



УДК 674.003.(0.31)

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## **INTERNAL BARRIERS OF THE INNOVATION POTENTIAL AND INNOVATIVENESS OF THE SLOVAK SMALL AND MIDDLE WOOD-PROCESSING ENTERPRISES**

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В статье приведены предварительные результаты второй фазы проекта VEGA 1/3396/06 "Определений барьеров инноваций малых и средних предприятий и предложение их возможных путей устранения как потенциальный инструмент поднятия рыночной конкурентоспособности", выполняемого по заказу Словацкого Министерства Образования, работа выполняется в отделе маркетинга, торгового и мирового лесоводства, факультета древесных наук и технологии, Технического Университета в Зволене. Эти результаты были достигнуты обследованием потенциала новшеств и последующим определением критических областей потенциала новшества в словацкой деревообрабатывающей промышленности предприятий малой и средней мощности.

This paper is aimed at introduction of the second phase partial results of the project Slovak Ministry of Education VEGA, 1/3396/06 "Determination of the innovativeness barriers of the small and middle enterprises and suggestion of their elimination possible ways as the potential instrument of the market competitiveness raising", which is currently being at Department of Marketing, Trade and World Forestry, Faculty of Wood Sciences and Technology, Technical University in Zvolen. These results were achieved by the survey of innovation potential and by the following determination of the critical fields of innovation potential in the slovak wood-processing small and middle enterprises setting.



## **Introduction**

Information, introduced in this paper are second phase partial results of the project Ministry of Education of the Slovak republic VEGA, 1/3396/06 „The determination of the innovativeness barriers of the small and middle enterprises and the possible ways of their elimination suggestion as a potential instrument for the market competitiveness increasing”, that we solve on the present at Department of Marketing, Trade and World Forestry, Faculty of Wood Sciences and Technology of the Technical University in Zvolen. The main goal of this project is the innovativeness barriers identification for the Slovak wood-processing small and middle enterprises using the marketing researches results, aimed at demand and supply. By the mutual comparison of the results the differences between supply, demand and consumer preferences will be identified and concurrently the innovativeness barriers of the wood-processing small and middle enterprises in such a way that the identified differences will be used as a possible lines for the following innovations.

### **Methodic of the research and structure of the questioned enterprises**

For the data collection phase, their analysis and interpretation the method of questioning, through questionnaire, that comes out from method, elaborated by collective of associate professor Skalický from The University of West Bohemia in Pilsen by the work at project Leonardo da Vinci – U-SME Innovation under the name “Searching for the innovation opportunities and the work with innovations” (2001). This questionnaire contains questions that affect all the problematic fields of the Slovak wood-processing small and middle enterprises.

The small, middle and big producing wood-processing companies were questioned in number 106, and reached return was 59 % (63 companies), examined questionnaires were adjusted from questionnaires of the enterprises, of which enterprising activity runs less than 3 years (8 enterprises). To the innovation potential evaluation were included 55 questionnaires.

### **Internal innovativeness barriers consequent on managerial approach to the particular innovation potential fields in Slovak small and middle wood-processing enterprises**

For this group of enterprises by the research of innovation potential were recognized following critical fields of managers' approach to problematic of:



- strategic approach,
- accomplishment to innovation intention consideration,
- decision making within risk conditions,
- collecting of the innovation suggestions,
- cooperation with the external scientific institutions,
- innovation efficiency monitoring,
- innovation culture.

These are exactly the same critical fields, which were identified for complex of all wood-processing enterprises (including big companies).

Listed fields represent posts, in which the current situation of an enterprise will evolve presumably negatively, regarding to influence of the ineffective management used by enterprises' managers.

In the field of **strategic approach** to the enterprise managing, the managers think that it is necessary to rise in the first place from actual situation, and that the long-term plans have for them considerable meaning, because they are based on indeterminate environment evolvement predictions. The managers are obviously missing knowledge about importance of strategic planning, from vision and mission statement and following statement of strategic goals of the enterprise. Concurrently all the contemplated innovation activities should be evaluated in term of their correspondence with long-term goals of the enterprise. Especially in the cases of micro and small enterprises, strategic planning absent completely, the operative innovation activities are mostly performed, not able to ensure consequent quality increasing and levels of the innovation capacity, that could be basis for enterprise's long-term development goals accomplishment.

In the field of the **accomplishment to innovation intention consideration** advised, that it is more important to act operatively than to make long analyses. Mainly in this we consider failure of the most enterprises by their innovations penetration. In such a case their investments to innovations can be significant, though their economic return can be low, especially for the dissemination of the finance analyses, marketing studies and over-elaborated technical and constructional documentation. Mainly in the group of micro and small wood-processing enterprises, the management often misestimates the meaning of marketing and their innovations are often realized without determination of the future possible rentability.

**Decision making within risk conditions** is next critical field of the innovation potential increasing in the environment of the Slovak wood-processing enterprises. Most of their managers are convinced that by the decision making about innovations is not important to count with possible failure some of the decisions. To every innovation activity and its future success though influence many of more and less important risks, which should by preidentified as strictly as possible. The signification of the indi-

vidual risks and the probability of their occurrence can though be quantified through the medium of various methods (expert's evaluation, sensitivity analysis, statistical characteristics of the variability rate), about which though entrepreneurs and managers don't have necessary knowledge. Their determination would possibly help them by the generation of the most significant risks and consequently, by their occurrence, with the most effective elimination, whereby the higher rate of success probability of the many innovation activities, would be ensured, which in the current conditions often end with failure (identification, problem cognition – the most important assumption of its successful solving). By the decision making managers, mainly of the micro and small enterprises, misestimate facilities of the statement of the future possible states that would have influence to the result of their decisions (alternatives statement).

**Collecting of the innovation suggestions** is the last critical field of the questioned enterprises. Managers in their answers inclined to the opinion that written evidence of the innovation suggestion fills up much time and it is not effective. They are convinced that while the suggestion is good, it will carry through without special attention. Because of this they lose many of the possible innovation that can be first made by competition.

The approach of the managers to the problematic of the **cooperation with the external scientific institutions** is significantly disrupted by their confession that universities and research and others institutes, can't really help by the running of the small and middle enterprises. The cause of this state is in the insufficient awareness of the entrepreneurs and managers about cooperation possibilities, insufficient communication of the universities towards them. Discredit of the managers to the results of the scientific and research work, often stem from the conviction, that the contribution to their enterprises would be clearly theoretical, that means for the enterprise activity development almost none. We consider the starting point in aiming of the scientific and research institutions at the contacts establishment with the enterprising subjects, for their concrete problems solutions, for the gained practical knowledge application to their own scientific and research activities. Such a relation would be reciprocal contribution for the science and praxis in Slovakia, and it is very probable, that the approach of the managers to this cooperation would be significantly better.

Other critical field in the approach of the managers to the problematic is the **innovation effectiveness monitoring**, where the managers declared nonacquaintance of the suitable instruments for the innovation work performance and efficiency evaluation and unwillingness to evaluate innovation efficiency of their enterprise, because of its difficult quantification. For these reasons, the managers often consider their enterprise as an innovative; even when this just in low rate achieve its innovation potential. Mostly the managers of the micro and small enterprises can not see the meaning in their



innovation activities evaluation, what is substantial barrier to future innovation activities selection, on the basis of their antecedent experiences.

The field of the **innovation culture** is in environment of the researched enterprises – in the approach of their managers also incorrectly comprehended. These don't realize the employees' stimulation to the innovations significance and they are convinced that own initiative of the employees to the new suggestion generation is by them noncontrollable. It was also found, that the managers do not realize the motivating meaning of the communication, as they do not have need to familiarize their employees with the general strategy of the enterprise, whereby they would ensure their higher initiative by the innovation opportunities detection. Equally it would be required that the managers realize the meaning of the employee's motivation, because they will be initiative just then, when they feel personal contribution and involvement to the improvement in the enterprise run. Moreover, they do not realize that for their employees is not sufficient to be charged by precisely delimited assignment, but also by its relation to the strategic intention of the enterprise. Certain voids we can see also in manager's ignorance of their success consideration in the field of employee's motivation.

#### **Internal innovativeness barriers consequent on current real situation of the innovation potential fields in Slovak small and middle wood-processing enterprises**

According to the scores of the real states in particular fields, we can consider as the critical fields of Slovak small and middle wood-processing enterprises the following:

- cooperation with external scientific institutions,
- continuous education training,
- innovation culture,
- financing,
- accomplishment to innovation intention consideration,
- decision making within risk conditions,
- innovation efficiency monitoring,
- existence and observance of the system.

The most surprising finding is, that in researched enterprises the **strategic approach** is on a good level, but in understanding of his significance by enterprises managers belongs to the most critical fields. The reason is in, that the managers are accustomed from the last periods of time to long-term planning, but on the present time of fast changing conditions they don't realize his application. Even though, that in enterprises a system of strategic planning still exists, especially long-term plans deprecation by managers causes that stated strategic intentions are not composed in a meaning of their



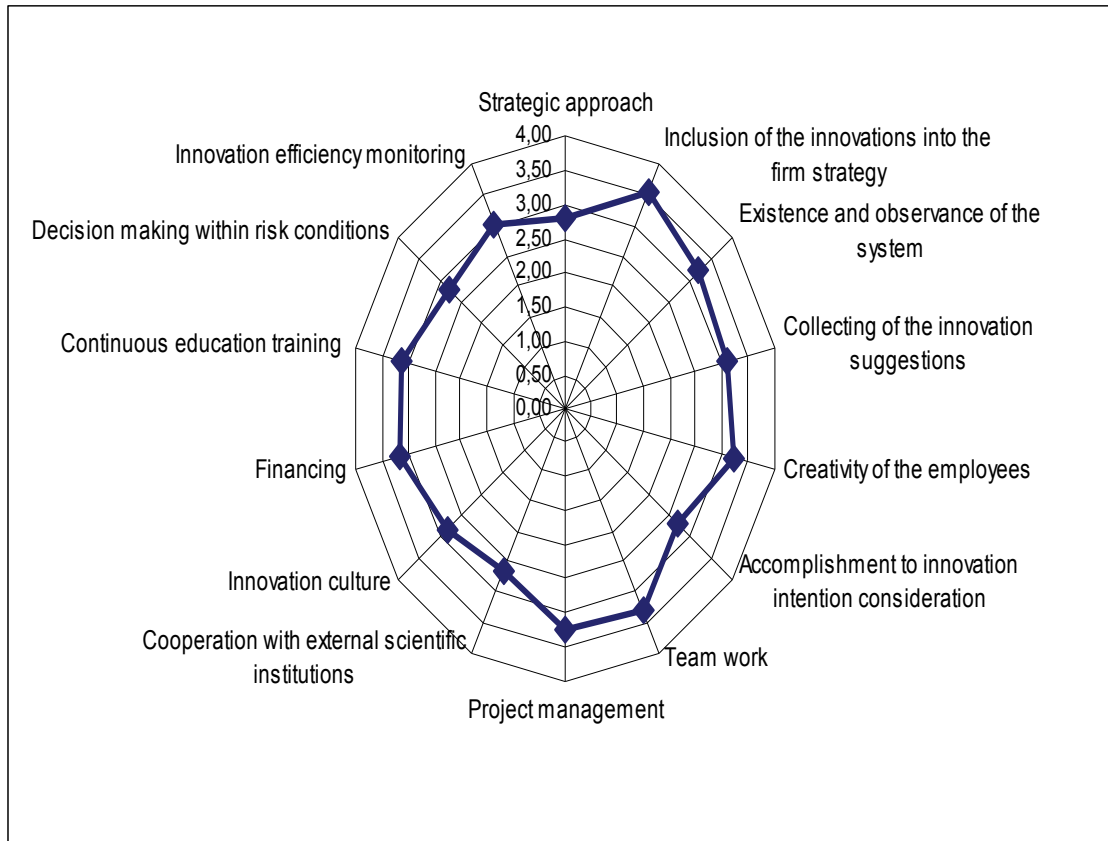
real achievement and justification in the future that means on the ground of possibilities assumption of their achievement.

Current state in the enterprises by the fields – **cooperation with external expert capacities, innovation culture, decision making within risk conditions and accomplishment to innovation intention consideration** responds to approach of managers to given problematic. In these fields as well as in the fields, which were evaluated as critical just in an approach to problematic, we recommend following possibilities of innovation potential increasing of the small and middle wood-processing enterprises:

- education activities for the enterprises managers in the fields: deciding in the risk conditions, importance of continuous education and creativity of employees and an evaluation of innovation intents.
- these activities should be initiated primarily by the universities, with strategic intention to make contacts with entrepreneurs and managers of enterprises, with an offer of solving their short-term and also long-term problems by diploma and dissertation thesis, also with cooperation by projects solving aimed at acquirement of financial support from EU. This way can be ensured long-term cooperation and bilateral gain for science-research and business environment (intention of Innovation strategy of Slovak republic 2006 -2013), as well as to ensure confidence trust increasing of businessmen and managers to results of science-research work of external scientific institutions.

As in the fields of continuous education training, financing, existence and observance of the system is better approach of managers to problematic than their real state on present time, is possible to predict certain improvement, which should show in these fields in the future.

In the other fields is necessary for their improvement to primarily change approach of enterprise managers to them (to increase qualification of managers, to improve their attitude and also their opinion to utility and importance of some methods and management approaches, to improve businessmen and managers informed ness about cooperation possibilities and financing).



Graph 1 Total innovation potential  
of Slovak wood-processing companies

## Conclusion

In the conditions of small and middle wood processing enterprises were identified following critical fields of their innovation potential:

- cooperation with external scientific institutions,
- accomplishment to innovation intention consideration,
- decision making within risk conditions,
- strategic approach,
- innovation efficiency monitoring,
- collecting of the innovation suggestions,
- financing.



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