

## **Effects of Tacit and Explicit Knowledge Signaling on Perceived Product Quality**

The statistical quality literature has a long tradition in considering people, methods, and products as main quality categories (Evans & Lindsay, 2008). The Total Quality Management (TQM) paradigm has primarily looked at such dimensions of quality as reliability, durability, aesthetics, conformance, or features (Sebastianelli & Tamimi, 2002; Zhang, 2001). However, as we move away from individual product parts and come closer to the finished product as presented to the end consumer, physical as well as symbolic presentation of the product (e.g. advertising, product packaging and branding) open a channel of dialectic communication between the seller and the consumer. More specifically, product packaging provides an opportunity for sale-independent, default-independent signaling (Kirmani and Rao, 2000). In order to signal their ability to achieve high product quality, sellers signal their possession of the necessary knowledge to achieve that quality. In this study we explore two strategies for signaling product quality through knowledge references. These include making a reference to tacit or explicit knowledge (Nonaka, 1991).

In recent years, visualizations of process control and quality assurance through process flow diagrams, has become more prevalent on product packaging. This form of signaling of explicit knowledge on the part of the seller is a divergence from the more mainstream signaling of tacit knowledge on product quality seen in most product packaging. Advertising based upon tacit knowledge signaling provides the consumer with mental imagery that implies that product quality dimensions are difficult to express in written terms or to codify. The imagery leads to the belief that the knowledge is highly personal, known only by a select few individuals and conduces the perception of higher quality through exclusivity of that knowledge. On the other hand, signaling of explicit knowledge on product quality provides the consumer with a visual representation of the step-by-step process the seller follows in order to ensure a high quality product. The internal quality assurance process steps are no longer treated as precious trade secrets. Instead, the process appears to be fully disclosed, implying that the consumer is now elevated to the status of a seller's partner who co-creates product quality. In this study we investigate the effects of such tacit and explicit knowledge signaling on product quality as perceived by the consumer. In particular, we seek to answer the following research questions:

- RQ1. Does explicit knowledge signaling influence the perceived quality of a product in the minds of the consumer?
- RQ2. Does tacit knowledge signaling influence the perceived quality of a product in the minds of the consumer?
- RQ3. Does explicit knowledge signaling have a greater influence upon the perceived quality of a product in the minds of the consumer than tacit signaling?

Our proposed model is shown on Figure 1. In order to empirically validate our model, we designed a survey of students at a large public university. We believe that the findings from this research will provide several contributions to the current body of knowledge. The findings regarding signaling of tacit and explicit knowledge of product quality can be applied to a variety of contexts. The findings of this research study can be leveraged to further the understanding of consumer perceptions of process flows and their underlying effect on product quality. Further

research into the interactions of tacit and explicit visual signaling and perceived product quality can be expanded to include other constructs including perceived product value.

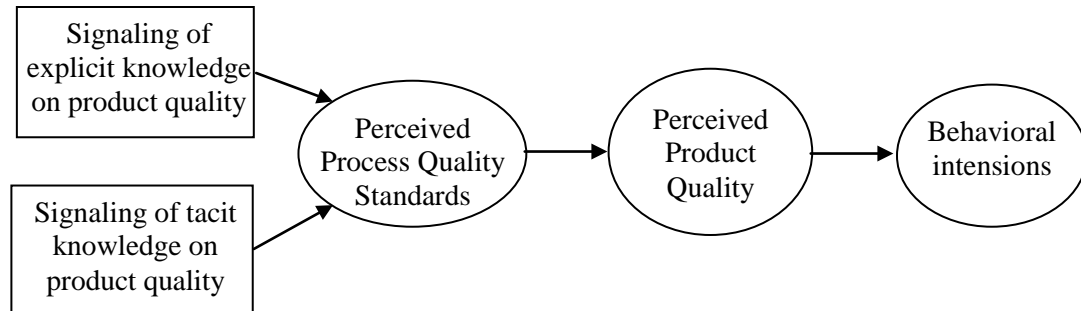


Figure 1. Proposed model for the effect of signaling of explicit and tacit knowledge on perceived process quality standards and perceived product quality.

#### References

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