

The Future of Foresight in Innovation and Competitiveness

UNIDO EXPERT GROUP MEETING OF TECHNOLOGY
FORESIGHT, 29-30 MAY 2007



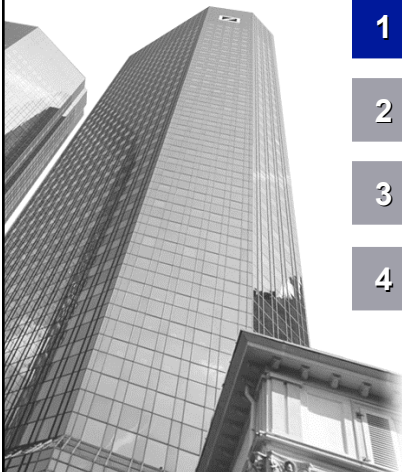
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Deutsche Bank Research



Agenda



1

Strategic foresight at Deutsche Bank
and DBR's approach

2

Identifying driving forces of structural change

3

The major elements of structural change

4

Insights for technology foresight

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Strategic foresight at Deutsche Bank

DBR's strategic foresight activities are aimed at

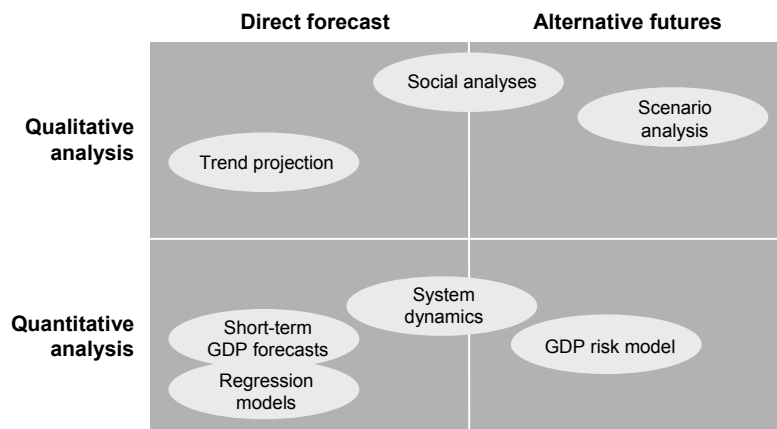
- identifying relevant future trends and incorporating them into the strategic and decision-making processes of Deutsche Bank's management
- providing input for economic and socio-political discussions

DBR's strategic foresight activities are characterised by...

- ... long-term future prospects
- ... a wide spectrum of methods
- ... interdisciplinary teams.



A wide spectrum of methods



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2

Identifying driving forces of structural change

Case study: Germany 2020

- Creating consistent pictures of the future



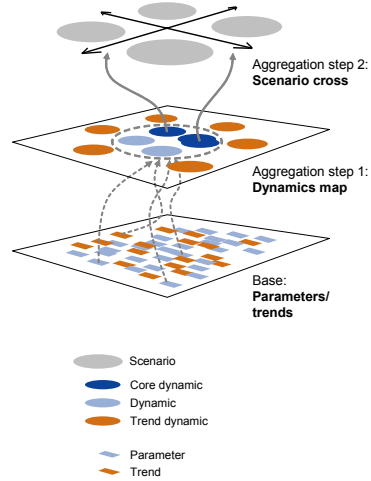
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The broad scan matters

Building consistent pictures and deriving scenarios by reducing complexity



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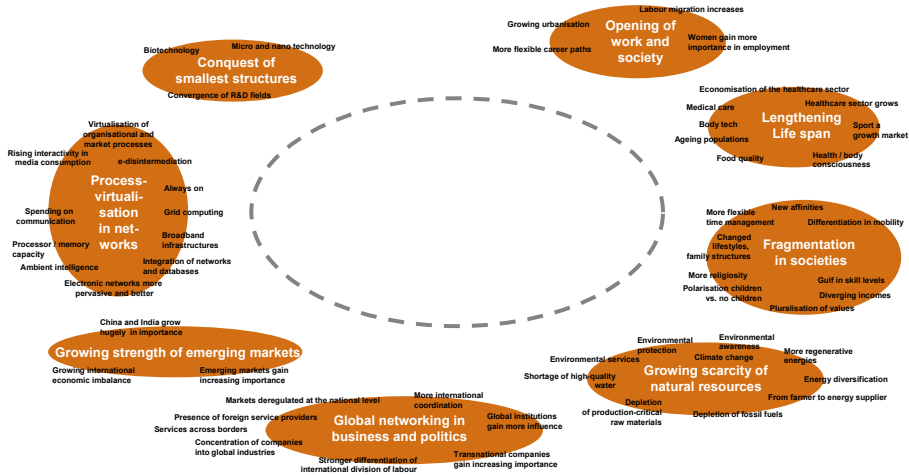
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The major elements of structural change

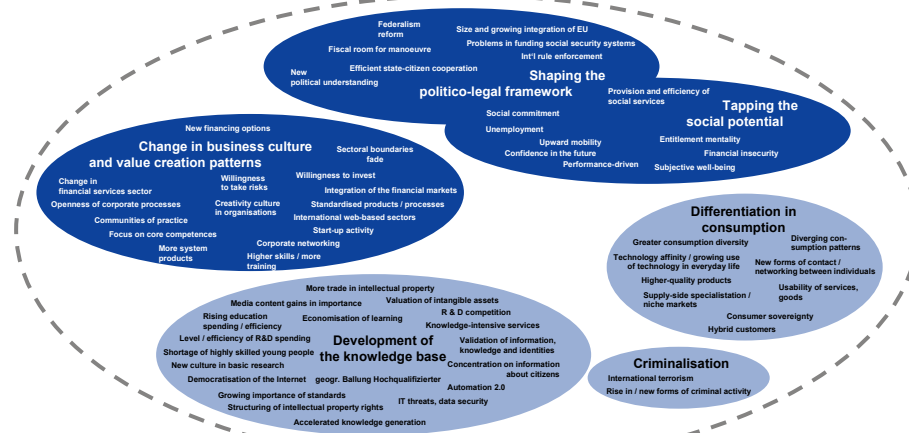
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Insights for technology foresight

Dynamics of structural change (trend-like)

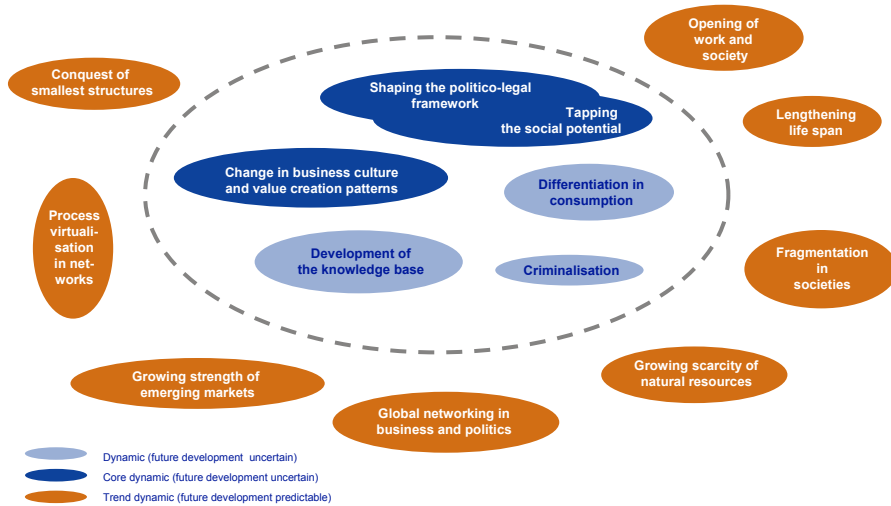


Dynamics of structural change (non-trend-like)



3 The major elements of structural change

DBR's dynamics map



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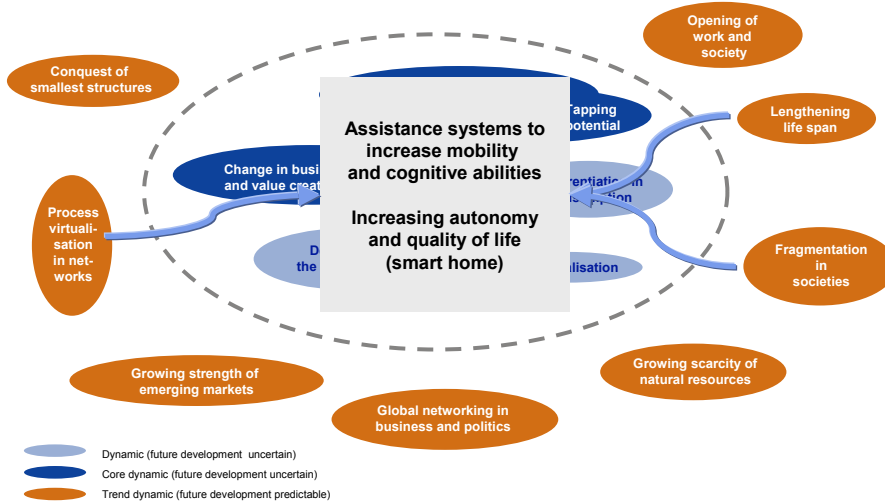
Dynamics in perspective: Insights for technology foresight

A three-fold framework:

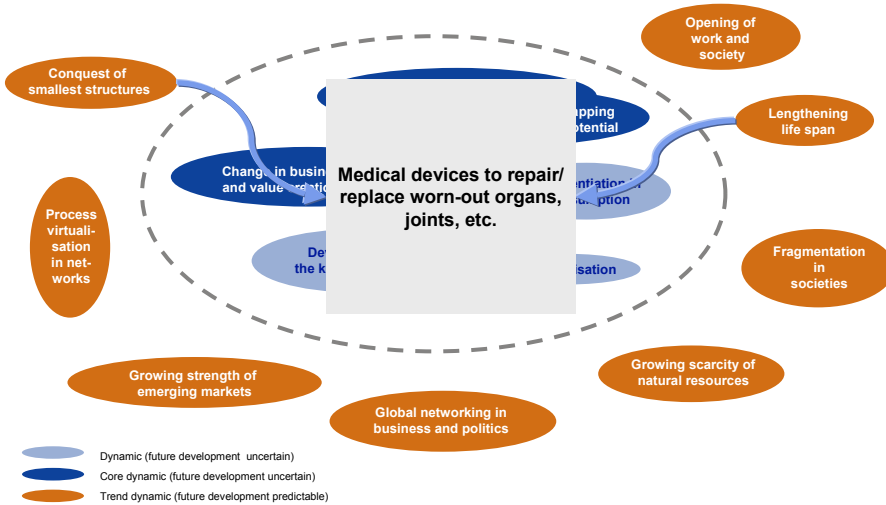
1. New societal needs for technological solutions (pulling technologies)
2. New structures and processes of innovation and technology creation (pushing technologies)
3. New technologies needed for these new innovation and production processes (pulling technologies).



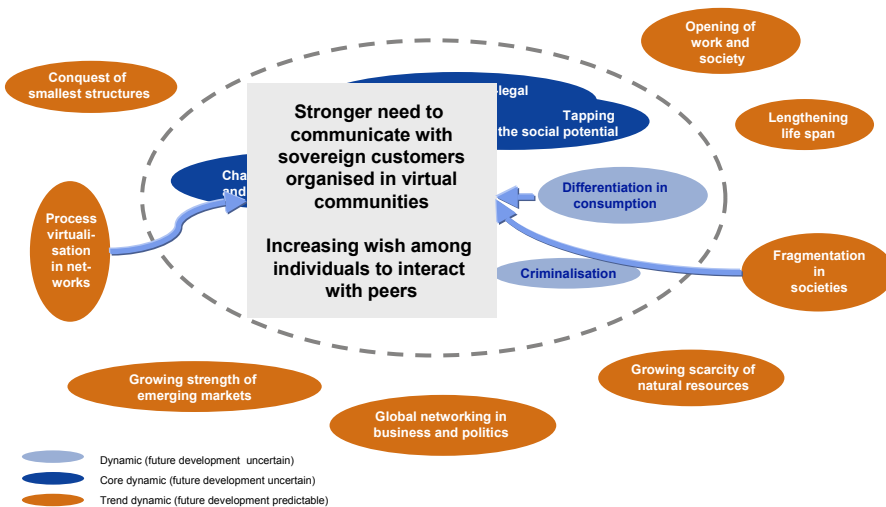
New societal needs for technological solutions (I)



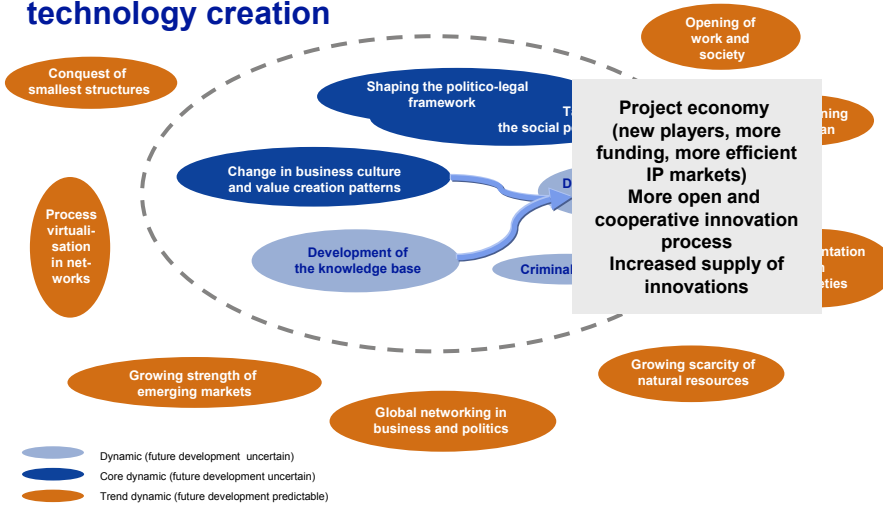
New societal needs for technological solutions (I)



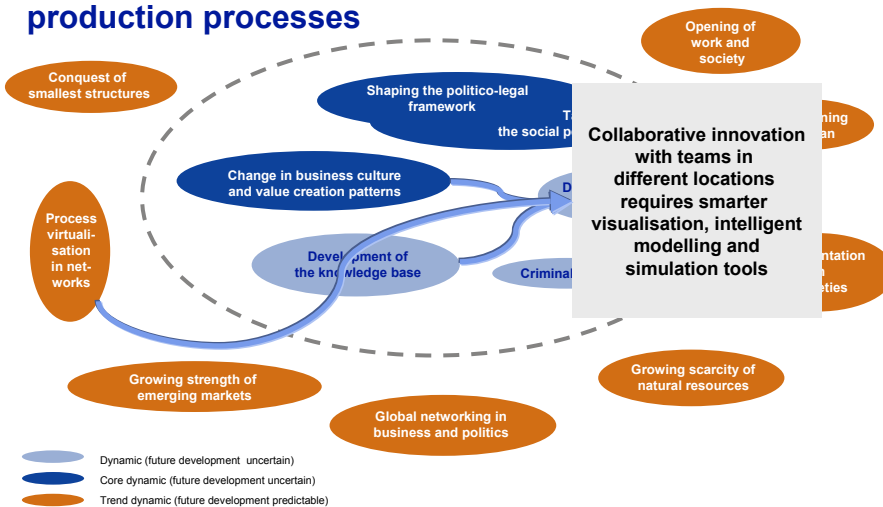
New societal needs for technological solutions (III)



New structures and processes of innovation and technology creation



New technologies needed for these new innovation and production processes





Summary

In order to use foresight to boost innovation and competitiveness and help decision-makers...

- a broadly based foresight process encompassing methodically societal, political, economic and technological trends should be used,
- complexity should be reduced by identifying parameters and trends and aggregating those into dynamics,
- aggregated dynamics should be chartered (depicted) in maps showing their impacts, references, interdependences, allowing a constant verification of dynamics and impact-schemes, making it easier to derive implications,
- pure technology-oriented foresight should be amended to incorporate the analysis of societies and markets for technology.
- A three-fold framework can be applied which differentiates between
 - new societal needs
 - new structures and processes of innovation
 - new technologies needed for these new innovation processes.

