



inFRes



Technological and economic barriers in innovation

Innovation is a key factor for the development and progress of a company in all sectors. In the forest technology sector, barriers and drivers that influence innovation activities and the diffusion of new products have not been studied extensively. Companies in this sector are mostly small and medium-sized (SME) enterprises, but typically sell their products on the world market. Their activities include the production of machine parts and even whole machines. Typically, these companies are located in rural areas and make an important contribution to the local labour market and the local economy and development. Their existence is essential also for the European Union.

In their development work, companies within the forest technology sector are facing barriers to innovation that can stop or delay the introduction of new products and concepts into practice. Even after introduction, some new products succeed

while others fail. Companies assess the performance of an innovation using specific criteria that are related to customer relations, product development process, financial performance, and company benefit. Customer relations i.e. customer satisfaction, high product performance level and meeting of quality guidelines are the most important. Company benefit (e.g. growth of demand of the products of the company) also seems to be prioritized.

The most important barrier to innovation is a lack of financing, especially for new high-risk projects. This is further supported by the fact that the forest technology sector is a small market and that development costs are high. A lack of skilled engineers is occasionally seen as a barrier as well.

The most important solution to overcoming barriers seems to be collaborations with customers, both to get a feel for what customers want, but also to better introduce new technology in a sometimes reluctant and conservative world. Furthermore, collaborations with universities and research institutes are becoming more important, as those will help unlock additional funding for the development of new innovations.

Drivers of innovations are tied to competitiveness (to stay on top, offer the best products, stay one step ahead of competitors). A genuine “passionate” interest in product development seems to be an important driver as well.

According to experience from harvesting operations, users and scientists identify innovations that increase the productivity of the operations, reduce the cost and are flexible (can work in most conditions) as successful. On the other hand, innovations that are poorly marketed, require complicated logistics, can only be used in specific conditions and have a low productivity are considered to be a failure.



Contact

Dimitris Athanassiadis
SLU

Tel: +46 907 868 304

Email: Dimitris.Athanassiadis@slu.se



INFRES Newsletter 10 | August 2015

The research of the INFRES project has received funding from the European Union Seventh Framework Programme (FP7/2012-2015) under grant agreement n°311881. The sole responsibility for the content of this flyer lies with the authors. It does not necessarily reflect the opinion of the European Communities. The European Commission is not responsible for any use that may be made of the information contained therein.