Knowledge sharing in high-tech industry

How to foster inter-organisational knowledge sharing on the Knowledge Sharing Centre-platform

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Introduction

In today's era where international competition is fierce, organisations are more dependent on their supply chain to conquer, maintain and improve their marketing position. To take the sector to a higher level it is necessary to exchange knowledge. Knowledge Sharing Centre (KSC) initiated a knowledge sharing platform to connect organisations in the design and manufacturing industry in a way to enhance the innovative strength of the high-tech industry.

Scientific research has demonstrated the contribution of inter-organisational knowledge sharing to organisations' competitiveness, performance and innovation capacity [1,2,3,4]. It shows that inter-organisational trust and absorptive capacity are crucial preconditions for establishing organisational collaborations and strategic alliances [2,5]. However, initiating a network of diverging organisations that exchange knowledge is quite different and knowledge sharing in networks has been researched much less often. The aim of this research is to gain a better understanding of the benefits and risks the organisations perceive with inter-organisational knowledge sharing and how this impacts their considerations for participating in the KSC-platform.

How can KSC support organisations in the high-tech industry to practice and participate in inter-organisational knowledge sharing on their knowledge sharing platform?

Method

Semi-structured interviews were conducted with key executive and management positions at 18 organisations (shown here below) in the Dutch high-tech industry to collect in-depth data. This data is analysed through the Thematic Analysis method [6], in which the interview data is codified and themes in these codes were identified. Coding frequency within these themes provides insight into which benefits and risks are perceived the most with knowledge sharing between organisations, while statement of interviewees reflect the importance of deterministic factors of trust and absorptive capacity.

Results

Organisations expressed concerns with uncertainties regarding the direction, decision making, costs and actual benefits of the platform. Yet, if cost of participation does not exceed certain limits, organisations mainly consider benefits and risks in their decisions to participate. The perceived benefits are access to more in-depth knowledge, the possibility to expand and strengthen their relations, direct commercial value and standardisation of definitions in the industry (Figure 1).
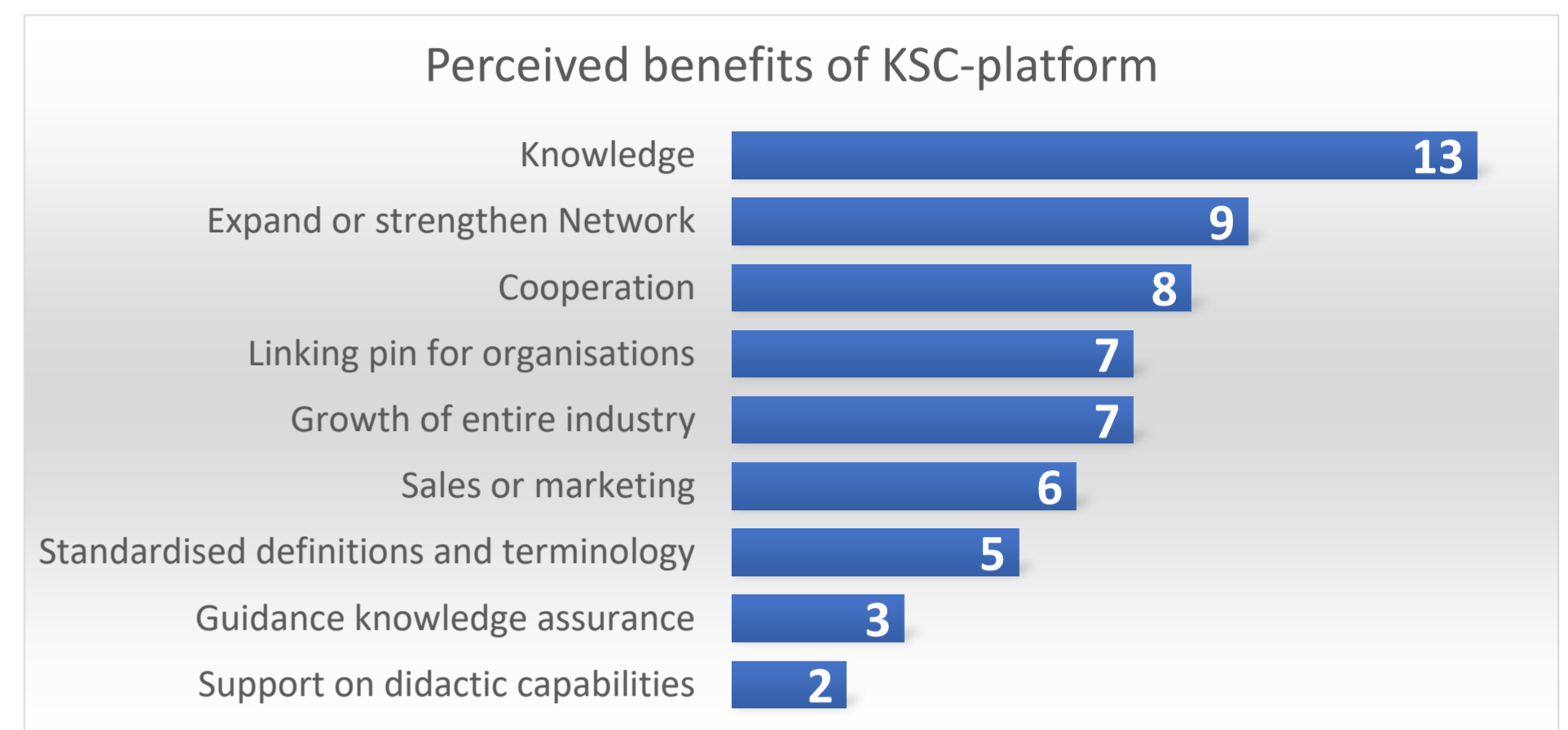
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Figure 1: Perceived benefits of KSC-platform numbered by code frequency

Risks organisations associate with inter-organisational knowledge sharing the most are: providing competition with knowledge and thus losing market position, leakage of knowledge that is not meant to be shared and the risk that knowledge being shared on the platform is incorrect, obsolete or low quality. Organisations might not participate on the platform when they are expected to share intellectual property, costs are too high, there is no mutual knowledge exchange or they experience unfair sharing or opportunistic behaviour.
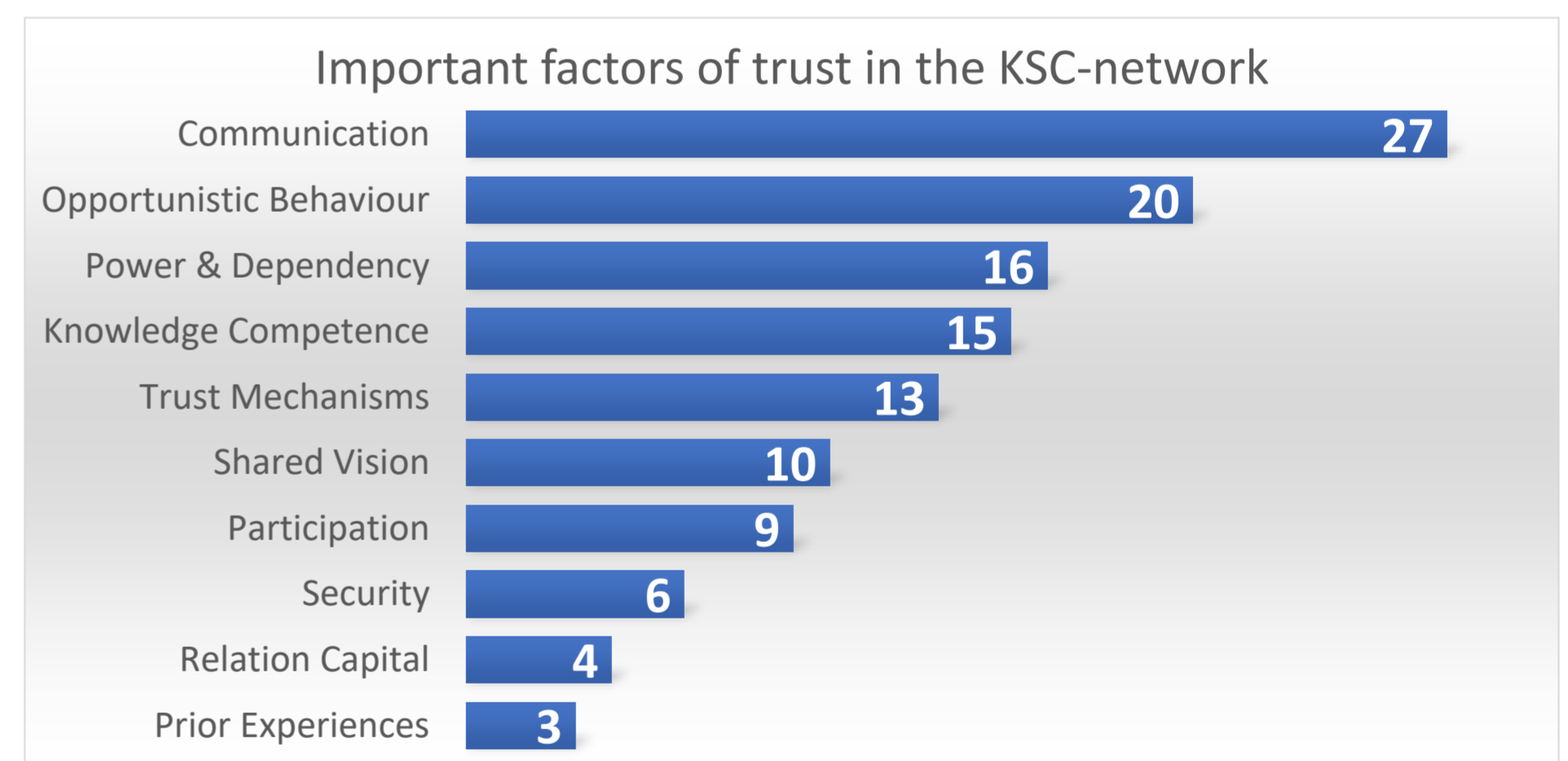

Figure 2: Important factors of inter-organisational trust in the KSC-network numbered by code frequency

While their importance varies, all deterministic factors for inter-organisational trust as identified in the theoretical framework are found to also determine trust on a network level (Figure 2).

Discussion

All organisations agreed on the necessity of inter-organisational trust for knowledge sharing between organisations and expressed it is too early to discuss absorption of knowledge, indicating that inter-organisational trust is more important in early phases of network based knowledge sharing initiatives than absorptive capacity. Future research can aim to identify and investigate different stages of knowledge sharing network initiatives.

KSC can support organisations by more communication to address uncertainties, establishing an open and trusted community of organisations and creating an accessible knowledge sharing platform.

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