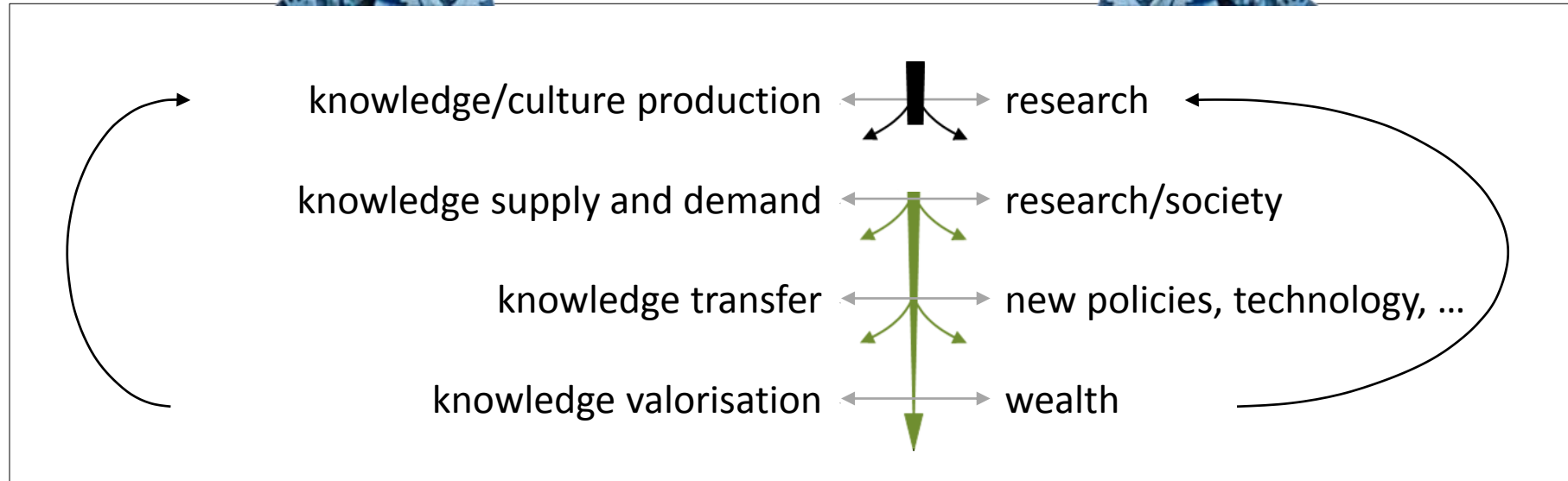
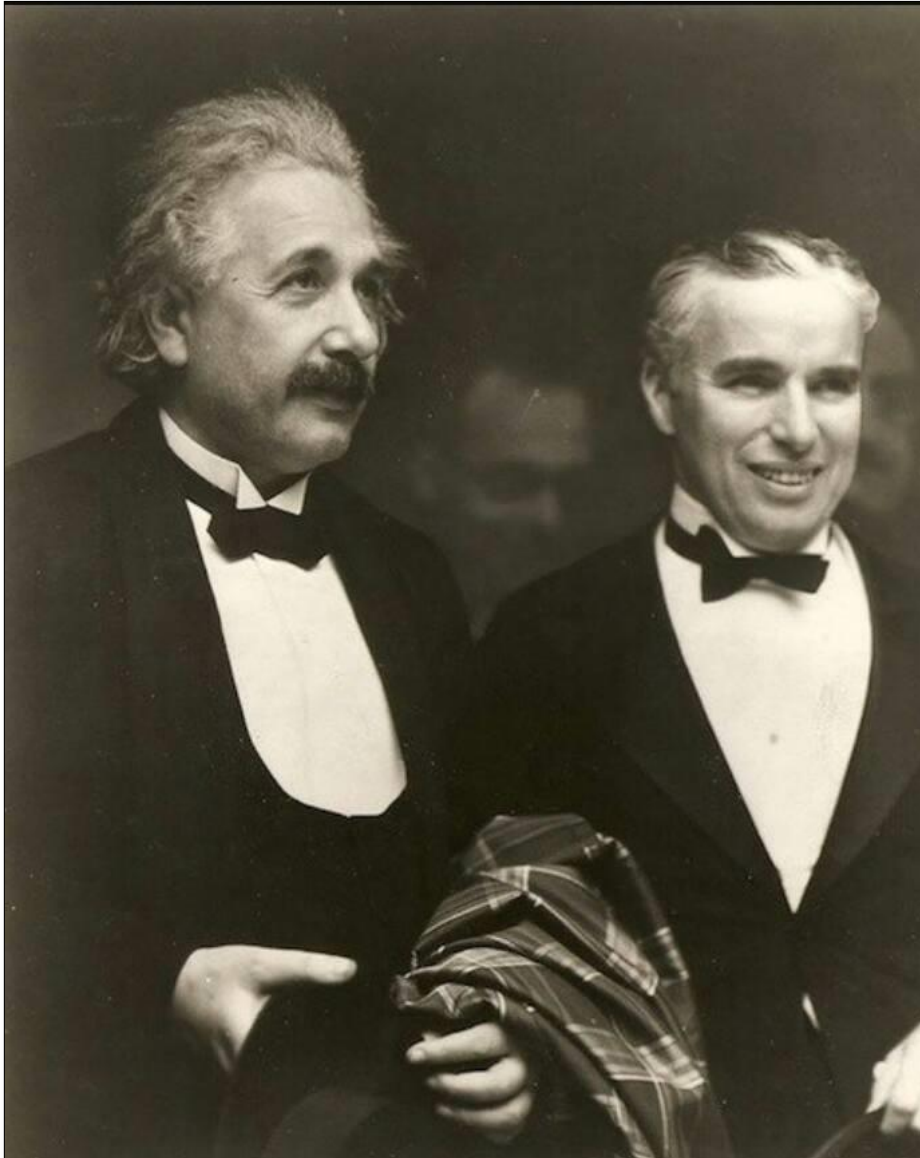


# the cycle of knowledge





In 1930 Charlie Chaplin (silent films) and Albert Einstein (theoretical physics) met in Los Angeles.

Einstein said to Chaplin:

"What I most admire about your art, is your universality. You don't say a word, yet the world understands you!"

Chaplin replied to Einstein:

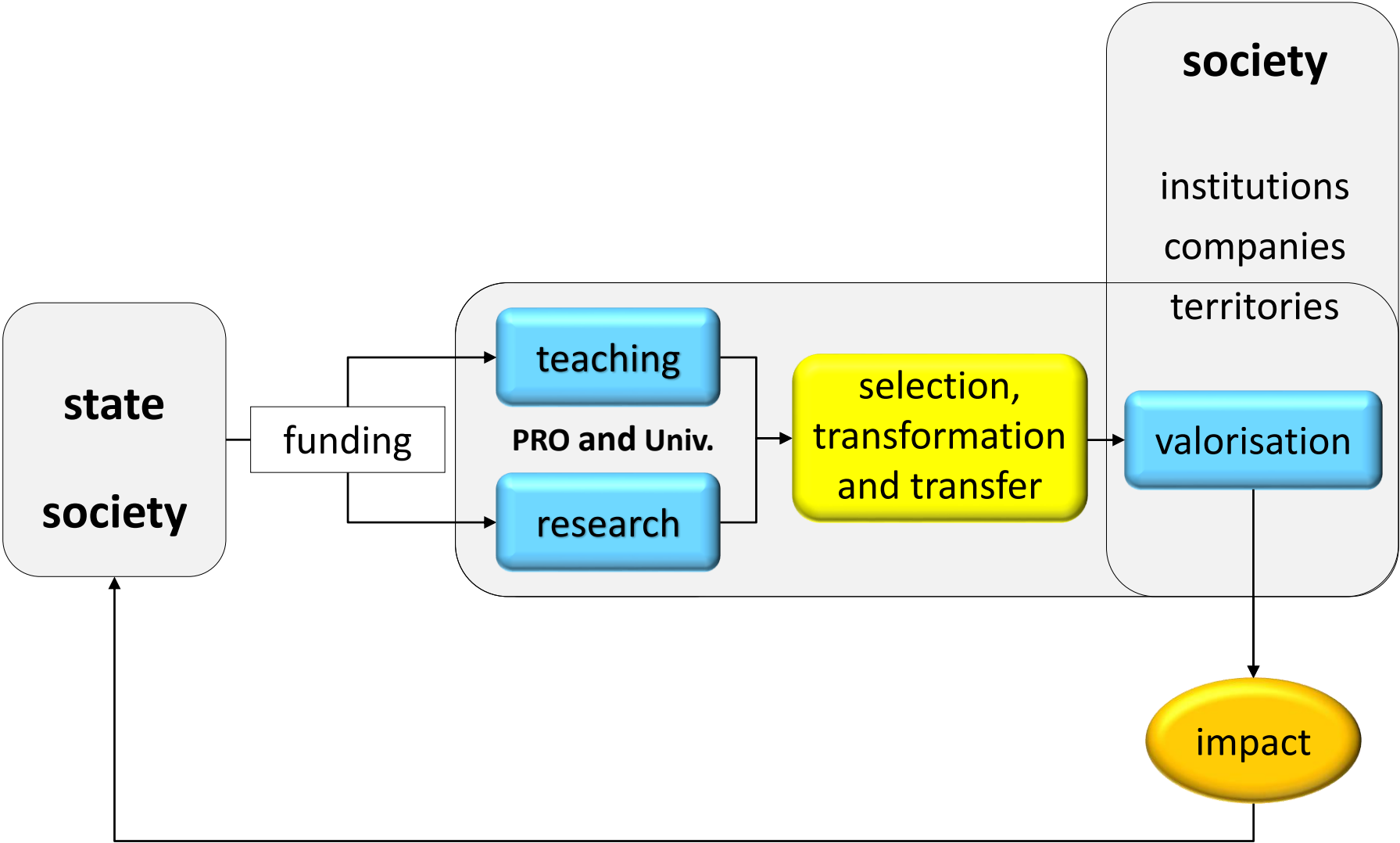
"True. But your glory is even greater! The whole world admires you, even though they don't understand a word of what you say."



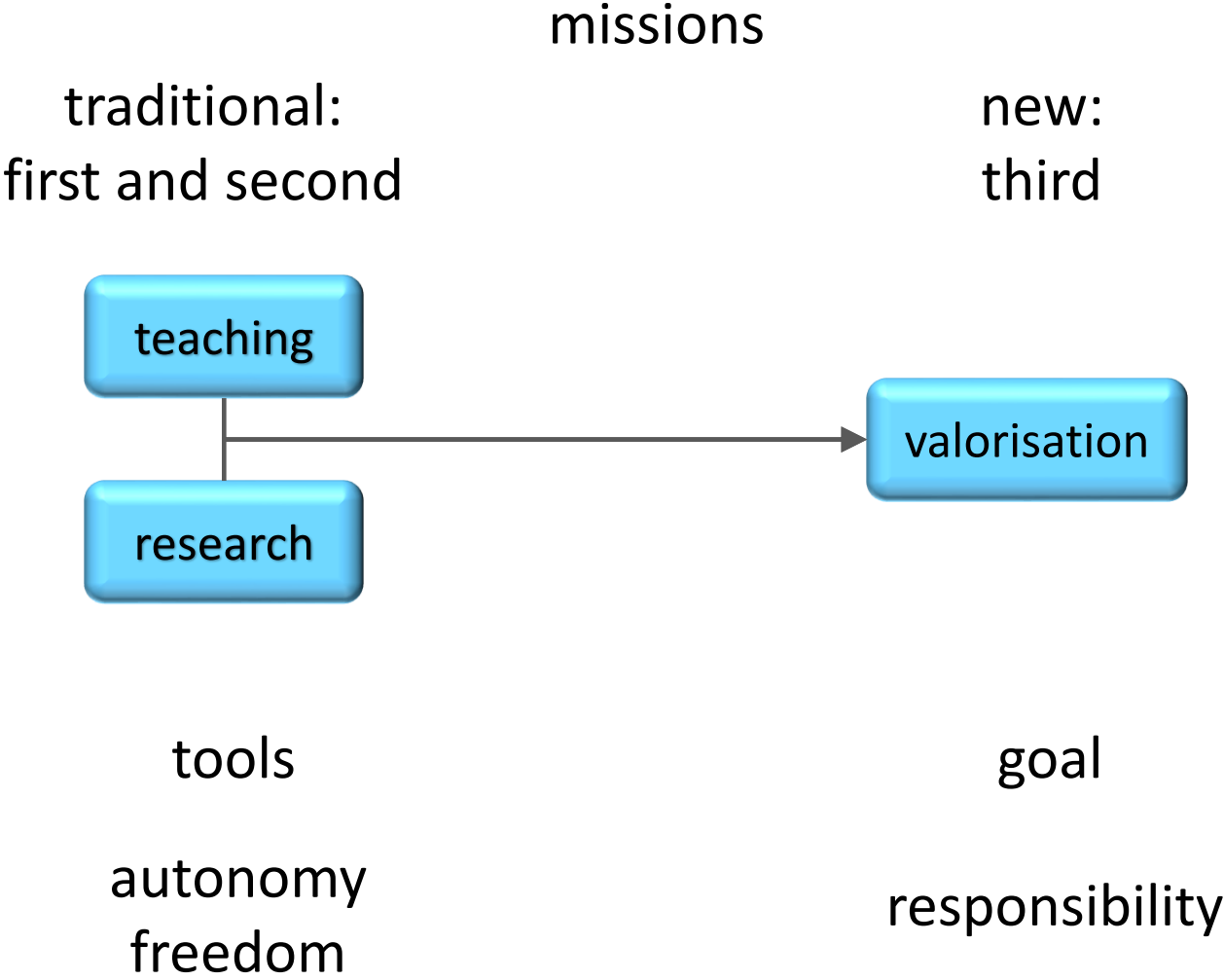
technology transfer and impact of research in 3 steps at CNR:

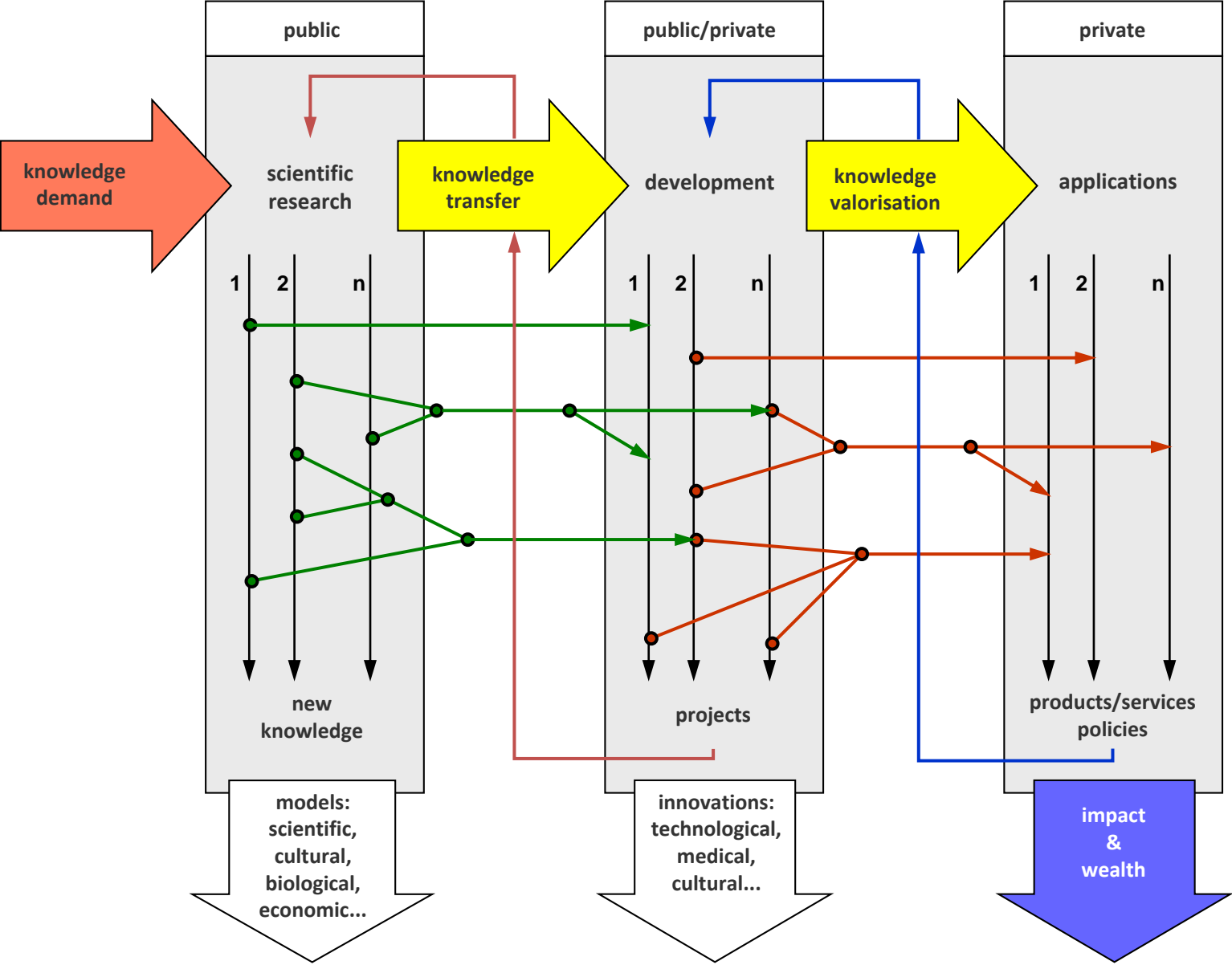
1. third mission or mission?
2. complexity
3. strategy

third mission or mission?



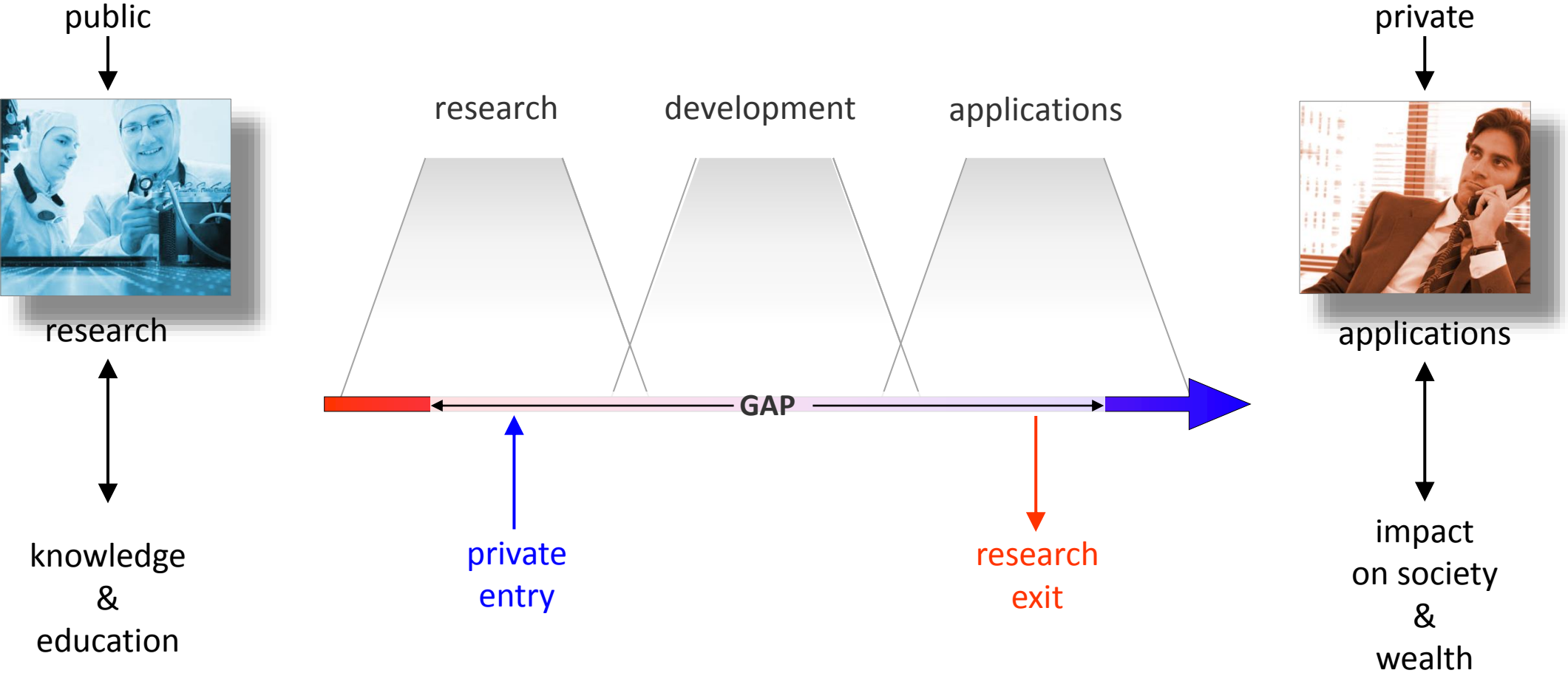
third mission or mission?





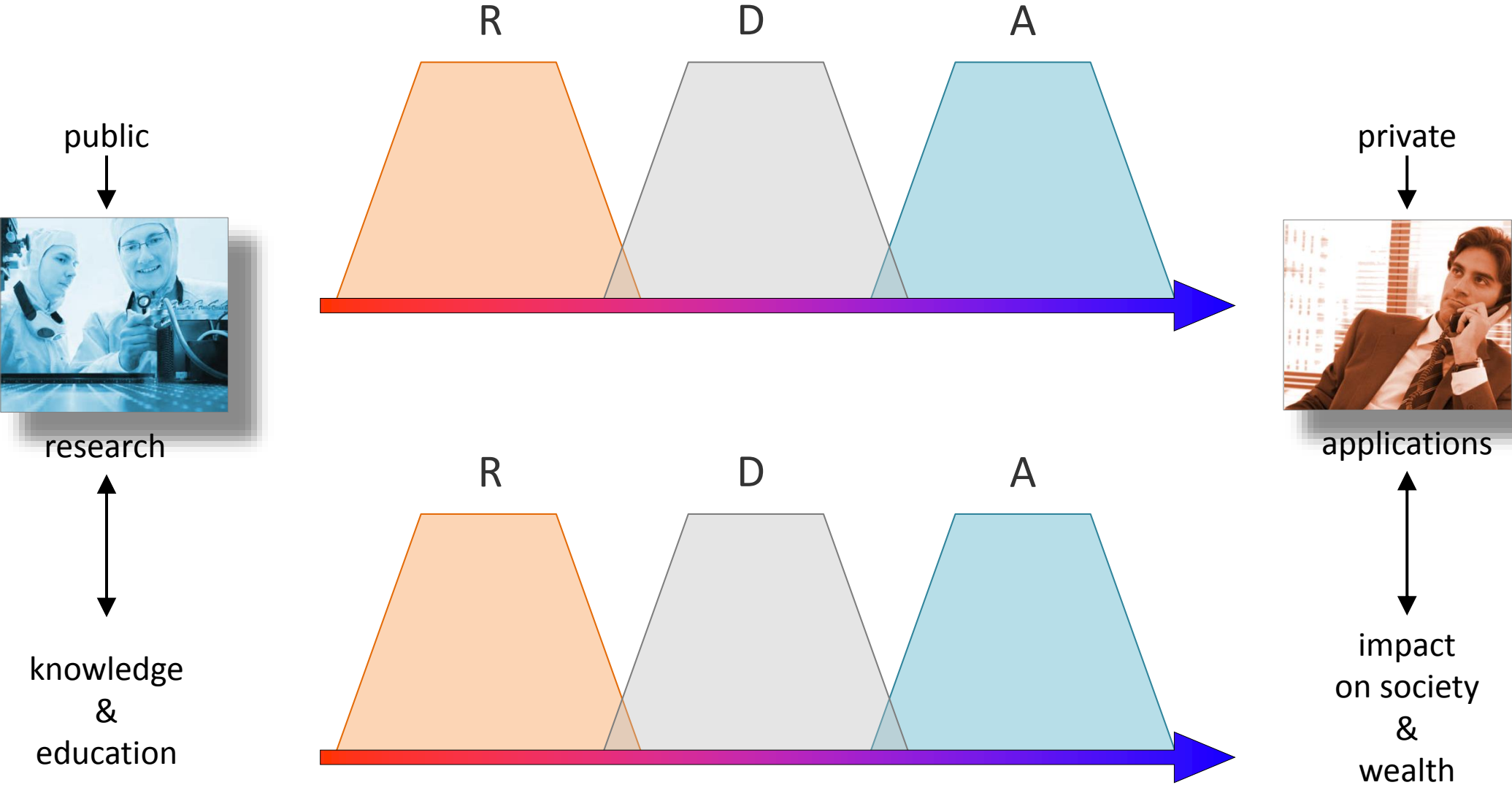


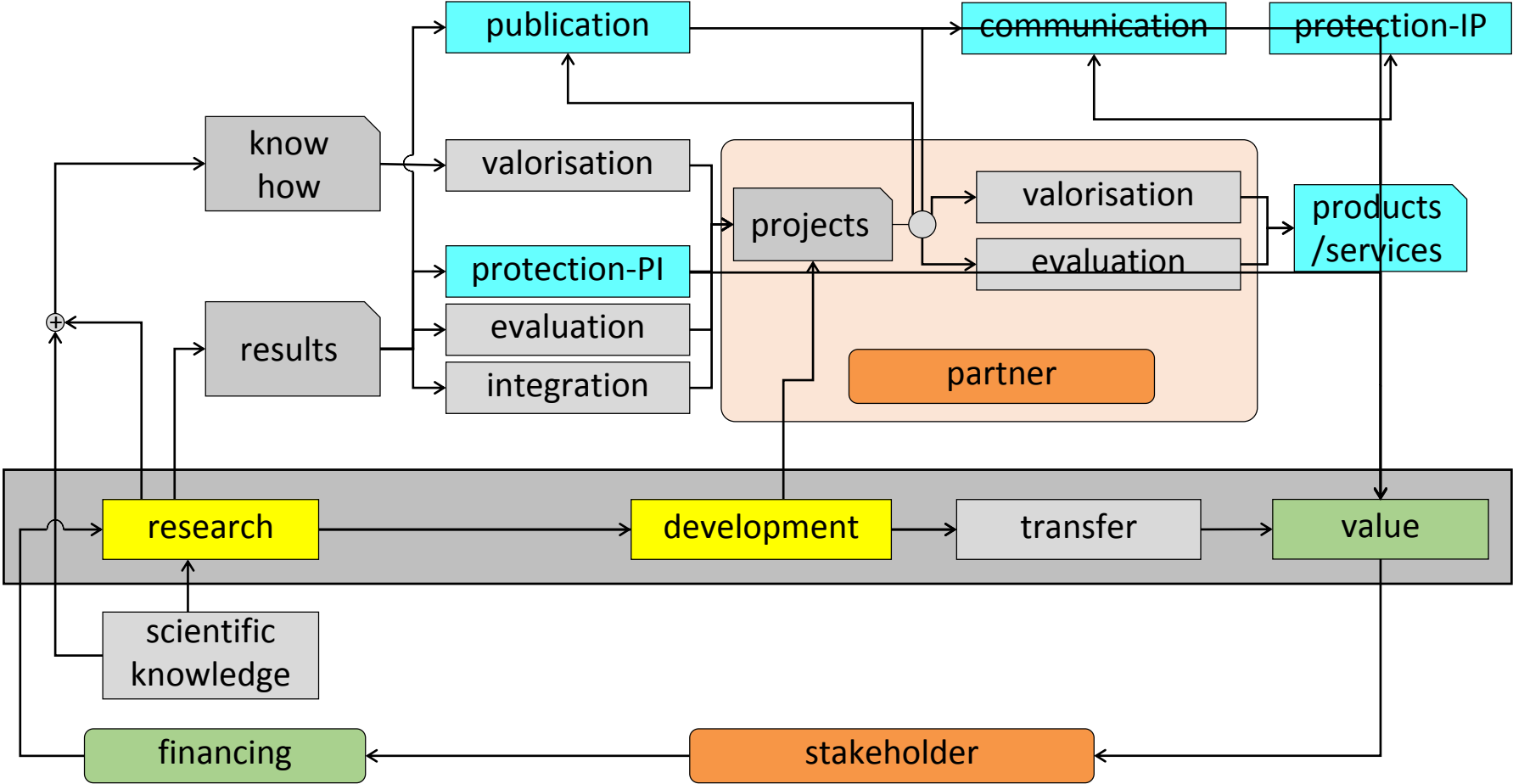
strategy (1)

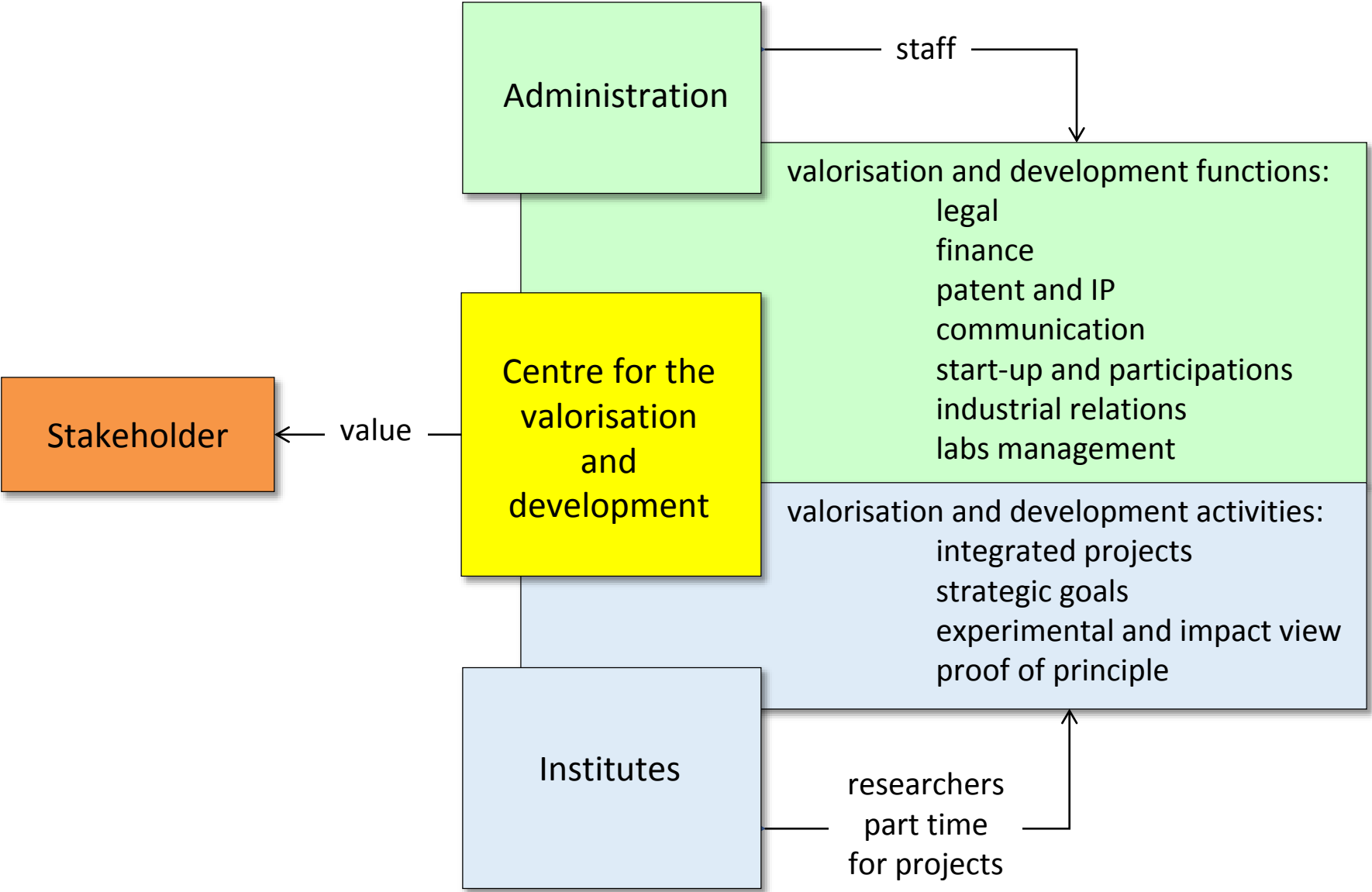


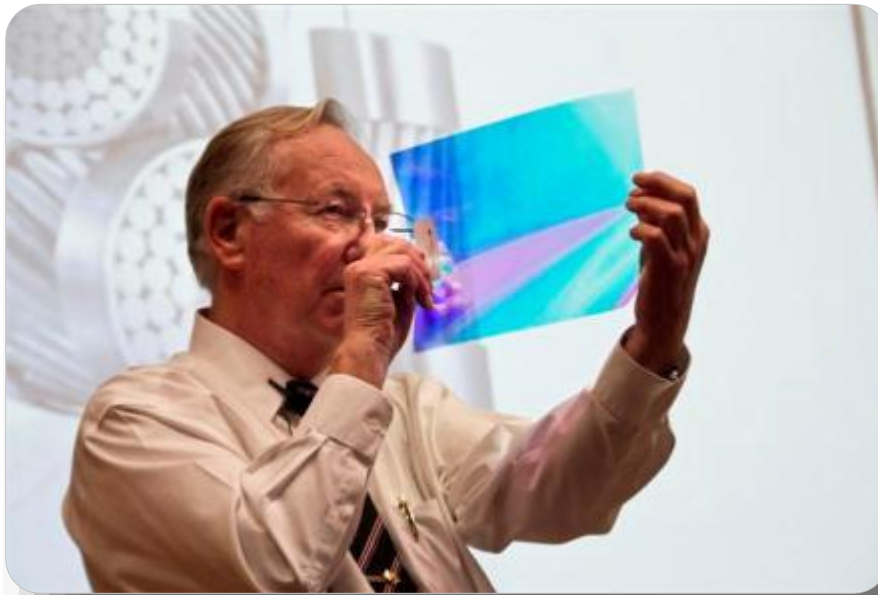


strategy (1)









Geoffrey C. Nicholson, Geoff, served as Vice President of Corporate Technical Planning and International Technical Operations of 3M Corporation. He served at 3M Corporation from 1963 to 2001. During his career at 3M, he was instrumental in the development of its "Post-it" Notes as well as oversaw 2500 3M employees internationally.

**Imperial College**  
**London**

**Department of Chemistry Centenary Lecture on Innovation,**  
**22 February 2007**  
*Innovation: A Survival Issue*  
Dr Geoff Nicholson

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**“...research is the transformation of money into knowledge**

**and**

**innovation is the transformation of knowledge into money...”**

university



industry

1. research produces knowledge and
2. innovation uses knowledge

1. research consumes money and
2. innovations produces money