

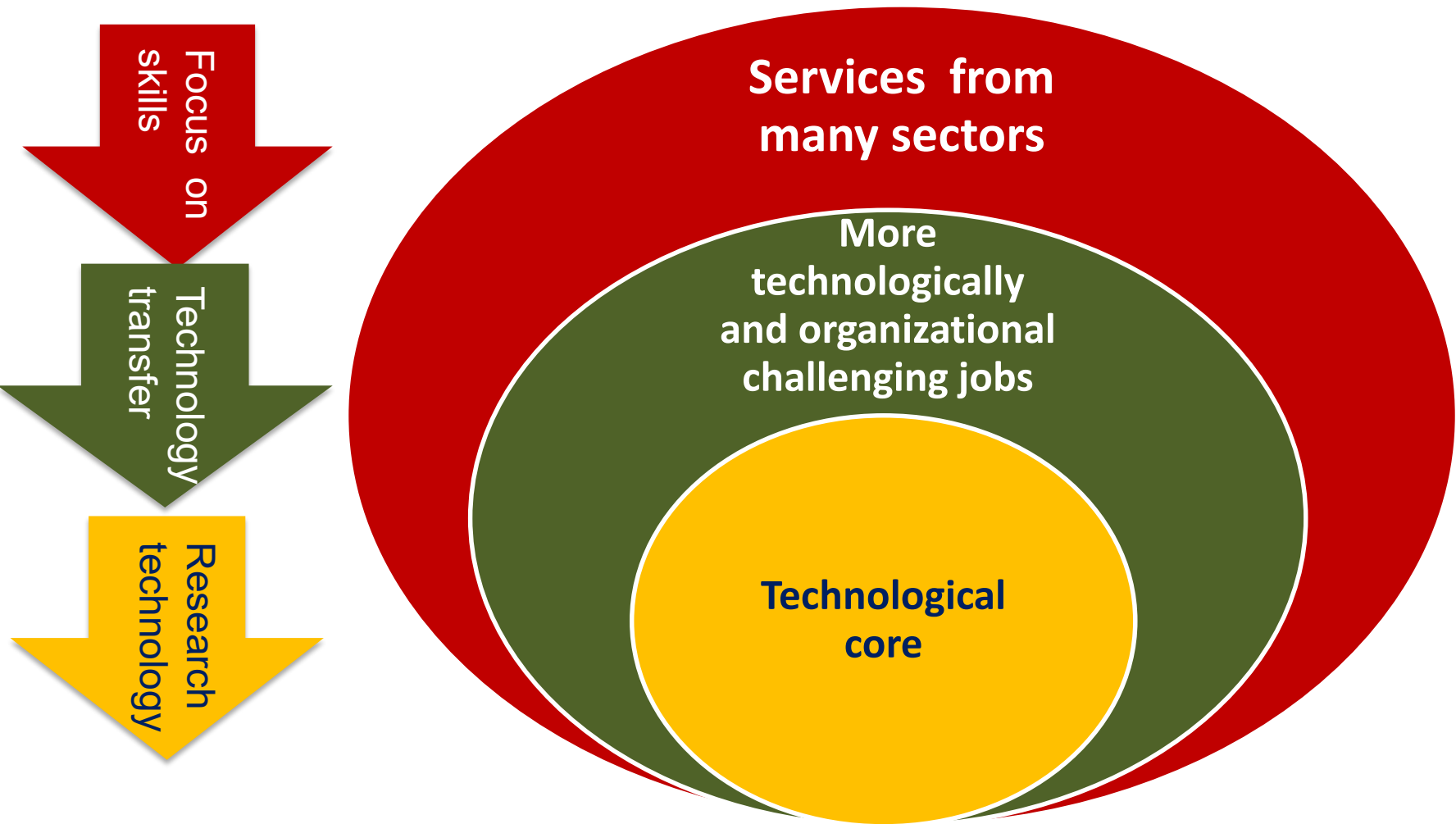


Innovation systems, local content and spin-off activity

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Looking for technology transfer

Getting to the core will take time



Lessons from the other countries experience

Best practice for local content developments

- 1. Long term commitment and political will to promote local content**
 - 2. Fiscal and monetary incentives and budget support to develop local content rather than legislate local content**
 - 3. Manpower development programs with incentives for R&D**
 - 4. Long term contracts with oil companies**
 - 5. Local content monitoring and evaluation framework**
- 1. Formation and prudent operations of a national oil company and oil industry regulator**
 - 2. Create and maintain macro-economic stability**
 - 3. Create and maintain a private sector led balanced economy**
 - 4. Prudent, transparent and cost effective procurement system**
 - 5. Good governance, transparency and accountability**

Investing in the supplier industry

Some of the key steps you need to take



Local strategy

**Building
competence**



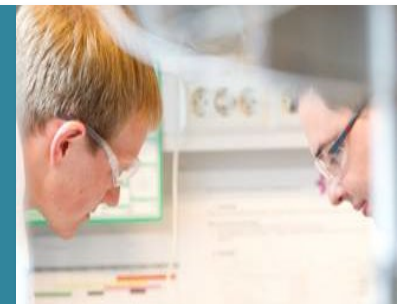
**Supplier
development
strategy**

**Technology
development**

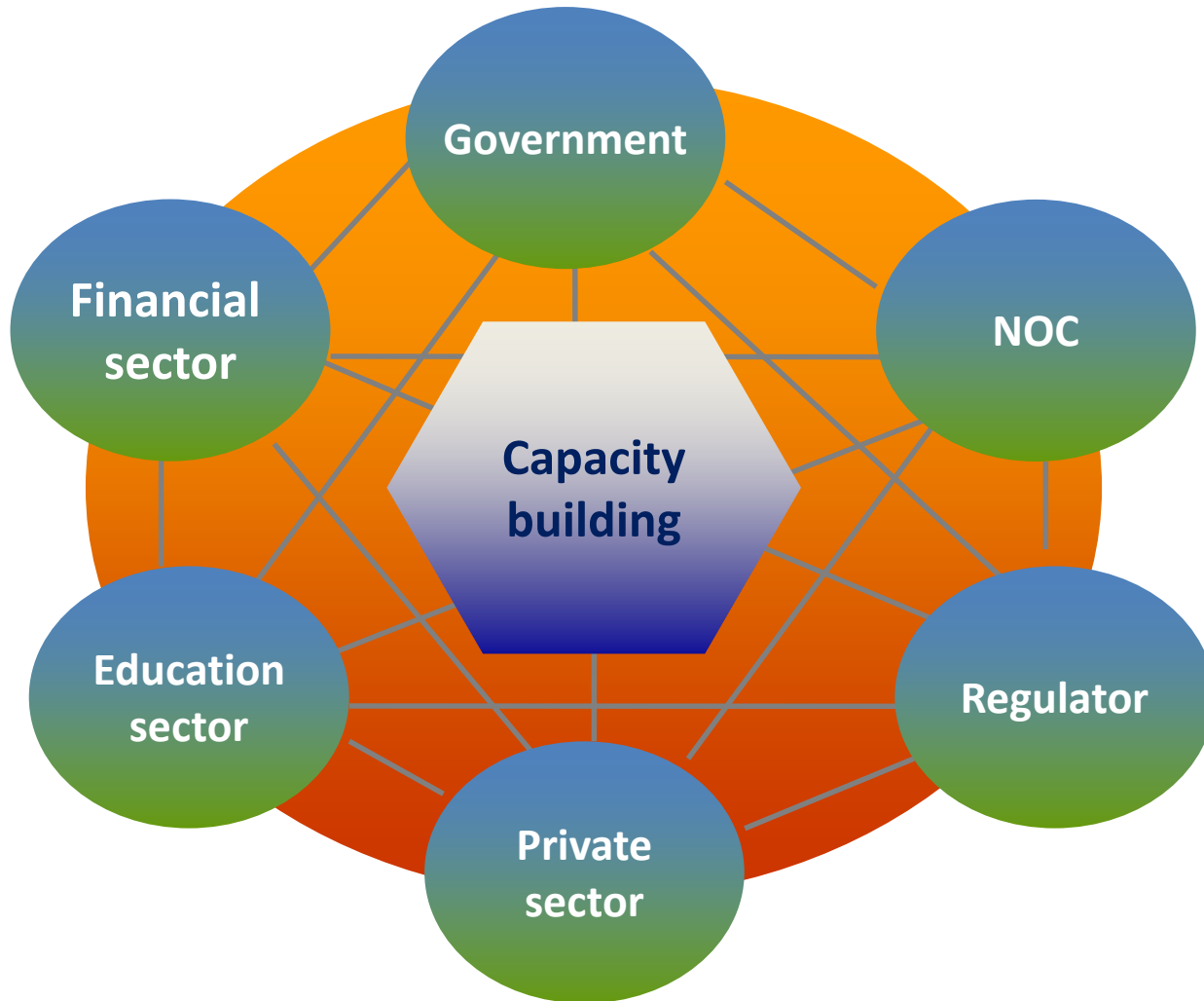


**Supplier
network**

**Innovation
portal**

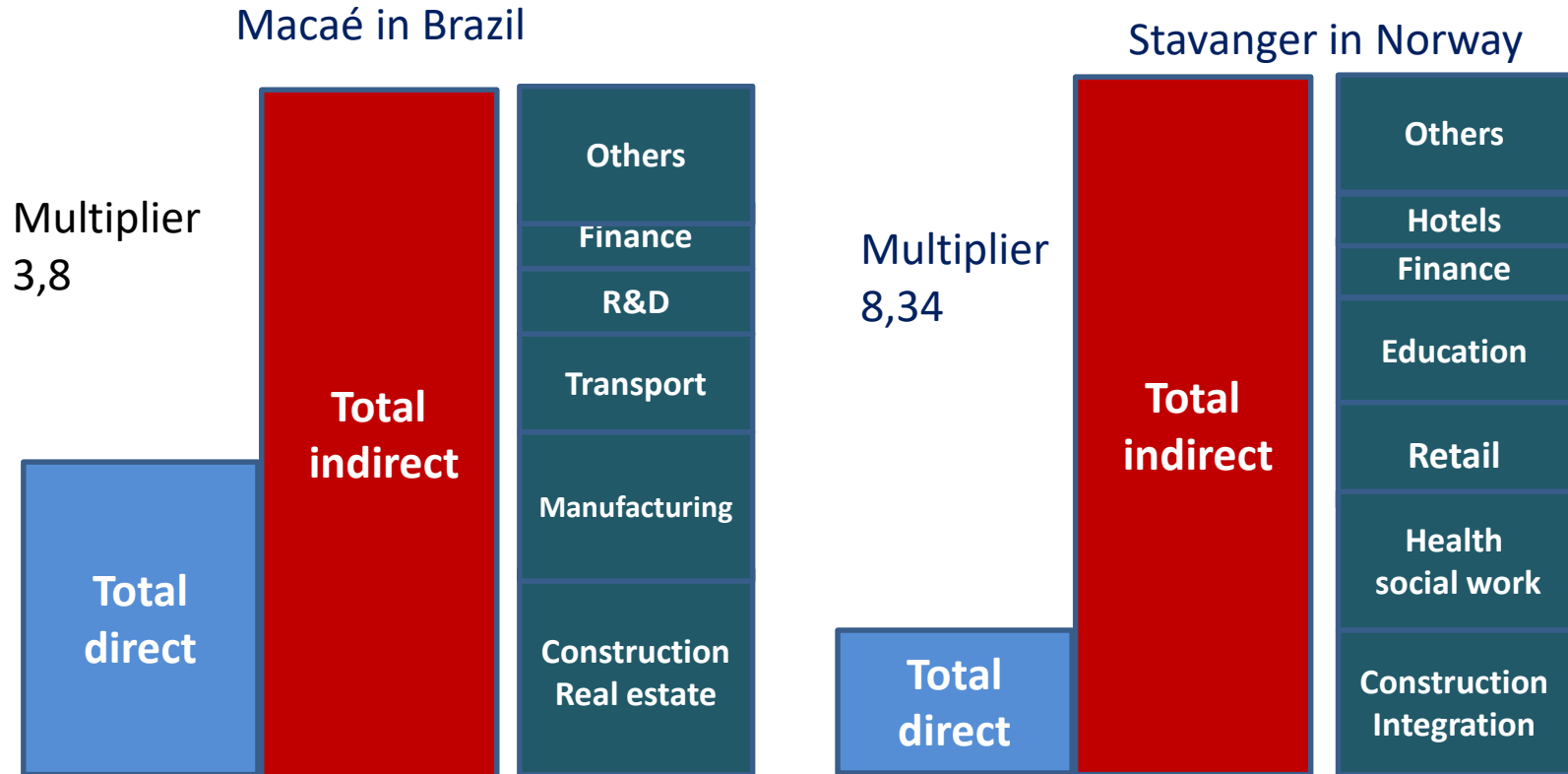


Capacity building is the top priority



Two oil cities – different impact of local content

The multiplier impact in Brazil and Norway



Developing LC – contextual indicators

Country	UK	Norway	Brazil	Kazakhstan	Russia
Stage of economic development at the time LC had been introduced (GDP per capita, as a share of US GDP per capita, constant \$ 2005)	78% (1967 - 19 69)	113% (1969 - 19 72)	11% (1997, 2004)	7% (2001 - 20 03)	9% (1999 - 2014)
LC explicit or implicit	Implicit	Explicit	Explicit	Explicit	Implicit
Commercial managerial oil and gas expertise at the start of the development of the LC	Yes	No	Yes	No	Yes
Civil service oil and gas expertise at the start of LC development	Yes/Some	No	Yes	Yes /Some	Yes
Domestic petroleum supply chain and service industry	Yes/Some	No	Yes	Yes/Some	Yes
Related/transferrable supply chain/service industry expertise	Yes	Yes	Yes	Yes	Yes

- Innovation is critical to sustainable development, adequately pursued it provides for sustained growth, social inclusiveness and the preservation of the environment
- CIS countries are the latecomers to the development of a National Innovation System(s)
- The Region faces unique challenges, in particular related the use of local content indigenous knowledge and their small size
- Local content policies can achieve economic and social objectives if adequately designed, implemented and used in conjunction with innovation strategies

- There are signs of more confident industrialization and upgrading, and that there are effective industrial, export and integration policies in Kazakhstan, Russia, Belarus, Ukraine and Azerbaijan. For these countries, higher prolonged industrial growth and technological progress are possible
- Currently the need to diversify national economies and exports, as well as to introduce effective economic policies had increased in the CIS region
- The key areas of industrial policy in the CIS region should vary depending on the level and paces of countries' industrialization and their capabilities to develop various technologies and innovations