

Slovenian Forest Based Industry and Smart Specialization Strategies: Sustainable Competitive Advantage Analysis in a Triple Helix Framework

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Slovenia forest-wood product chain has been struggling due to low value-added products and decreasing export competitiveness. In such situation, the necessity of sustainable forest based product development's effort has to be taken into consideration. Effective interactions between and within triple helix institutional actors; university-industry-public is fundamental as they have to agree explicitly on the same issues, share their respective motives and together develop innovative solutions to the issue. Triple helix framework is supporting knowledge creation with a fine-tuning of communications regardless different value systems in the background. Continuous evaluation towards organizational competencies and resources guides organizations in striving for sustainable competitive advantage.

This study demonstrates the application of Sense and Respond (S&R) analytical models in the analysis of interactions between and within forest based industry of triple helix institutional actors; university-industry-public in Slovenia. The model evaluates the distribution of organizational resources based on four competitive priorities; quality, cost, time and flexibility into their operations strategy. It assists in identifying critical attributes with a worse trend development in order to enhance operational competitiveness as well as innovation capabilities of the industry by making strategic adjustment accordingly. The result of the analysis reveals that most of the interactions are emphasized on quality in resource allocations. Critical attributes with worse trend development that potentially drawback the effort to transform operation capabilities into competitive advantage has been found in all interactions. The attributes are further compressed into six main categories based on the similarities found within them. The current turbulent business environment demands organizations that are not only competing on their own capabilities but together with other members of the network to generate a value chain synergetic impact to gain competitive advantage. This study is supporting this effort by highlighting the areas for improvement in business processes and organizational routines among forest based industry of triple helix institutional actors in Slovenia to enhance their operational competitiveness.

Keywords: competitive advantage, operations strategy, competitive priorities, sense and respond, triple helix, interactions