## Control for Quality: Defining Skateboard Quality

By Cameron Beveridge The key to a successful project is based on the theory of 'The Iron Triangle'. The Iron Triangle represents the three identifiable factors that contribute to a successful project. 'Quality' is one of the 3 features of The Iron Cross (Atkinson, 1999). There are numerous adaptations of the definition of 'quality' depending on the subject, whether it is a product or a service. In relation to project management, the most widely used definition is defined by ISO9000 (Moody, 2005), stating that quality is the expectation of certain characteristics are fulfilled by the product or service. Although many theorists have attempted to define quality, there are issues surrounding the task. The definition of 'quality' often refers to the different approaches to defining different products, services and information (Reeves and Bednar, 1994). Examining the various definitions of quality, we are able to define what constitutes a quality skateboard. When looking for a quality skateboard we must acknowledge the manufacturing of the product, the practicality of the product and the value of the product when defining what a quality skateboard is.

*The ISO9000 definition* is broadly used in relation to quality. Where certain characteristics of a product must be fulfilled to deemed of quality. This definition refers to quality based on functionality (Yates & Aniftos, 1997). In relation to skateboards, a quality product by this definition requires a skateboard to be capable of two things, rolling and turning. Although these are functional characteristics of a skateboard, it does not consider other elements such as durability, reliability and user perception. This definition does not consider other major aspects of a quality skateboard.

Before defining what, a quality skateboard is we must define what approach to quality skateboards fall under. Using Garvin's 5 (*Garvin, 1984*) approach model we can identify what quality from various viewpoints. Several of the approaches can be used to define what a quality skateboard is. From a supplier/manufacturers perspective, the intended approach would be leaning towards the value-based approach and manufactured based approach. This draws focus on the cost and quality of materials used on the production of a skateboard. Where lower costing skateboards would use inferior materials to meet cost requirements. These two approaches focus on the idea that they are able to create a functional product that is desirable to consumers at a low cost. In an industry where skateboards differ slightly in the manufacturing process, user-approach to quality should be considered and what they perceive as a quality board (perceived aesthetics). (Garvin, 1988) A skateboard cannot take on the product-based approach to quality as skateboards aren't a product that can be measured or defined in terms quality. There are no tests that can accurately measure the durability and capabilities of a skateboard. Similarly, the transcendent approach cannot be applied to

skateboards as there is almost no specific feature that makes skateboards unique in terms of design between different manufacturers.

Examining Garvin's 8D model of product quality, Garvin (1987) defines quality based on a series of dimensions; performance, features, reliability, conformance, durability, serviceability, durability, serviceability, aesthetics and perceived quality. Garvin's 8D model is used in preference over the 'ServQual Index' as skateboards are a product of quality rather than a service of quality (Parasuraman, Zeithaml and Berry, 1994). In relation to skateboards, the performance aspect of Garvin's dimensions, for a skateboard to be of quality, the product must be able to operate in the way it is intended to. To meet the performance standard of quality, the board must be able to roll sufficiently when force is applied. The other performance aspect is that the board has the ability to turn where pressure is applied to either side. These two performance aspects must be met for a skateboard to be deemed of a quality standard.

The features of the board relate to the secondary characteristic, that aid the basic function of the board. The secondary characteristics of a skateboard would more notably be the distinct shape of the board and the construction process. The shape of the board aids in the mobility and specific functioning of the board. The longer and more narrow boards serve the function of mobility and speed, whereas shorter boards with tapered nose and tails are designed towards users more involved with 'tricks'. Depending on the function of the board, helps define what features are perceived as being a quality feature.

Skateboards in relation to durability and reliability arises from the manufacturing process. Skateboards are a product that are expected to deteriorate with time. The duration of a lasting product relies heavily on the user and the materials used in production. Based on Garvin's dimensions serviceability is a dimension that cannot be met. When a board breaks, or suffers minimal ware or tare there is no service to repair the product. Only the wheels maybe serviced, but the board it-self cannot.

Aesthetics is not a significant component to the quality of a skateboard based on Garvin's model, because it serves no functional purpose to the product. Where a product may have a skilled artist's, work printed on the skateboard compared to a board showing natural wood-grain. Aesthetics does not play a role in quality in terms of functionality. Perceived quality however does play a role in skateboard quality as viewed by the consumer. Where products are effectively endorsed by professionals or advertising has an effect on what a quality product may look like, despite the constituents in the construction of a skateboard across various manufacturers varies slightly in the process. Based on the various definitions and theories of quality, skateboard quality comes down to the manufacturing and user based approach to quality as well as the functionality. Manufacturing is a key element in terms of constructing a quality product that draws focus on the performance, features, reliability, conformance and durability. Whereas perceived and quality by the user plays another significant role in the quality of a skateboard based on the shape and graphic design as well as endorsements by professionals.

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