New business models and digitalization in Finnish wood products industry



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Challenges in the product-driven industry

Digitalization has challenged the traditional business models of the Finnish wood products industry. In this study we aim to find out, how the industry has responded and how do the companies think about the future and possible barriers in adopting digital business models.

We have first interviewed 13 companies and industry representatives to build an online questionnaire for companies for the second stage. The main theoretical framework is diffusion theory by Rogers (2003)*. The analysis is based on altogether 31 responses. Despite the increasing interest in open innovation research, most studies have focused on large technology-intensive companies. Our study looks for insights on impacts of digitalization and business models in micro and SMEs.

Making use of the digital platforms

Digital tools in marketing were used by 2/3 of the respondents, but only a handful of companies were actually doing sales online. Administrative and production tools were more common, but not widely in use.

The main body of respondents considered themselves as an owner or an entrepreneur. Roughly 1/3 of them considered that commonly argued pros of digitalization like cost savings, market reach, multi-channeling and customer tracking should not be taken as granted in the industry concerned. However, a solid support was found for reaching new customers with the help of digital platforms.

Unlike producers located at the lower and upper end of the production chain, manufacturers of intermediary products (eg. building elements, doors and windows) were more pessimistic concerning the usefulness of digital platforms.

Expected changes in B2C & B2B markets

The expected changes are more significant for businesses in B2B than those in B2C markets.

Online shopping is an important trend in both environments, but multichannel shopping is not yet well identified.

The companies appear to rely on their competitiveness to prevail abroad (global markets) and don't expect global competitors to become a substantial threat to their home markets.

Conclusion

Penetration of digitalization was found weak in Finnish small-scale wood products companies. The resource-scarce industry could make use of digital business models based on open innovation to develop joint competitiveness.

Number of companies Annual turnover Employees The average size of a corabout 2 million euro.	3 000 5 600 m€ 28 000 npany is 9 en	nployees and turnover	١
Main products	Share of turnover	Exported	ı
Sawn or planed wood Plywood or boards	52 % 12 %	50 % 50 %	

12 %

17 %

Q6: Digital tools currently in use

Wooden houses

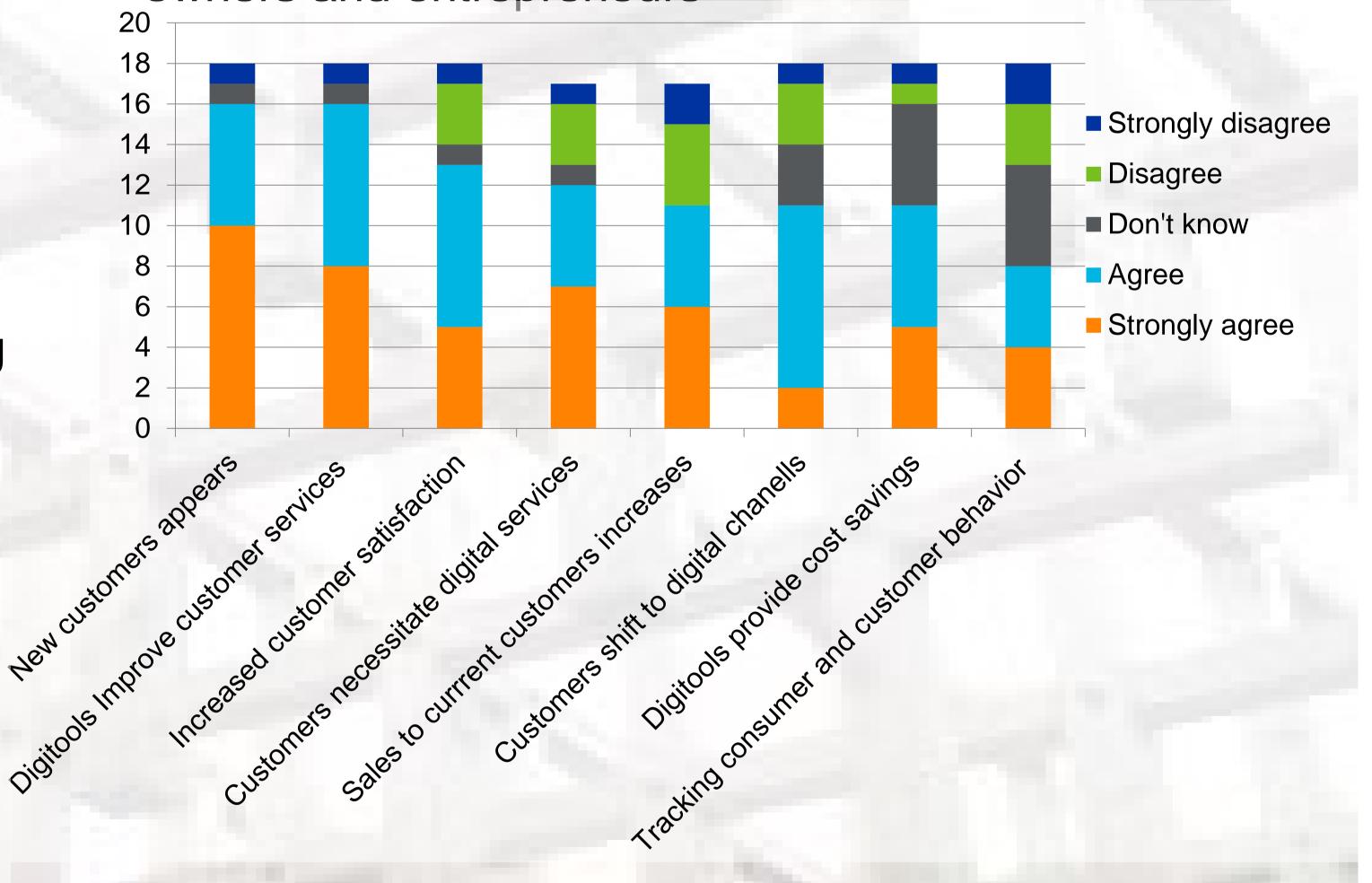
Engineered wood

(A summary)	Count	Share
Marketing	22	71 %
eCommerce	4	13 %
Financial Administration	9	29 %
Production	14	45 %
No response	9	29 %
Responses	22	71 %

Q7: Advantages of digitalization as currently perceived by owners and entrepreneurs

16 %

30 %



Q11&12: The expected changes due to digitalization in different business environments*



^{*} Rogers, E.M. (2003). Diffusion of innovations. 5th edition New York. Free Press