



Enhancing Russian SME collaboration
and business development through
Communities of Practice

D1.1 – Intermediary Results

Online Conference, 4/07/2005

Irina Alexeeva

Patricia Wolf

Tanya Emshanova



Enhancing Russian SME collaboration
and business development through
Communities of Practice

Business Development

Irina Alexeeva, RCSME

Business Development – Russian SMEs

Organisation of Innovation

- Russian innovative SMEs are a small part of SME sector yet with a significant S&T potential. There is little domestic demand for R&D products, the linkages between R&T resources and enterprises are poor.
- Intellectual property framework is confusing, SMEs lack skills in marketing innovative products. Technology transfer is low-scale, product innovation outstrips process innovation.

Organisation of External Relationships

- Innovative SMEs are particularly sensitive to unfavourable business and innovation infrastructure (tax, capital and financial markets, administrative burden).
- SMEs lack knowledge about implications of quality management principles. Innovative SMEs only begin to improve customer relation management and supply chain management

Organisation of Internal Processes

- SMEs show a weak knowledge-intensive organizational and innovative R&D culture
- Innovative SMEs are not always aware of the need to improve their quality management, internal communication and internal business organization in order to be competitive and growing, or they do not know how to do it

Business Development – European SMEs

Organisation of Innovation

- European SMEs are an important source and engine of innovation, although they are more focused on incremental rather than radical innovations.
- Despite some obstacles, there are good practices of knowledge transfer and networking from which innovative SMEs do benefit

Organisation of External Relationships

- SMEs in EU are at an advantage in terms of practical support from business support infrastructure, although access to finance may be a problem.
- SMEs have difficulties in controlling their suppliers and collaborating with them.
- There is evidence of both efficient and unstructured networking and knowledge transfer. However, there is a growing awareness of the positive role of extensive and proactive networking for SMEs

Organisation of Internal Processes

- Most of SMEs in EU organize their internal processes to fit their strategy, aimed at developing employees' competence and talent development, as well as meeting market challenges
- An increasingly demanding knowledge environment urges SMEs optimize quality management, internal communication and internal business organization

Business Development – Survey Recommendations

Important Statements to be Verified

- Promotion of innovative SMEs can be achieved through re-design of their organization and management systems, expanding business cooperation and networking capabilities
- Transfer of adjusted European collaboration, networking and management practices can help Russian innovative SMEs to improve their competitiveness and create opportunities for growth

SOTA Gaps

- The fundamental gap is: significant imbalance between the large innovative potential, science base and the low capacity of Russian SMEs for market-related R&D, knowledge and technology transfer, collaboration and networking
- Russian SME support infrastructure and government policy cannot ensure full-fledged support to most innovative SMEs. EU knowledge and practices could facilitate capacity building of innovative SMEs

SOTA Recommendations for Solution Development

- Identify readiness and specific needs of Russian innovative SMEs in three regions in building their collaboration and networking capacity for competitiveness and growth
- Identify Westerns management and networking practices which can be effectively transferred to Russian innovative SMEs. Suggest concept, tools and framework for the effective transfer of Western practices



Enhancing Russian SME collaboration
and business development through
Communities of Practice

Transfer of Management Practices

Patricia Wolf, IAT

Transfer of Management Practices

General Assumptions to verify

- Transfer of management practices is a social communication process that requires dealing with asymmetric understanding on individual and organisational level.
- Cultural barriers cause problems in the transfer process of management practices.
- Western European and Russian management practices/cultures are different. But: Russia is changing from a collectivistic to an individualistic culture (?)

Key barriers to successful transfer of management practices from Western Europe to Russia (I):

- No tradition and long history of business contacts: Trust and common understanding of what business is and how it has to be performed is missing
- Very different ideological, religious and social backgrounds of knowledge providers and knowledge seekers
- Communication problems and misunderstandings due to language

Transfer of Management Practices

Key barriers to successful transfer of management practices from Western Europe to Russia (II):

- **Russian collectivistic culture causes difficulties when dealing with Western companies:**
 - Motivation: focus in Russia was on routines and upgrading technologies within a strong hierarchical structure, not on change, learning, adaptation as in Western Europe
 - Qualification: In spite of high education level, skills of Russian medium and top managers lack foreign investors requirements like e.g. change management (What means: they have a different focus, in that case on maintaining structures)
 - Cultural distance: May lead to a lack of understanding and information circulation between Western European and Russian partners (Due to flat hierarchies, information in Western Europe is circulated more freely than in Russia where information is power and thus rather not circulated or has to follow very formal procedures)
- Differences in the legal and administrative systems of the countries: Corruption, confusing and changing legislation framework, breaking of signed agreements

Transfer of Management Practices

Key barriers to successful transfer of management practices from Western Europe to Russia (III):

- **Management practices:**
 - Planning: the situation in Russia is so rapidly changing that it is difficult to make long term plans like Western Europeans prefer to do
 - Hierarchical organisation: In Russia, decisions are not made if the top manager is away, in Western Europe one finds relatively flat organisational structures
 - Top managers of innovative Russian SMEs are good scientists but lack management skills

Conclusions for RUSMECO (to verify):

- The KM concepts provided to the SME networks need to be adapted to the Russian context, taking into account the key barriers.
- Contents and methods of training need to be contextualised to the Russian context.
- Western partners must not ignore local traditions and cultures, Western methods are not superior!!!

Transfer of Management Practices

Conclusions for RUSMECO (to verify):

- Communication with the SME networks must be designed according to the reference frame of the SME managers
 - Russia scores high power distance (big distance between top manager and employees etc.) – is an autocratic communication style needed? Or is it important that top managers support the project?
 - In contradiction, KM and learning needs the willingness of the participant to accept participate leadership. Participation is likely to be most effective in low power distance cultures → How to deal with that?
- **Russian innovative SMEs are ready and willing to apply KM methods. Need to find out:**
 - what are motivations for Russian SME managers to apply KM methods which come originally from the West.
 - what they think is special about KM in the Russian management context.



Enhancing Russian SME collaboration
and business development through
Communities of Practice

Collaboration

Tanya Emshanova, VVC

Collaboration – Russian SMEs

Collaboration Practice – general types

- **Daughter structures or satellite** - SME system formed on base of dominating large or small enterprise. Economic purpose of such kind of structures is a maximum diversification of production activity and a sale risk reduction. Innovative SMEs appear usually on the base of scientific organizations (universities, institutes, R&D centers in large firms).
- **SME Alliances** - are formed from initially independent small enterprises. The main aim of cooperation is a transaction cost reduction as a result of effective common problem coordination (mutual assistance, using of a barter system, irretrievable services, information and knowledge exchange).
 - Business associations
 - Industrial or regional clusters
 - Networks structures

These forms of SME collaboration is usually called *cooperation interaction* and its are based on a system of common economic interests of SMEs – alliance participants, where each participant gets an additional value as a result of interactions. This form is usually informal, formed spontaneously, by the own participants' initiative. The main income of participants is their intellectual capital, experience, skills and knowledge.

Collaboration – Russian SMEs

Collaboration Practice – general features

Russian SMEs show a weak knowledge-intensive organizational culture coupled with a lack of understanding of it's necessity for survival and growth.

There are mostly cooperation structures with non-developing and weak interactions.

The main reasons for that:

- Lack of law base for cooperation interaction.
- Undeveloped federal and regional infrastructures for cooperation interaction.
- Low level of mutual trust between economic agents in Russia.
- Historically social networking occurs more at a personal level activity rather than between institutions.

Collaboration – Russian SMEs

Collaboration Practice – communication needs

There are following discovered needs in interaction between SMEs ¹:

- Needs in information about prospective partners and opportunities
- Needs in forming of more distinct (rather than fuzzy) local communities
- Needs in realization of joint projects
- Needs in more intensive and effective information exchange in thematic problems
- Needs in taking the initiative and new business idea creating
- Needs in better understanding of common problems

¹ <http://www.trainet.org/communities/research/problems.shtml>

Collaboration – Russian SMEs

Collaboration Practice – important research issues

- In order to SMEs will form and develop a stable cooperation structure it is necessary that their cooperation benefits will substantially exceed their cooperation interaction costs.
- There also should be “mutual attractive force” inside cooperation structure, which should exceed individual functioning advantages.
- SME economic symbiosis will be especially stable when different SME purposes are combining. Due to importance of Russian SME economic symbiosis, which is not studied at present properly, our research seems especially urgent and timely.
- SMEs need in using new methods and tools to establish or rethink their organizational and management systems to sustain increased competition in their specific environments. Using state of the art methods and tools, SMEs will become more capable of developing and exploiting their intellectual capital both inside their own organisation and also in knowledge-intensive and dynamic external networks.

Collaboration – Russian SMEs

Collaboration Technologies

Traditional off-line collaboration forms:

- Joint projects, conferences, round tables, meetings at the federal and regional levels
- **Internet as a communication tool:**
 - Internet is getting a meaningful tool in SME activity.
 - Internet is used mostly as an information source rather than a collaborative space, because to collaborate Russian SME should have:
 - additional technical and human resources
 - more qualitative and long internet access
 - more open and trust collaboration culture

Collaboration – Russian SMEs

Collaboration Technologies

What are the most spread internet tools in Russian small enterprises activity?

- E-mail
- Mailing lists and newsletters
- Whiteboards or discussion panel
- Links catalogs

In Runet there are many of resources which are common information spaces for different off-line associations and communities. These resources are rather good in information delivery but weak in collaboration opportunities. They have not a very important constituent – **a virtual collaboration space**, where people can freely interact with each other, exchange and create knowledge.

Collaboration – Russian SMEs

Collaboration Technologies – Internet-communities

The role of Internet-communities is rising in Russian society, because there is getting possible:

- to make a search for different solution variants;
- to point out problems and make a common decision;
- to recommend, motivate and realize creative potential of participants;
- to educate and develop in intellectual, law, moral direction;
- to satisfy information and communication requirements;
- to organize and develop local and regional communities for political, social and economic representing of different groups' interests.

But in case of Russian SMEs it is possible to say about a **very few really working SMEs Communities** as well as other internet collaboration forms.

Collaboration – Russian SMEs

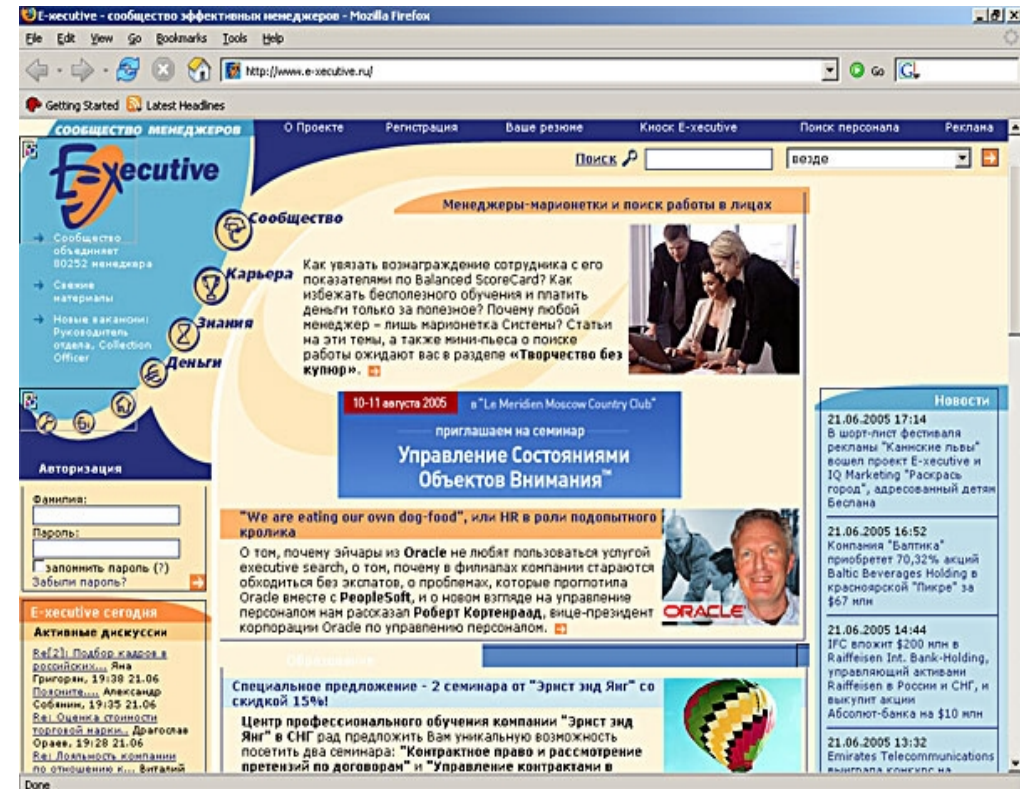
Collaboration Technologies – Internet-community example

E-xecutive - Russian Managers and Professionals On-line Community

<http://www.e-xecutive.ru>

It is probably the best example of virtual professional community in Russia. E-xecutive's founders recognized that after 5 years of existence, now this resource is an effective and creative micro environment for studying in collective relations and experience exchange processes.

There are a lot of communication opportunities (discussion boards and threads which attendant each article, participants list with personal information, feedback forms) as well as a big collection of useful information in management and marketing (articles, researches, announcements etc.).



Collaboration – Russian SMEs

Collaboration Technologies – Internet-community example

E-xecutive - Russian Managers and Professionals On-line Community

From interview with the most active participants:

“... Community is a high-class professional environment. There is not such crowd of professional around me in real life. Naturally, I use the resource first of all in educational purposes, to increase my level. And pleasant relations are at the second place.”

“We often discuss some problems with colleagues ...I just give my view or some interesting facts...at some forums I can share my experience, at others – I ask questions actively, initiating a discussion.”

“I can find information in internet quickly, and rather routinely different people thank me for this.”

Five the most attendance portal sections

Section	Visits in April 2005
<i>Discussion board</i>	<i>1 942 740</i>
<i>Publications</i>	<i>894 420</i>
<i>Carrier advice</i>	<i>849 960</i>
<i>Home page</i>	<i>787 140</i>
<i>Community participants</i>	<i>774 540</i>

Collaboration – European SMEs

Collaboration Practice - general issues

- Half of the European SMEs cooperate with other SMEs. Generally, medium-sized enterprises cooperate with other SMEs for strategic reasons and long-term benefits, while micro and small enterprises cooperate with other SMEs for operational purposes with shorter time-scale for the expected benefits.
- Past studies ^[1] have shown that many organisations acquire their technological know-how by learning from external sources such as networks, which exists in two main forms:
 - Vertical Associations along the supply chain where SMEs and larger firms work together;
 - Industrial District Model, where small firms self organise to better supply a regional manufacturer along “horizontal” lines. Firms in the networks (often described as “clusters”) take on specific roles in the design, production and logistics process within loosely coupled arrangements to minimise dependency relationships in the cluster.

^[1] *Harding, S. and Pawar, K. (2001): Know-how Share and Transfer in SME Networks: A Contingent Approach, in the proceedings of the International Conference on Concurrent Enterprising (ICE2001), Bremen, Germany, June.*

Collaboration – European SMEs

Collaboration Practice – knowledge sharing issues

What certain characteristics can help to understand the network process and knowledge exchange in small firms?

- Strategic networking is a process with specific phases
- Only if trust exists can such strategic interactions take place
- The importance of mutual support for process improvement
- The need of an external influence to act as a catalyst for strategic networking to commence
- The fear is a strong inhibiting factor for know how sharing
 - The size of the networks seems to indicate a group of between 4 to 8 SMEs can develop enough trust to allow for meaningful exchanges of information and overcome some of the barriers to sharing.

Collaboration – European SMEs

Collaboration Practice – knowledge exchange practice

Many instruments have been utilized which should support the formal and informal knowledge sharing processes: *colloquia, lunch meetings, communities of Interest/Practice, regional workshops, conferences, etc.*

Nowadays the development and sharing of knowledge is becoming more and more implemented by way of *Communities of Practice (CoPs)*.

- ▶ CoPs are self-organizing, informal social networks that virtually cross intra- and inter-organisation boundaries and that capitalize on the participants' motivation to create and share knowledge.
- ▶ The knowledge that is created and shared is directly related to the practice of the members participating in the community.
- ▶ CoPs foster creative interactions amongst experts and help to channel their efforts to where they are most needed.

In this way, these communities are a key element in the learning organisation.

Collaboration – European SMEs

Collaboration Practice – important research issues

- Although communities are believed to be more suitable to transfer tacit, situated and non-routine knowledge than technical repository knowledge management systems, academic literature is limited on how and why communities share knowledge when its members are dislocated (e-CoPs).
- Next to academic interest, there is a growing interest among practitioners in the question how to set up and manage e-CoPs.
- Most technology that supports distributed teams allows them to collaborate, rather than encourages team members to collaborate. A major research question therefore is how to design collaborative technology that enhances virtual teams and encourages collaborative learning.
- The increased number of projects in companies has raised the question of how to learn from a project's experiences and disseminate lessons-learned to other projects? Here Project Learning Model should turn into Multi-Project Learning Model when the lessons learned of a project are transferred to other projects. This interproject transfer of experiences could be done by CoPs and knowledge systems.

Collaboration – European SMEs

Collaboration Technologies – a technology-enabling tool support viewpoint

People to Content	People to People
<p>“stock” approaches</p> <p><i>Knowledge bases and Document management systems (DMS)</i></p>	<p>“yellow pages” approaches</p> <p><i>On-line communities, yellow pages and awareness tools</i></p>
<p>These systems aim to “capture” the knowledge that is in the mind of workers, and store this in an information system. Later, this “stored knowledge” can be accessed and used by others.</p>	<p>These systems aims to bring people together with the help of technology. Here the system itself does not contain the knowledge we need but rather a reference to the person who does have that knowledge.</p>
<p><i>Enterprise Information Portals</i></p> <p>an integrated solution</p>	

Collaboration – European SMEs

Collaboration Technologies – other techniques for knowledge management processes

Method	Key characteristics
Task Environment Analysis (TEA)	TEAs consist of in-depth investigations of how knowledge workers perform business tasks and the conditions under which they work. The focus is on knowledge, its presence and use of knowledge, how the task is performed at present, what its inputs are, what its deliverables are. TEA provides the added perspective of knowledge flows and uses.
Basic Knowledge Analysis (BKA)	Basic Knowledge Analysis refers to an analysis and characterisation of the knowledge in the task environment. It focuses on how knowledge is held, used in decisions and other knowledge-intensive tasks.
Knowledge Mapping (Kmap)	Knowledge mapping is used to develop concepts maps as hierarchies or networks. Knowledge mapping systems are used for identifying relevant information from workers, displaying this information and presenting it for training, communicating, planning, problem-solving or decision-making purposes.

Collaboration – European SMEs

Collaboration Technologies – other techniques for knowledge management processes

Method	Key characteristics
Knowledge Use and Requirements Analysis (KURA)	KURA is performed to explicate knowledge use and proficiency requirements. The focus is on the use of knowledge in problem-solving, decision-making and other knowledge-intensive processes within the target business area.
Knowledge Scripting and Profiling (KS&P)	Knowledge Scripting and Profiling is used for the detailed description of knowledge-intensive processes, tasks and scripts.
Knowledge Flow Analysis (KFA)	Knowledge flow analysis is used to gain overview of knowledge exchanges, losses, or inputs to the business process or the whole enterprise. It also determines characteristics, strengths & weaknesses of existing and potential knowledge exchanges.
CommonKADS; Knowledge Metaprocess	These methods focus on the application-oriented development of ontology's and support all phases from the early stages of setting up a KM project to the final roll-out and maintenance of the ontology-based KM application.

Collaboration – European SMEs

Collaboration in European SMEs – a case study

Managing Apprenticeship in Italian Districts

Objectives

- In Emilia-Romagna Region the most important consortium managing apprentices' learning activities (Conorzio Formazione & Lavoro, "Training & Work Consortium") intends to define and test a specific KM model aiming to improve apprentices' and enterprises' capacity to manage their cognitive relations, removing/diminishing hurdles in knowledge transmission.
- Substantially, the Consortium aims to provide trainers and expert workers with an easy-to-use Knowledge Apprenticeship Tool - KAT – conceived to evaluate the coherence of the disposable learning resources, possessed and used by the apprentice and by the enterprise, with the kind of knowledge to transfer. This facilitates the initial diagnosis of training needs and the following monitoring of accomplished learning, improving decision making upon management of workers placement. Indirectly, the use of the tool is a chance for the enterprise to think about its KM capacities in an organisational development approach.

Collaboration – European SMEs

Collaboration in European SMEs – a case study - results

Managing Apprenticeship in Italian Districts

30 industrial SMEs belonging to 5 local productive systems of Emilia-Romagna, for a total amount of almost 50 apprentices, have been tested with KAT. The **outputs** point out four critical factors:

- Tacit knowledge at the base of the productive process is not enough sorted out and represented, and this heavily increases transmission costs
- Integration between formal and non-formal learning is considerably difficult, with negative effects on the relation between empirical know-how and theoretical know-why
- Expert workers find it difficult to adopt “pedagogical” behaviours consistent with the kind of knowledge that they have to transfer
- SMEs have less and less organisational resources dedicated to the reproduction of their knowledge, due to costs and time reduction urges determined by the new competitive scenario.

In terms of KM, **the main lesson** this case taught is the request for policies letting productive working overlap with “cognitive working” as much as possible, in such a way that knowledge may come as a product (but also as a condition) of enterprise’s normal functioning.

Collaboration – Survey Recommendations

Important Statements to be Verified

- In order to SMEs will form and develop a stable cooperation structure it is necessary that *their cooperation benefits will substantially exceed their cooperation interaction costs*. There also should be “*mutual attractive force*” inside cooperation structure, which should exceed individual functioning advantages.
- Although communities are believed to be more suitable to transfer tacit, situated and non-routine knowledge than technical repository knowledge management systems, academic literature is limited on *how and why communities share knowledge when its members are dislocated (e-CoPs)*.
- Next to academic interest, there is a growing interest among practitioners in the question *how to set up and manage e-CoPs*.
- Most technology that supports distributed teams allows them to collaborate, rather than encourages team members to collaborate. A major research question therefore is *how to design collaborative technology that enhances virtual teams and encourages collaborative learning*.
- The increased number of projects in companies has raised the question of *how to learn from a project’s experiences and disseminate lessons-learned to other projects?*

Collaboration – Survey Recommendations

SOTA Recommendations for Solution Development

To be effective SME virtual community should be *rather stable to provide its own existence* – at first hand, *rather flexible and useful to provide effective development of SME participants* – at the other hand, and *rather powerful to provide development SME sector as a whole*:

- Community will be more effective and powerful if it unites different participants both in subjects and in geographic.
- SME economic symbiosis will be especially stable when *different SME purposes are combining*.
- Community should be living, based on real participants' activity, their problems, decisions and projects. But at that time attracting mechanism not should be formal, yet compulsory.
- Community will be effective if it has an influence on political, social and economic situation (in this case – in Russian SME sector). To point out and discuss the most important problems, to attract a wide social mass attention, to give an actual information – is also primary tasks of internet community.

Collaboration – Survey Recommendations

SOTA Recommendations for Solution Development

As for communication tools we can say that our collaboration platform should meet the following main requirements:

- Community technical infrastructure should be simple and understandable as well as universal.
- Content should be based on useful, actual for innovative SMEs, topics
- Tools should be very easy in running and have got an intuitive usable interface
- It should let to communicate easy with both colleagues and experts
- It should let to communicate and collaborate by different means according to participants' needs and chooses
- We also should offer upcoming collaboration tools to learn Russian SMEs leaders to use advanced ideas which are becoming widespread in world