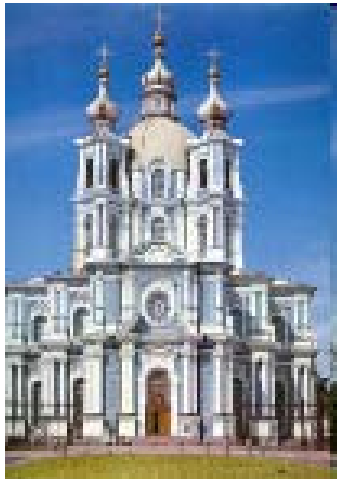


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# Entrepreneurship in the Sphere of Innovation in Russia: International Context



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Paper for presentation



*The sphere of innovation seems to be environment favorable for internationalization of small entrepreneurship because new ideas and novelties are the base for cross-national cooperation*

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# Agenda



- Innovations and their impact on contemporary economy development
- National innovation system (NIS): factors of effectiveness
- Main problems of Russian NIS development
- The contribution of entrepreneurship in Russian NIS
- Challenges for small innovative companies in Russia

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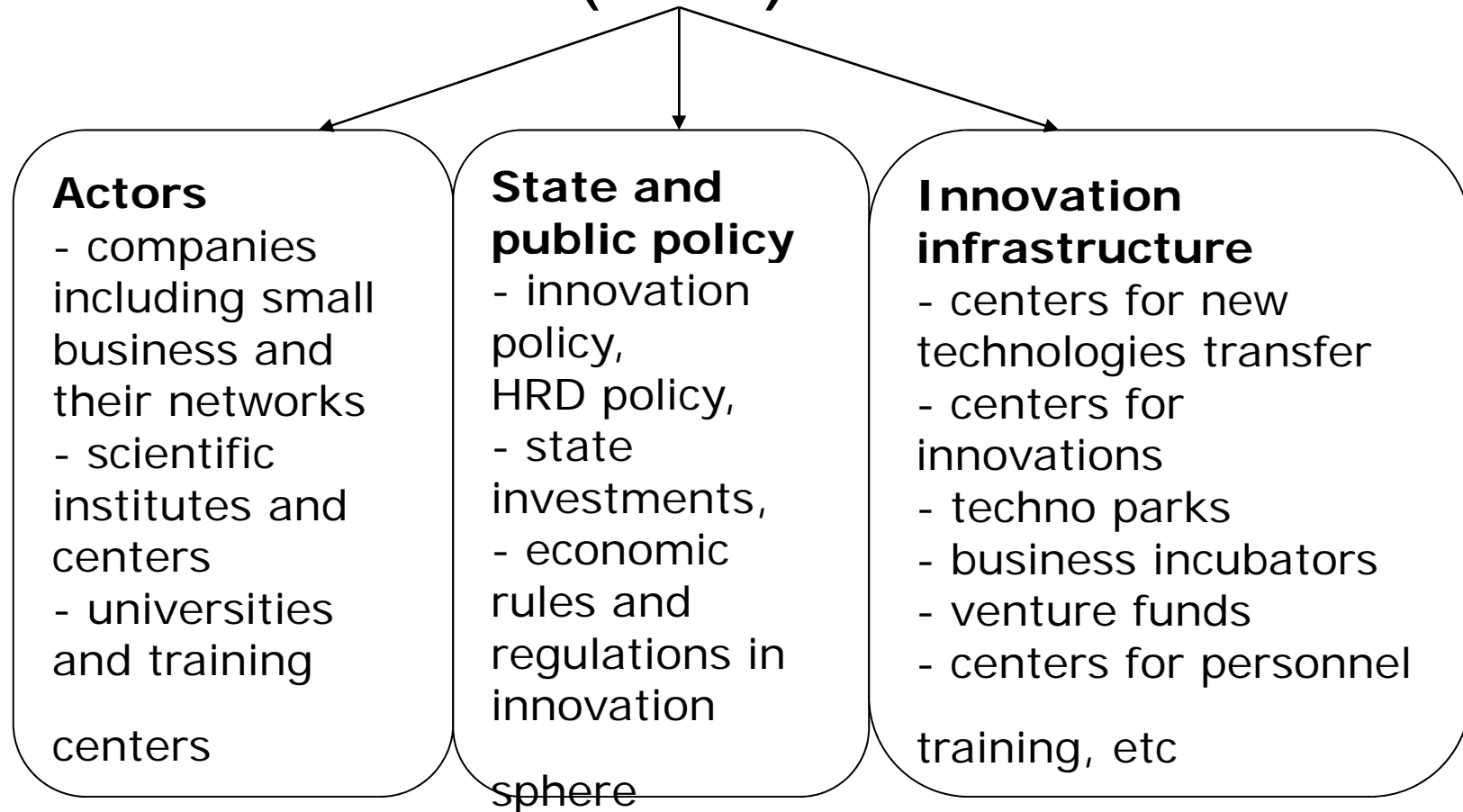
# *Innovations as key drivers of economy development*



- Innovations are the feature of knowledge economy
- Innovations are the core of organizational changes
- Capacity for innovation is a crucial indicator of competitiveness

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# National innovation system (NIS)



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# NIS impact on economy development



- *Provide a link between*
  - ✓ science, education and business
  - ✓ producers and customers
  - ✓ large and small business
  - ✓ public policy and business
- *Help actors involved*
  - ✓ to transfer new ideas, novelties into business
  - ✓ to improve business performance
- *Induce entrepreneurship contribution to*
  - ✓ new product and technologies development
  - ✓ new business models implementation



# NIS in Russia

- Business sector
- Scientific and research sector
- Centers for technology transfers and other mediators
- Russian Government
- Civil Society Organizations (NGOs)
- Foreign partners in innovative sphere

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# Business sector of NIS in Russia



- Large companies – the leaders of Russian business
    - ▶ GASPROM
    - ▶ LUKOIL
    - ▶ SEVERSTAL
    - ▶ AFK System
  - Small and medium enterprises involved in innovations
    - ▶ soft
    - ▶ biology
    - ▶ chemistry
    - ▶ medicine
- Extractive and manufacturing industry*



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# Scientific and research sector

- Research institutes belonging to Russian Academy of Science
- Universities
- Branch research institutes

Public  
sector

- Commercial research centers
- R&D departments of the large companies

Private  
sector

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# Innovation infrastructure



- *Techno (industrial) parks* – usually created by the Universities and Research Institutes
- *Business-incubators* – usually created by local government
- *Naukograds (technopolices)* – usually created by federal government

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# Russian Government



- **Policy:** Council on the Science, Hi-tech and Education under the President of RF, Ministry of Education and Science, Ministry of Economic Development
- **Finance:** Ministry of Finance, Russian Fund for Fundamental Research, Russian Fund for Humanitarian Research, Federal Fund for Small Innovative Enterprises Support
- **Service:** Federal Service of Intellectual Property for License and Trade Mark – Rospatent, Federal Service for Technical Regulation and Measurement, Federal Antitrust Service

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# NGOs



- The Russian Union of Manufacturers and Entrepreneurs (RUME) – large business
- The Union of Entrepreneurs of Russia (OPORA) – small and medium business
- The Chamber of Commerce and Industry of RF
- Association “Techno Park”
- “Delovaya Rossia”

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# Foreign partners



- Joint enterprises
- Industrial alliances
- Subsidiaries of TNC
- Joint research projects
- Foreign governmental and non-governmental funds: TASIC, INTAS, IREX, SRDF, British Council, DFG, Ford's fund, MacArthur's fund, Marks Plank society

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# Russian NIS effectiveness



- Russian contribution to global innovation 15-20 times less than China, which contributes only about 6%
- Expenditures on R&D less than in USA in 29 times
- Hi-tech production shares less than 3 % of the total export volume

688 new technologies in 2002  
735 new technologies in 2006

The rate of new production is less than 1 % from the volume of GDP



# Key reasons for low effectiveness of NIS

- ✦ The low level of entrepreneurship
- ✦ Very pure contribution of small business in the innovation process
- ✦ A lot of institutional barriers for innovations and innovators
- ✦ The gap between studies carrying out by public research institutes and the demands of private companies

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# Problems of Russian NIS development



Economic	<ul style="list-style-type: none"><li>▶ Low demand for new technologies</li><li>▶ Dominance of extractive and manufacturing industries</li><li>▶ Fall into decay of scientific and research sector</li></ul>
Financial	<ul style="list-style-type: none"><li>▶ Very limited financial support of research</li><li>▶ Poor development of venture funds</li><li>▶ Investments in R&amp;D from Russian companies are less than from foreign ones</li></ul>

# Problems of Russian innovation system development



Institutional	<ul style="list-style-type: none"><li>▶ Insignificant impact of new legal regulations on innovation process</li><li>▶ The ownership on the research results financed by federal/local government or public funds</li><li>▶ Poor development of public and private partnership</li></ul>
Managerial	<ul style="list-style-type: none"><li>▶ Inefficient inspection of R&amp;D quality</li><li>▶ A lack of coordination between making and implementing of innovation policy</li><li>▶ Dependence of allocation of resources for innovations from social networks</li></ul>



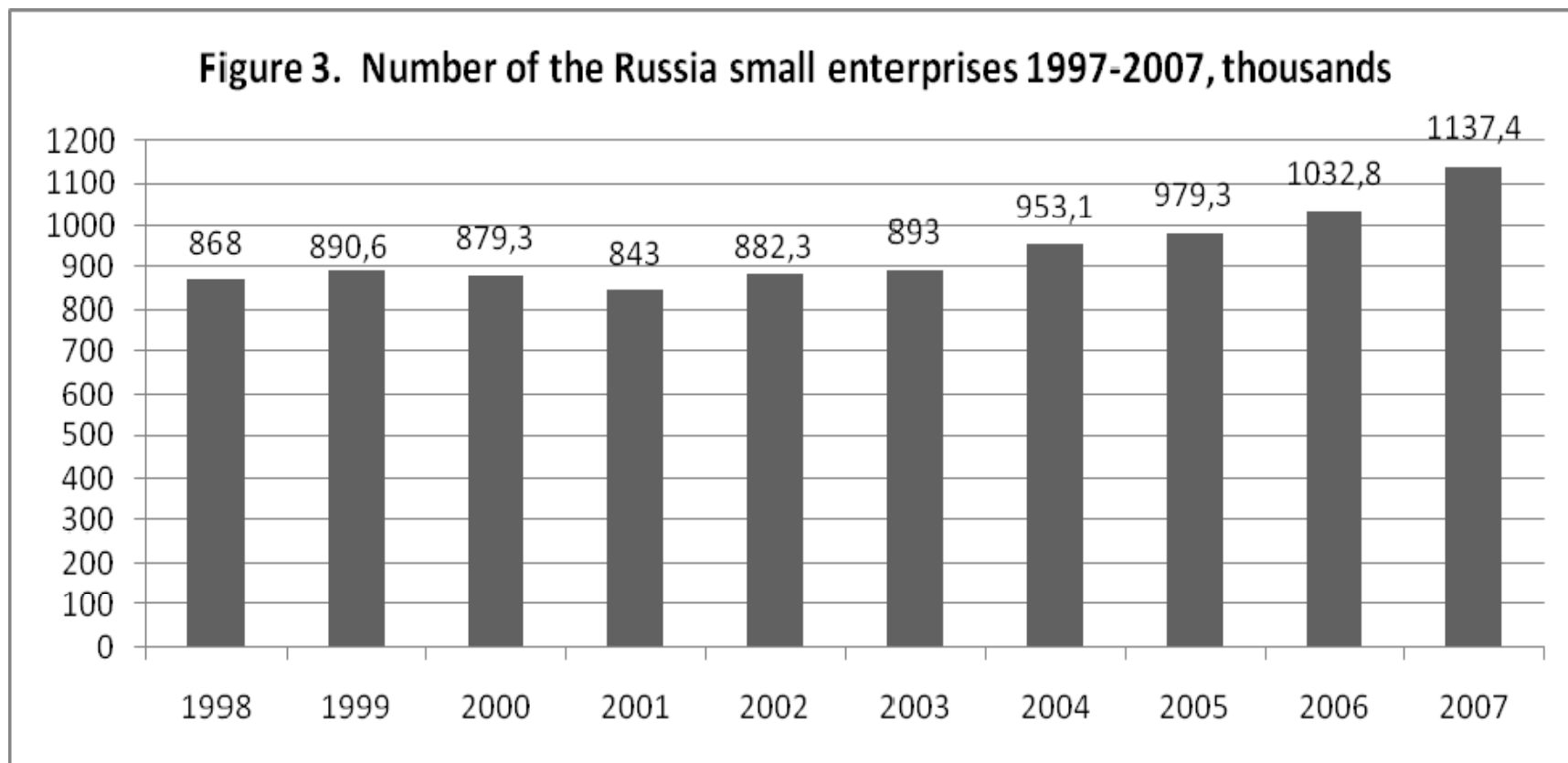
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# Problems of Russian NIS development

Cultural	<ul style="list-style-type: none"><li>▶ Low level of business culture in the sphere of innovation</li><li>▶ The culture of distrust in the Russian society</li><li>▶ Negative attitudes toward entrepreneurs and entrepreneurship in small business</li></ul>
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# The dynamic of the Russian small enterprises



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# Entrepreneurship of SMEs



- 2008 - small enterprises were 25% of the total amount of enterprises in Russia

Only 8 small enterprises per 1000 inhabitant in Russia, while in Europe is 25-40

- 2008 – small enterprise produced about 12% of GDP

In developed countries it is about 50% of GDP

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# Small innovative companies



- Only about 2 thousand small innovative companies In Russia

Half of them have successful experience in commercial realization of their novelties

- The share of small innovative companies is 1.4 - 3.3 % of the whole Russian small business
- Only 15 % of small innovative enterprises deal with real innovations

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# Barriers for small innovative companies development



High economic risks

Low motivation of researchers

Legal

Information



# Challenges for entrepreneurship of small companies in innovation sphere in Russia

## Case

### Settings & methods:

- 3 in-depth interviews with top-managers
- in-deep working with documents
- 6 years in-depth participant observation



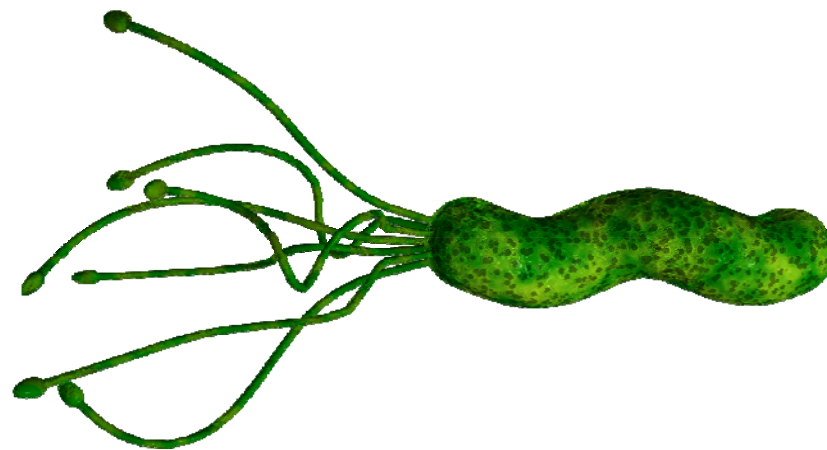
## The company



# ***Association of Medicine and Analytics - AMA***

St.-Petersburg, Russia

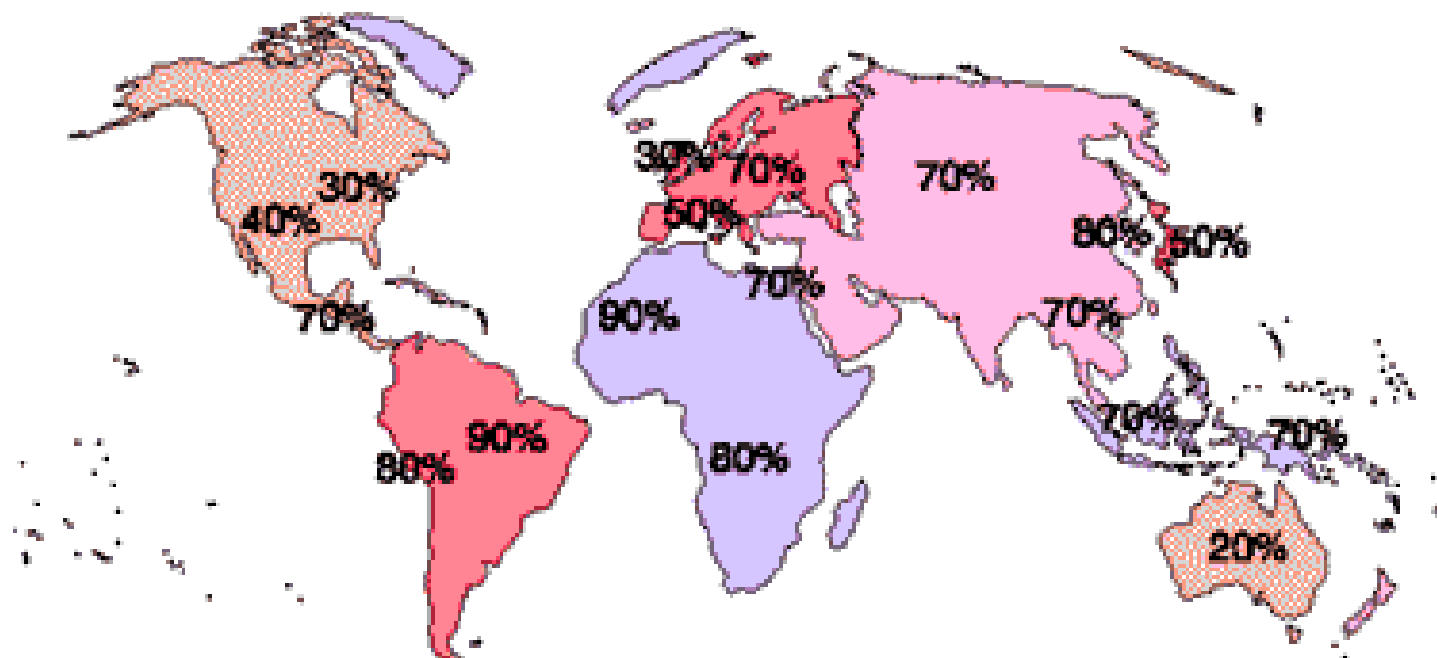
Developing and producing biochemical test-systems for medical diagnostics and for scientific purposes. Since 1997



***Helicobacter pylori***  
**infection**



## ***Prevalence of *Helicobacter pylori* infection in the world***



Nobel's prize in 2005 to B.J. Marshall and J.R. Warren for HP discovery



## **Start points for success**

1. High level of motivation
2. Free market
3. The lack of regulations
4. Know-how without high start investments

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# Start points for success



## 1. High level of motivation

To promote the “right” gastroenterological diagnostics with precise, easy-to-use, safety, and cheap tests.

Profite was not priority.

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# Start points for success



## **2. Free market**

- only 1 Japanese tests for HP detecting
- no urgent need for patents

## **3. The lack of regulations**

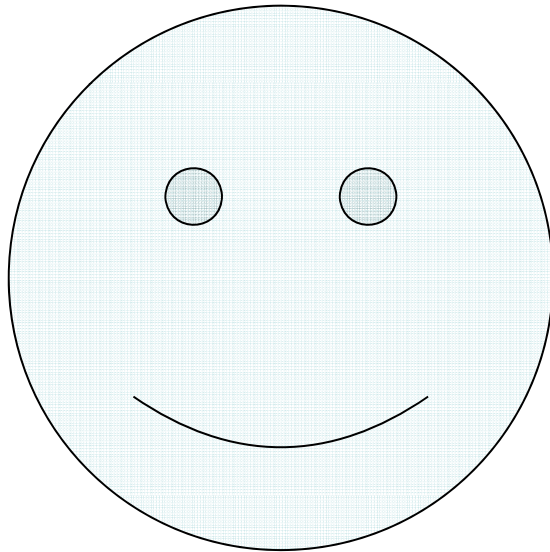
- no need for certification
- no licensing

## **4. Know-how without high start investments**

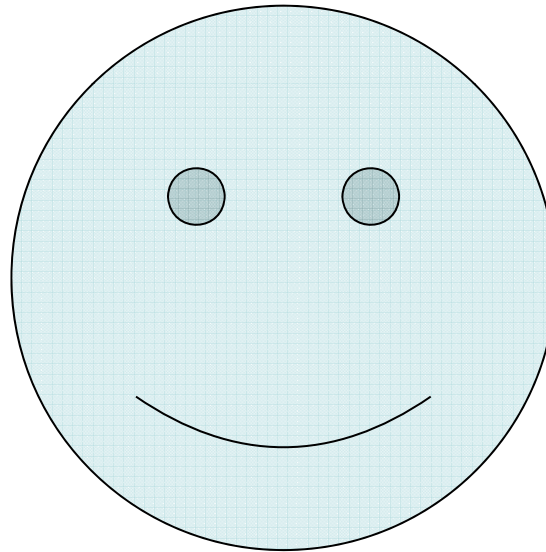
- hand-made producing
- cheap materials



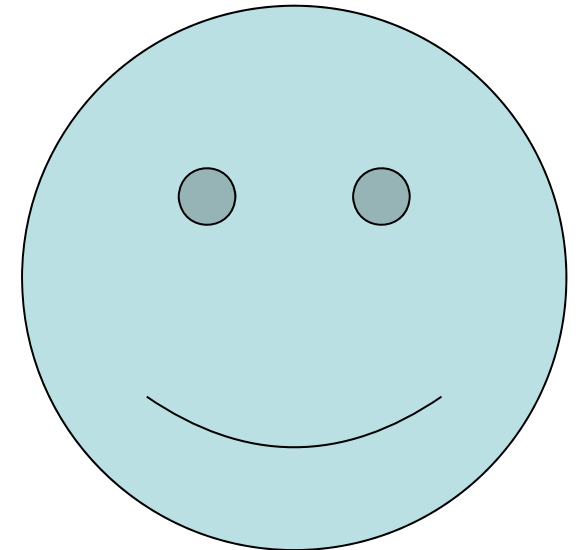
## AMA's owners



**1**  
**Gastroenterologists,  
Professor**



**2**  
**The chemist,  
PhD in Technic Science**



**3**  
**The chemist,  
PhD in Technic Science**



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**Company life stages  
Association of Medicine and Analytics –  
AMA Co. Ltd.**

	<b>Challenges</b>
<b><u>The infancy</u></b> <b>1997-2002</b>	Survival
<b><u>Go-go</u></b> <b>2002-2007</b>	Regular management
<b><u>Maturity</u></b> <b>2007-now</b>	Strategy and interpersonal relationships



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## The infancy 1997-2002

### Problems

1. Limited resources (finances, facilities, information)
2. Lack of managerial competences (trial-and-error management )
3. Unclear game rules (no info support, the lack of consultants)
4. Conflict of owners' interests (profit VS development, one owner has gone)
5. Free market (unformed demand)



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## The infancy 1997-2002

### Advantages

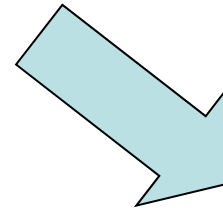
1. Small and high motivated team
2. Flexible and open organisational structure (rapid decision-making, ready for innovations and changes)
3. International contacts (science news, business examples)
4. Free market (no competitors, no need for patents)
5. Easy producing (hand-made, small premises, cheap materials)



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**Go-go  
2002-  
2007**

The company has defined its place on the market,  
stability appeared, sales and staff increased



Need to have more  
professional and  
regular management



**Go-go  
2002-  
2007**

## **Problems**

1. Unefficient hand-made producing and the lack of professional staff
2. The lack of professional management
3. The absence of strategic vision
5. Competition
6. Protectionism (EU, USA especially)
7. Serious administrative changes in Health system in Russia




**Go-go  
2002-  
2007**

## **Advantages**

1. Optimisation of producing processes, more equipment
2. Experience in management and in business relationships (including international)
3. New elaborations
4. More professionals in the company

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**Maturity  
2007-now**

**Problems**

1. Inner organisational problems
2. Outdated form-factors for some products
3. The lack of CRM in company
4. New requirements for certifications



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**Maturity  
2007-now**

## **Advantages**

1. More advanced organisational structure was designed
2. New R&D activities were started
3. Elements of strategic management
4. Opportunity to get CE mark
5. Some support from regional authorities
6. The support of young scientists was started

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# Findings



Main challenges for entrepreneurs (hypothesis):

- Uncertainty at the beginning stage
- Lack of managerial competences
- The problem of strategic view

Further research prospects

1. New cases from other fields
2. Test hypothesis



**Thank you for you attention!**

