Contents

• The role of the automotive industry in the Samara region
• Cluster organization
• Strategic goals and mission
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The automotive industry in the Samara region

30%

- Automobile production in Volga FD
- Automobile production in other FDs

70%

AVTOVAZ – the largest automobile producer in Russia
NEW REQUIREMENTS

Shortage of specialized staff
* low production quality
* shortage of new products

Automotive Components Producers

UNIVERCITIES

RESEARCH INSTITUTIONS

LACK OF STRATEGIC PARTNERSHIP

NEED FOR CREATION
Automotive cluster of SAMARA REGION
Cluster Organization

- **FINANCIAL INSTITUTES**
- **ENGINEERING CENTERS**
- **DEVELOPMENT INSTITUTIONS**
- **LEARNING CENTERS**

- **EDUCATIONAL INSTITUTIONS**
- **AUTOMOTIVE PRODUCERS**

**TRAINING PROGRAMS ORGANIZATION**

- **DEVELOPMENT & INVESTMENT**
- **COMMON PRODUCTS**

- Participation in regional and federal tenders

- **INNOVATIVE PRODUCT**

**ISO QUALITY MANAGEMENT SYSTEM**

**SINGLE BRAND**

**ACSR**

- **REGIONAL MARKET**
- **INTERNATIONAL MARKET**

Supply Chain Optimization
STRATEGIC GOAL AND MISSION

MISSION:
To increase the competitiveness of our members through the effective use of the synergies of competencies and resources

GOAL:
To become efficiently coordinated network of automotive components manufacturers, integrated into the global automotive supply chain
# SWOT - analysis

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
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<tr>
<td>• The presence of AVTOVAZ on the cluster area with a course on the</td>
<td>• High dependence on a single client;</td>
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<td>development of Renault-Nissan Alliance;</td>
<td>• Insufficient investment in technology and equipment in the last decade;</td>
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<td>• The high concentration of automotive suppliers;</td>
<td>• Current issues on quality and cost;</td>
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<td>• Strong regional educational base;</td>
<td>• Lack of companies motivation to invest in new technologies and innovative</td>
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<td>• Opportunities for research and development;</td>
<td>approaches;</td>
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<td>• Geographical position</td>
<td>• Lack of cooperation with the education sector</td>
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<td>THREATS</td>
<td>OPPORTUNITIES</td>
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<tr>
<td>• The potential loss of the market in the future due to outdated technology, poor quality and the level of competitiveness; inability to adapt to new market requirements (safety, environmental protection, vehicle compatibility);</td>
<td>• Investments of foreign auto suppliers in the region;</td>
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<td>• It is not enough high investment attractiveness of the cluster in the region (administrative barriers, ..);</td>
<td>• Sales growth in the world markets;</td>
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<td>• Insufficient investment in high-tech sector, where labor costs are less critical;</td>
<td>• The growth of interest of potential investors in the Russian market due to the favorable exchange rate;</td>
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<td>• Automotive suppliers change their organizational forms to a limited liability company;</td>
<td>• The ability to maintain the current development by the use of technology;</td>
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<td>• The rise of global auto suppliers</td>
<td>• Development of engineering services sector by outsourcing key areas of engineering</td>
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<td></td>
<td>• Using the region’s technology, innovation and production capabilities;</td>
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<td></td>
<td>• Political support for cluster development and localization of the automotive industry in Russia and the Customs Union</td>
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<tr>
<td>Training Programs</td>
<td>Management</td>
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<td><strong>Systems</strong></td>
<td>ISO TS 16949 ISO 14001</td>
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<td><strong>Quality</strong></td>
<td>Quality Management System</td>
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<td><strong>Methods/Tools</strong></td>
<td>Lean Production Strategy</td>
</tr>
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<td><strong>Experience</strong></td>
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Engineering.
Time for new solutions
Development of Plastic & Metal Components

- treatment of measurements and preparation of surfaces for the working out and agreement of style mock-ups for further development of class A surfaces
- feasibility analyze of Surfaces
- elaboration of master sections
- calculation chains of dimensions and targets of gaps and flashes
- development and agreement of Class A surfaces
- development and agreement of 3D components of interior and exterior
- manufacturability analyze of products
- architecture and packaging of necessary works
- design of mechanisms
- preparation of necessary technical documentation and reports
CAE

- creation of high-quality 2D and 3D finite element models (FEM) on any present CAD systems base
- strength and fatigue analysis of details and assemblies
- structural optimization
- noise, vibration and harshness (NVH) analysis
- highly non-linear dynamic, crash and impact analysis
- manufacturing processes simulation
- vehicle aerodynamics
- climatic and heat transmission analysis
- analyze and optimize multi-body system performance
- metal forming
Support and maintenance projects for passive safety

- forming of RFQ
- carrying out selection of direct executor of tests (choice of possible executors, a comparative analysis of commercial proposals, agreement of volumes of tests)
- preparation of technical specifications
- preparation of technical concepts
- preparing of the schedule of the project
- development of test matrix of impact
- preparation list of parts required for the agreed scope of testing
- development of validation plan of properties of passive safety
- preparation of forecast achievement of project objectives, according to the approved RFQ between the Customer and the Contractor (system integrator) for each control point in accordance with the work schedule
- management of Project Communications (timely exchange of information for decision making, control of the timing and quality of work on the project)
- engineering control of testing and reporting
- approval of results with the customer
Development & Modernization of Production Equipment

- Layouts
- Welding equipment
- Handlings
- Storages
- Conveyors
Design of molds and dies

Design of molds:
- analysis, preparation of recommendations to change the design of the component during design of molds,
- design of molds
- architecture of molds
- analysis of molding of the component
- simulation of the assembly process
- preparation of the necessary technical documentation (2D, specifications)
- technical and design support during the manufacture, installation, adjustment
- following of the project to the finished product

Design of dies:
- analysis of the components for the manufacturability
- analysis of formability
- modeling and preparation of drawings for technological process
- 3d design of Dies
- preparation of the necessary technical documentation (2D of dies, 2D of technological process, specifications)
- technical and design support during the manufacture, installation, adjustment
- following of the project to the finished product from the line of dies
- following of the project till the agreement of the control sample of the product
Results in 2014

Organizational issues

Registration of a legal entity
NP “ACSR” (June 2014)

Election of Partnership’s Board and Director

The Partnership’s Board
Results in 2014

Presentation in activities:

National Assembly NAPAK at Moscow Motor Show in Moscow

CEE Automotive forum (Prague)

ACSR stand organization at Automotive industry and components

Central & Eastern European Automotive Forum 2014

CLEPA Board meeting
Results in 2014

Individual meetings and presentations

- ACSR
  - With Vice-President on Purchasing VW Rus

- ACSR
  - With Vice-President on Purchasing PCMAR

- ACSR
  - With CEO of MAGNA Rus

- MAGNA
  - AVTOVAZ & Renault
    - First leaders

- ACSR
  - Official meeting (for interaction)
    - The top-leaders of the global Tier1 (Faurecia, Valeo, Bosch);

- ACSR
  - Official meeting (for interaction)
    - Faurecia
    - Valeo
    - Bosch
Results in 2014

Official activities

3 Cluster meetings were held

NP “ACSR” members’ production visiting

Organization of Cluster members’ economic mission to AutoEvolution 2014 forum (Kaluga)

Organization of private section for NP “ACSR” members

Volkswagen
PCMAR
MAGNA

Requirements

Suppliers

AutoEvolution 2014
RESULTS in 2014

Official activities

Preparation for the implementation of UNIDO program in Samara Region for 2015

Preparing for the Forum "Automotive industry. Autocomponents 2014 “ and organization of speakers visit to the forum (AVL, Magna, PCMAR, Tecos, Gostol TST)

Training package offer in conjunction with the International Finance Corporation (IFC)
RESULTS in 2014

Training Programmes realization via ГАУ ЦИК, December, 2014 with involvement of 7 experts from EU
RESULTS in 2015

Open meetings

February 19, 2015
Deputy Minister of Industry and Technology of Samara Region, head of engineering complex O. Zhadaev

1. Information part
   - NP ACSR board member
   - Dushan Bushen
   - Cluster program for 2015

2. Discussion between procurement service and suppliers
   - Head of project procurement
   - A.A. Smolyankin
   - 24 компании

April 16, 2015
Discussion panel with FordSollers & Valeo representatives

1. Presentation “Requirements to suppliers of 2,3,4 levels and new opportunities for suppliers of Samara region”
   - National Director of Procurement, Russia, Valeo, Christoph Milleville

2. “Requirements to 1 level suppliers and new opportunities for suppliers of Samara region”
   - FordSollers Purchasing Director
   - Oliver Majewski
   - Deputy vice president of procurement, procurement COO
   - Nicholas Khodosevich

B2B meetings

- Mitsubishi Motors
- Peugeot
- IMAGOT

- FordSollers
- Valeo

- NP ACSR board member
- Dushan Bushen
- Cluster program for 2015

- Head of project procurement
- A.A. Smolyankin
- 24 компании
RESULTS in 2015
Visit of the delegation of the Republic of Tatarstan

February 5-6, 2015 (Kazan)
International automotive Forum TIAF 2015

March 11, 2015 (Togliatti)
Organizers

Delegation of the Republic of Tatarstan automotive cluster

19 companies from Republic Tatarstan

Experience exchange
RESULTS in 2015

NP ACSR entry into the Union of Mechanical Engineers

March 16, 2015

NP “Automotive Cluster of Samara region”

Entered the Committee on Development of cooperation and localization of production in the automotive industry

Head of Committee, President of AVTOVAZ Bo Andersson

NP ACSR Director V.V. Putkin

ACS Director Dusan Busen

Togliatti State University Rector M.M. Krishtal

Became a member of the Union of Mechanical Engineers

Took part in the organizational meeting of the Committee
RESULTS in 2015

Information support

February 2, 2015
NP ACSR members
Presentation of innovative technologies for enterprises of Togliatti

April 8, 2015
NP ACSR members
Free information day "The new requirements of ISO 9001: 2015"

April 21-24, 2015
NP ACSR members
International Specialized Exhibition of metal industry and the exhibition "Welding and Foundry" (Celje, Slovenia)

13th FORMA TOOL
Tools, Tooling, Tooling machines
Celje Showground, 21 - 24 April 2015
RESULTS in 2015
Participation in forums

February 5-6, 2015 (Kazan)
International automotive Forum TIAF 2015

Participation in the leading exhibition of automotive components, spare parts and equipment for maintenance of vehicles of the North-West Russia and the Baltic States "Automechanika"

March 25-27, 2015 (Saint Petersburg)

March 17-19, 2015 (Moscow)
Participation in the 18th Annual International Russian Automotive Forum

NP ACSR
Director
V.V. Putkin

ACS Director
Dusan Busen

Interactive discussion on the conduct of automobile business in Russia on "Automotive Cluster of Samara region. Localization features"

ACSR board member
Dusan Busen

Topic: “Prospects of development of Russian automotive components industry”
RESULTS in 2015
Business meetings on March 26 (Saint Petersburg)

1. Joint Science and Technology Institute
   - Executive Director of Joint Science and Technology Institute
     - M.A. Odnoblyudov
     - Cooperation Agreement, May 2015

2. Director of STC "MashTeh"
   - P.N. Vopilovskiy
   - Director of STC "MashTeh"

3. Engineering Center “Center of Computer Engineering”
   - The Head of Engineering Center “Center of Computer Engineering”
     - A.I. Borovkov

4. NP “Center on certification “Respect”
   - The Head of NP “Center on certification “Respect”, V.V. Mikhailovskiy
   - Cooperation Agreement, September 2015

NP ACSR
- Board member
  - Dusan Busen

NP ACSR
- Director
  - V.V. Putkin

Head of RIC
- A.N. Mironov
RESULTS in 2015

Official activities

ACSR arranged a meeting with foreign manufacturers of automotive components (with the participation of PCMAR Procurement Services)

ACSR became part of the Committee on Development cooperation and localization of production in the automotive industry

ACSR took part in the annual Russian Automotive Forum (Adam Smith Conference)
RESULTS in 2015

Official activities

Open meeting with FordSollers and Valeo top-managers organized

A meeting with IFC (International Finance Corporation) and JMAC (Japan Management Association Consultants) top-experts organized
RESULTS in 2015
Official activities

NP "ACSR" Director V.V.Putkin and board member Dushan Bushen are nominated to the Scientific and Technical Council (STC), the Governor of the Samara Region

ACSR took part in the second meeting of the Committee of the Russian Engineering Union
RESULTS in 2015

Official activities

From May 29 to June 5, ACSR representatives in the delegation of the Samara region visited with business visit Anhui province of China.

During the visit, Samara delegation suggested Chinese partners joint implementation projects
RESULTS in 2015
Togliatti, June 26
I International Automotive Forum
“Autointegration” - 2015

• More than 200 participants
• More than 50 organizations
• More than 20 speakers
• More than 20 federal and regional journalists & Media
## DIRECTION OF DEVELOPMENT IN 2015

### AIMS:
- Creation of a communication platform between the members of the cluster and development / intensification of coordination between them;
- The introduction of quality management and lean manufacturing at the enterprises of the cluster;
- Implementation of joint projects "turnkey“;
- Improving the competitiveness of cluster members;

### TASKS:
- Increasing the number of cluster members;
- Providing them a favorable business environment;
- The exchange of experience with participants of regional and national clusters;
- Organization of training programs / training of cluster members personnel;
- Inter-cluster cooperation.
NONCOMMERCIAL PARTNERSHIP

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