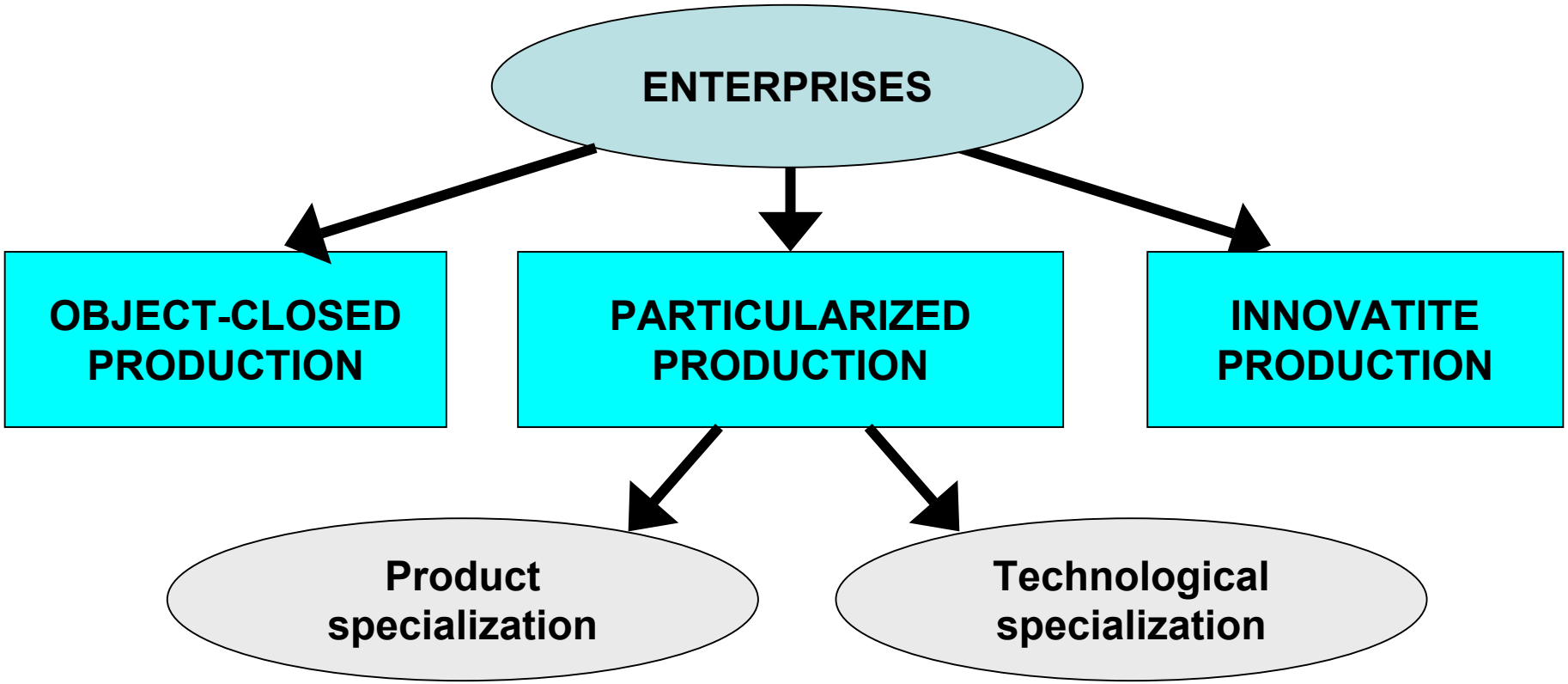
COMMERCIALIZATION OF INNOVATIVE DEVELOPMENT AND PROTECTION OF INTELLECTUAL PROPERTY
(machine-building complex of Russia)

Dmitry Vasilkov

Director, Institute of Engineering Industry, St.Petersburg

STRUCTURE OF MACHINE-BUILDING RUSSIAN COMPLEX



Quantity of object-closed type competence centers is more than 85% of all machine-building enterprises, therefore innovative development is an instrument for efficiency increase and modification of machine-building complex structure

DIRECTIONS FOR INNOVATIVE DEVELOPMENT

Without modification of product and component characteristics

Only technology modifies

Without modification of product characteristics

Component characteristics and technology modify

Product characteristics modify noticeable

RISK - EFFECTIVENESS

Risk – minimal

Effectiveness due to technology perfection

Risk – medium

Effectiveness due to:

-adjustment of component live;

- technology modifying.

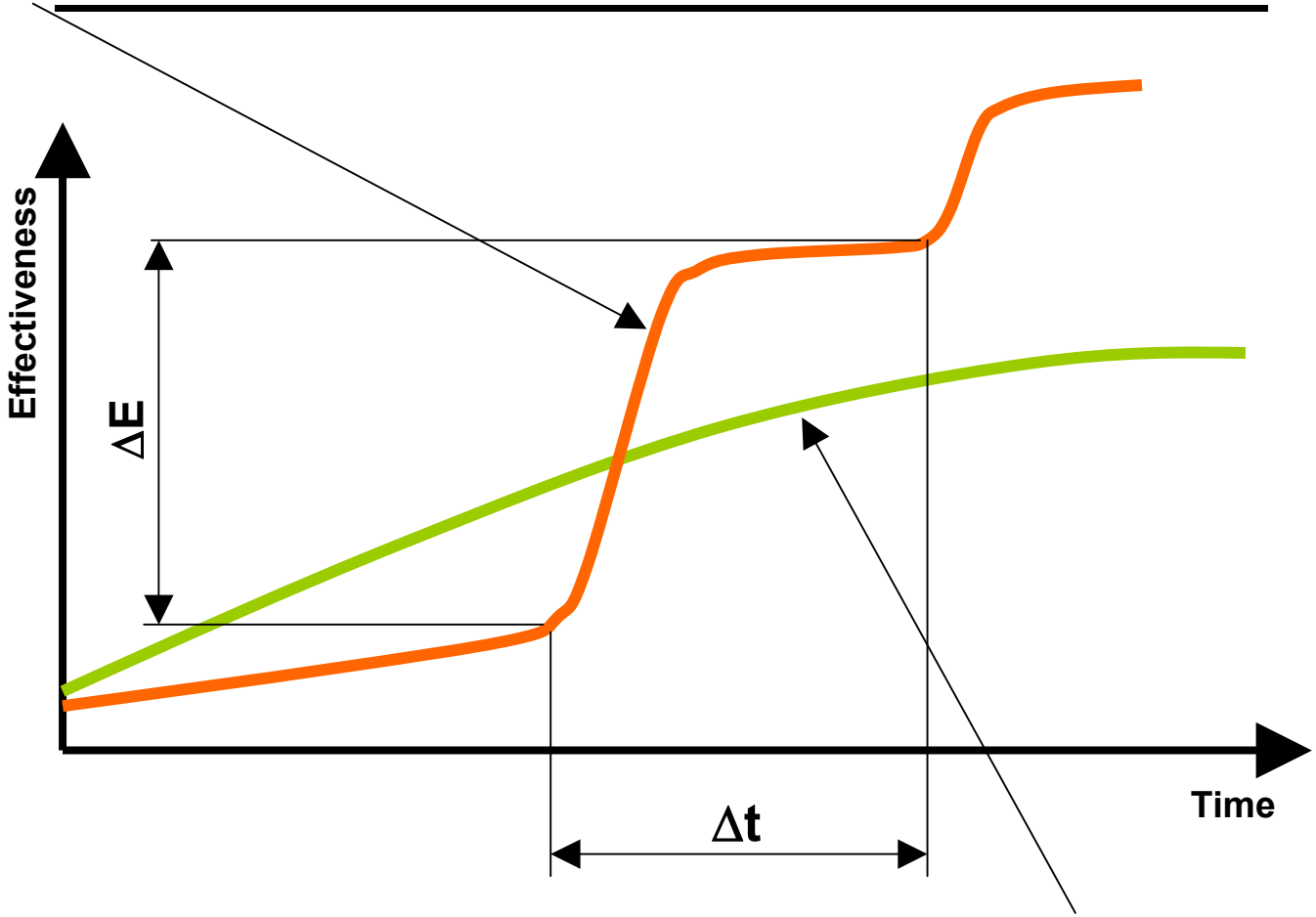
Risk – maximum

Effectiveness due to:

- creation of modern qualitative product;

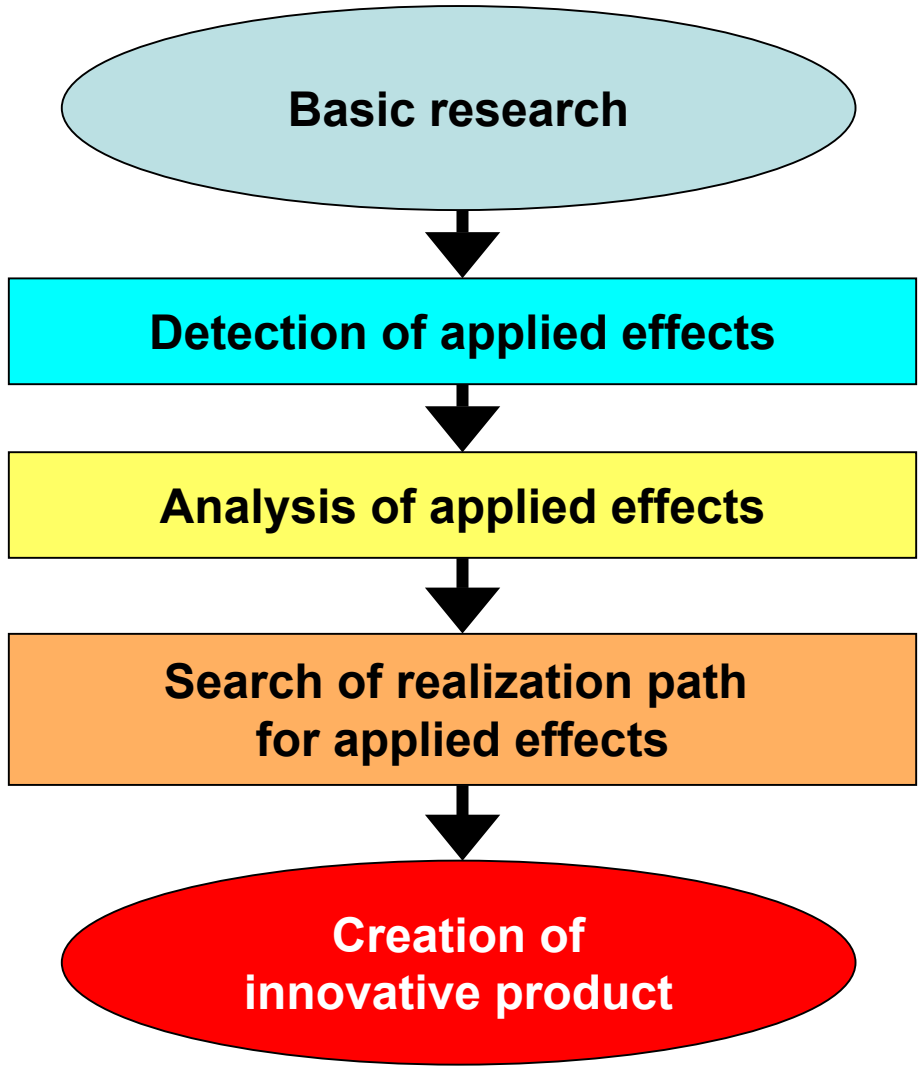
- application of modern technologies.

INNOVATIVE BUSINESS DEVELOPMENT

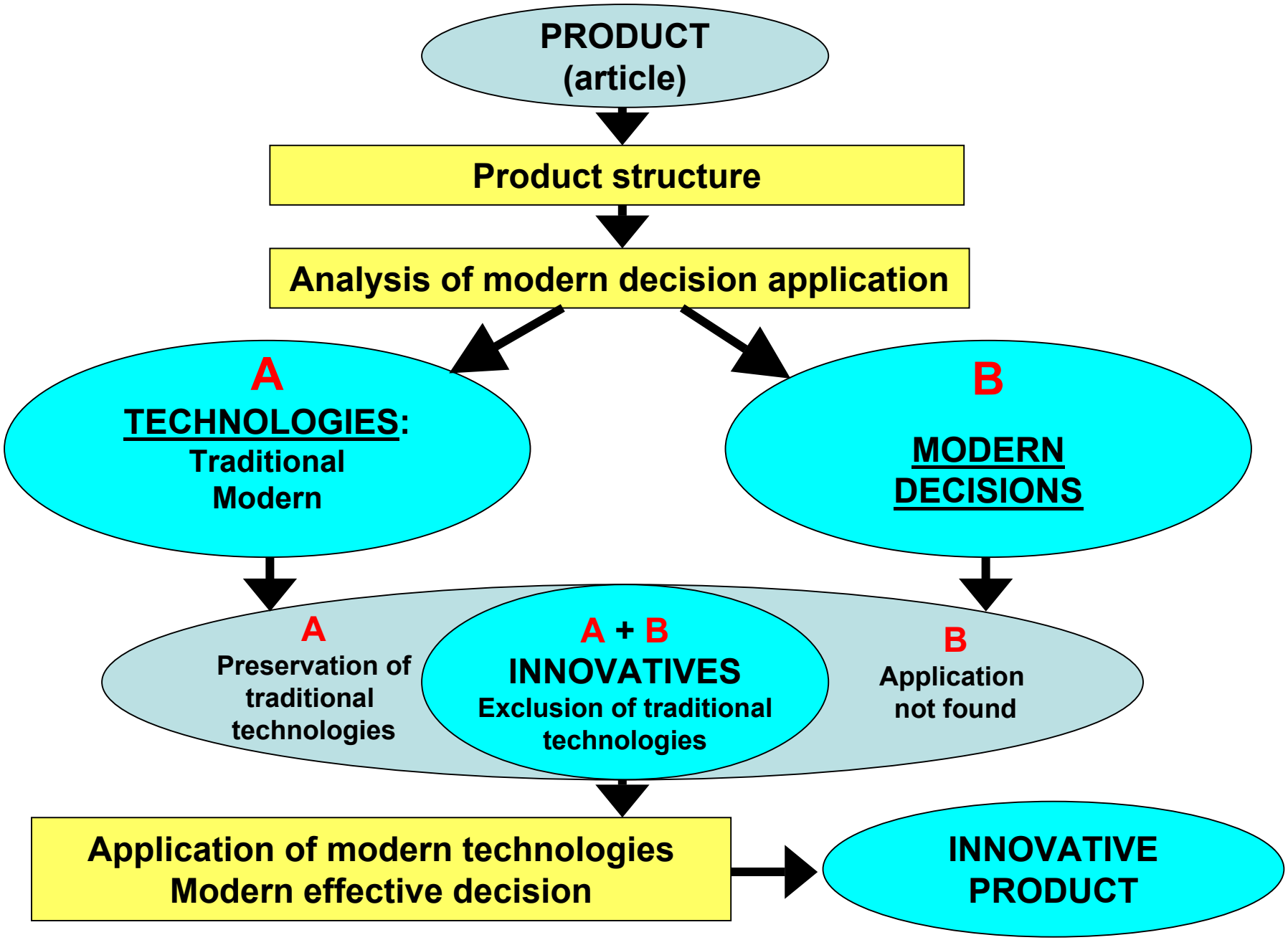


Δt → min; ΔE → max - criteria of innovative business development effectiveness

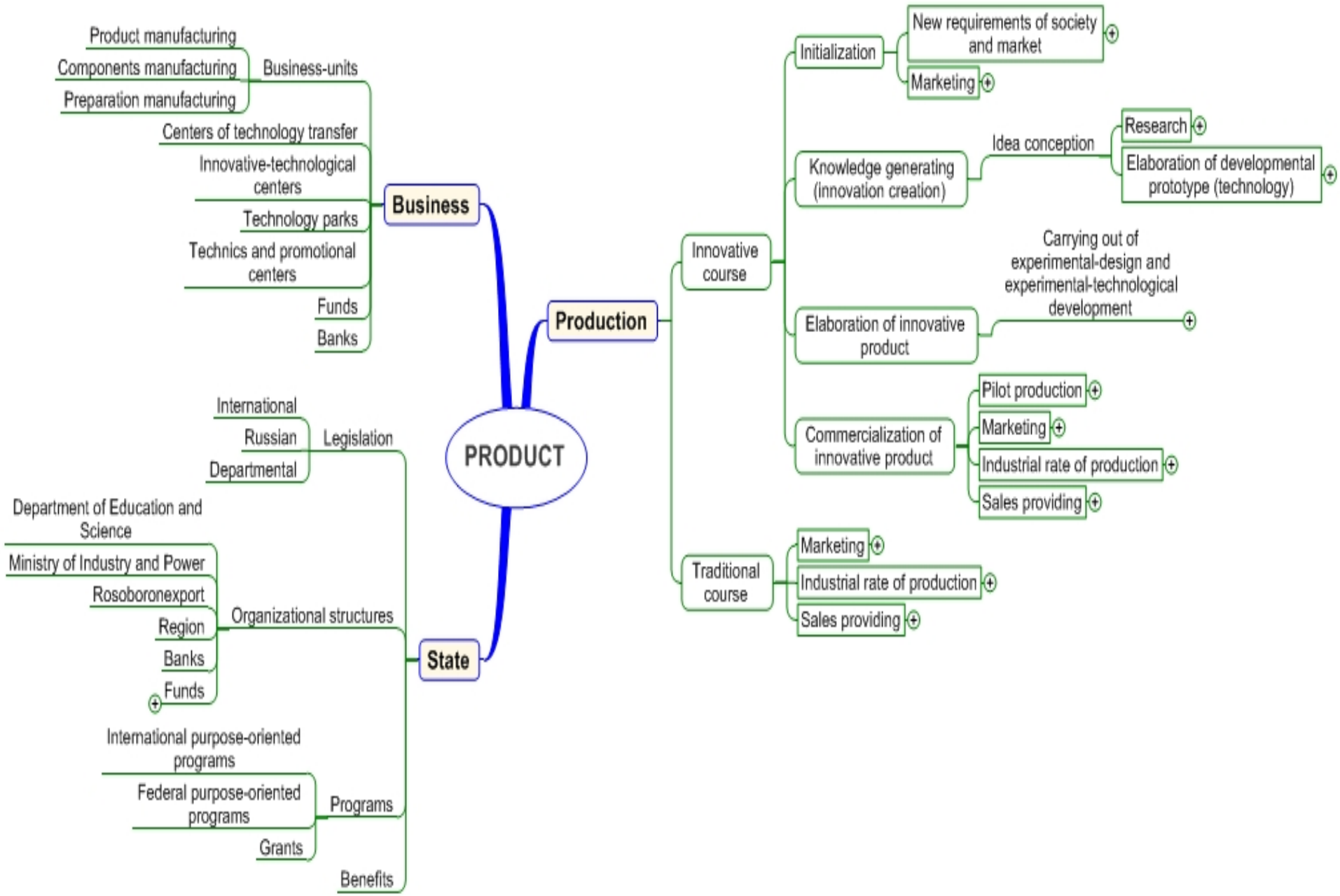
PROCESS OF INNOVATIVE PRODUCT CREATION



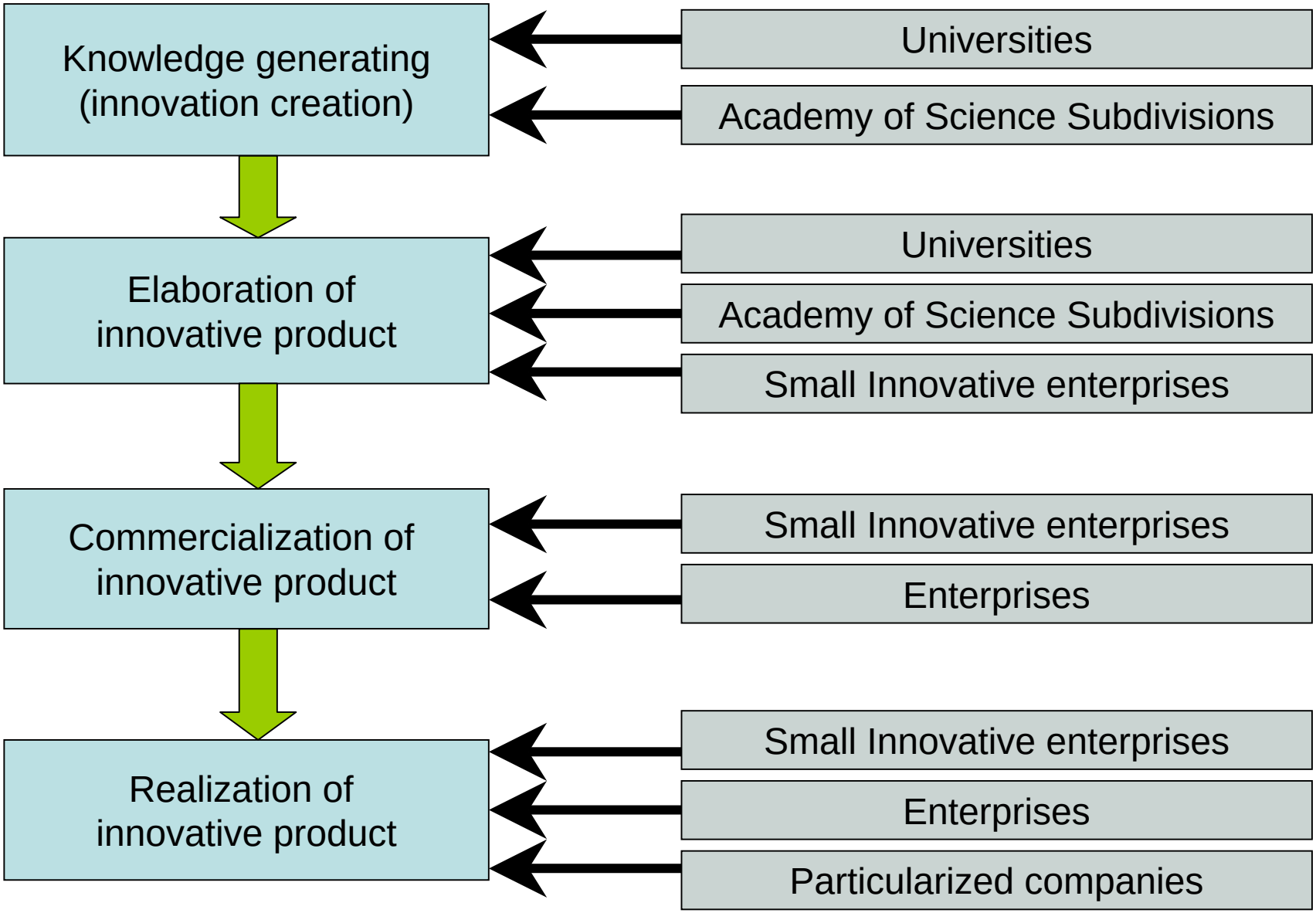
MOTIVATION OF INNOVATIVE PRODUCT CREATION



FIELD OF BUSINESS AND GOVERNMENT INTERACTION DURING THE PRODUCT CREATION



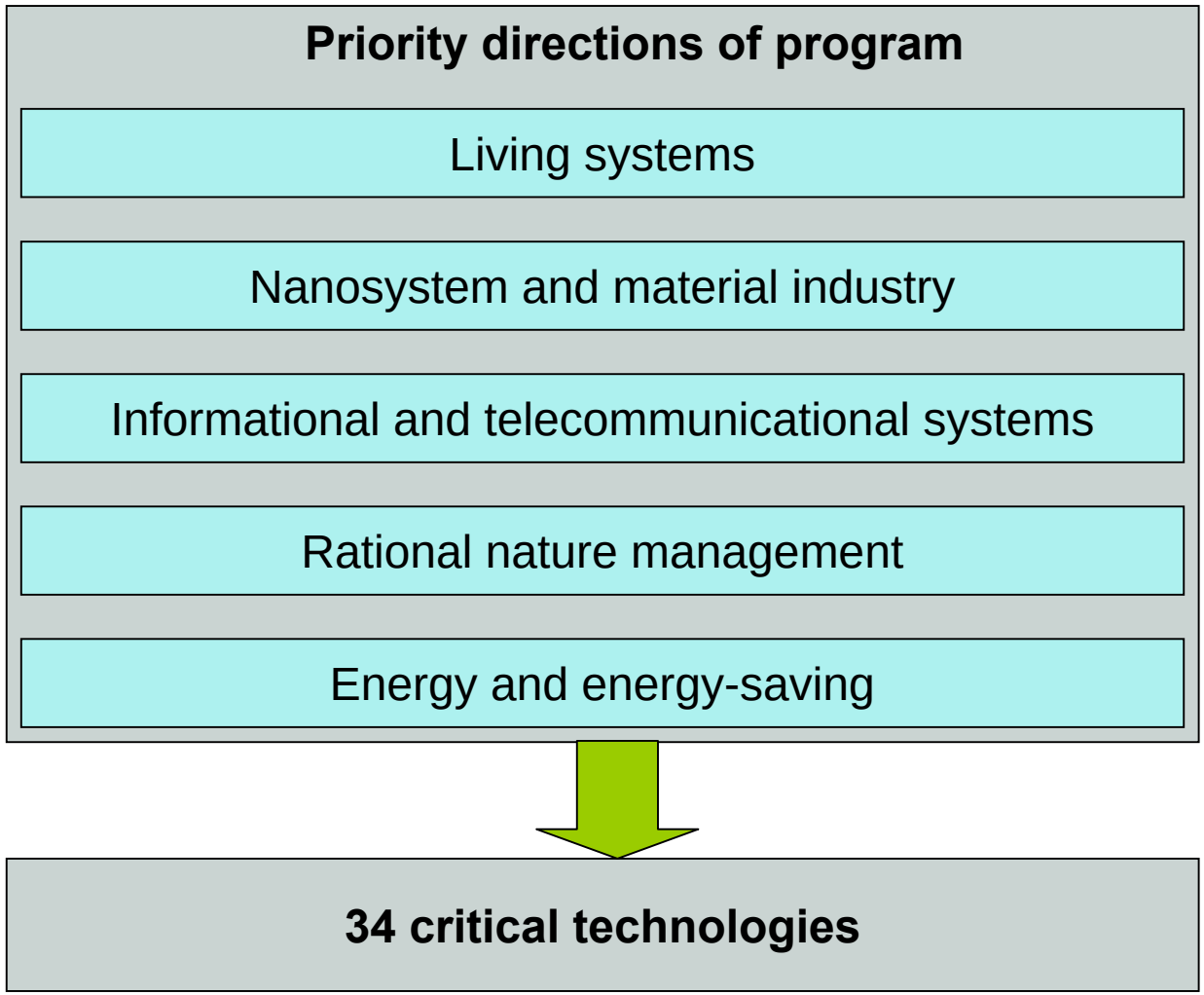
INNOVATIVE TYPE TECHNOLOGICAL CLUSTER FORMING



FEDERAL TARGET PROGRAM (FTP)
"Researches and elaborations for priority direction of development of science and technological Russia complex in 2007-2012"

Program purpose – development of science and technological potential in Russian Federation for purposes of priority derection of science, technologies and techniques development in Russian Federation

Volume of financing: federal budget – $7,6 bln ; extra-budgetary resources – $2,4 bln



STAGES OF INNOVATIVE PRODUCT FINANCING UNDER FTP

State,%	Stages	Private business,%
100	Knowledge generating (research)	0
88	Knowledge generating (elaboration of development prototype, technology)	12
75	Elaboration of innovative product. experimental-design and experimental-technological development	25
50	Elaboration of innovative product. Preparing for commercialization	50
30	Commercialization of innovative product. Production adaptation	70
0	Commercialization of innovative product. Industrial rate of production	100

FTP INDICATORS

Stages	Basic indicators
Knowledge generating (research)	- publication in maintain science magazines; - patents (including international) for results of intellectual activity; - theses for academic degrees competition.
Knowledge generating (elaboration of development prototype, technology)	
Elaboration of innovative product. experimental-design and experimental-technological development	- correspondence (excess) of innovative development creation level to the best world analogues; - legal protection and safeguard for science and technical activity results (intellectual property protection); - a quantity of young specialists recruited to works; - a part of accomplished projects transformed to commercialization stage.
Elaboration of innovative product. Preparing for commercialization	
Commercialization of innovative product. Production adaptation	- a quantity of advanced technology embed in economics; - a volume of new and improved high technological production (including for export), that executed as a effect of project realization; - a quantity of new workplaces (developed under project realization) for eminently qualified workers.
Commercialization of innovative product. Industrial rate of production	