time-based competition¹

Peter Dempsey, Edward Heard, and Tanya Sammut-Bonnici

DEFINITION

Time-based competition can be defined as the strategic advantage derived from making the order-to-delivery cycle more compact, efficient, and cost effective for both the supplier and the consumer. It helps to compress time in the whole organization, across decision flows, procurement, engineering, manufacturing, order processing, distribution, and customer processes. The time-based advantages arise from demand conditions. When markets and industries are experiencing rapid technological change, the product life cycle of any one product is short and therefore the whole profit-earning horizon is compressed. Operational time in the value change would require a strategic review in order to cope with time compression and the demand-based market pressure.

CONCEPTUAL OVERVIEW

Responsiveness. Time-based competitive action analyses each element of time used and questions the right to use it. The focus is on responsiveness, which refers to the ability to satisfy customer requirements quicker than one's competitors. Satisfying customer requirements has a variety of interpretations, such as filling an order from shelf stock, assembling to requirements, engineering to order, and bringing a new product to market. Short cycle management incorporates numerous "Just In Time," "Total Quality Control," and "Total Productive Maintenance Management" principles selected to complement one another. Those principles can be used to dramatically improve competitiveness by simultaneously improving processing cycle times, cost, quality, and capital requirements. The operational principles employed all share cycle time (elapsed time) as the common measure of performance.

Cost. It is important to establish the relationship between time and money. The fact is that profit is typically reduced by one-third for every 6 months by which a capital goods

product is late to market. A computer game may have only a 6-month life anyway, so time is even more vital. Companies that compress time out of their business cycle or pipeline understand that, throughout it, materials, direct labor, handling and transportation, interest, and overheads contribute to overall costs. The longer the business cycle takes, the greater the costs are and the slower is the response to the customer. The trick is to speed up the flow of all events. The process flow consists of all operations of the business, the information flow consists of all data in the business, and the decision flow consists of all actions taken by people in the business.

Quality. The relationship between time and quality is also vital. Doing everything faster means doing this right the first time. One cannot afford the time for rework. Quality is inextricably linked to customer satisfaction, which is a number one requirement of time compression management. Achieving the required quality standard first time does not mean rushing the job and cutting time out. Time compression management may mean deliberately taking longer on tricky aspects in order to ensure that "getting it right the first time" is achieved. High-quality, low-cost, products are becoming simply the price of admission to some markets. Likewise, customers are beginning to think in terms of total enterprise cost, quality, and responsiveness. These changing needs are on a conflicting course with current and past trends in traditional manufacturing enterprises. Meeting this challenge depends on an enterprise's ability to identify and shorten the above three primary business cycles of new product introduction, the value-adding pipeline, and customer service.

CRITICAL COMMENTARY

Products with relatively short life cycles (such technology gadgets, fashion clothing, cosmetics, and toys) carry a high cost of obsolescence, and time-based response becomes critical to competition. However, some approaches to shortening cycle times may have a negative impact on a company's level of competitive advantage. Recent research shows that, over the previous two decades, the development in international commerce and the relocation of multinational

2 time-based competition

production firms have created global supply chains with lengthier response times. Supply chains have encountered operational boundaries to time-based competition, where the cost of more rapid production and faster delivery is not justified by the proportional savings in inventory and the increase in sales revenues. A study of the effect of time in proportion to unit product cost in supply chains would make an interesting topic for further research.

ENDNOTES

¹ Original article by Peter Dempsey and Edward Heard. Updated by Tanya Sammut-Bonnici.

See also advantage matrix; barriers to entry and exit; business process reengineering; competitive advantage; cost strategies; first mover advantage; lean

Bibliography

- Blackburn, J. (2012) Valuing time in supply chains: establishing limits of time-based competition. *Journal of Operations Management*, 30 (5), 396–405.
- Liming Liu, L., Parlar, M. and Zhu, S.X. (2007) Pricing and lead time decisions in decentralized supply chains. *Management Science*, 53 (5), 713–725.
- Shang, W. and Liu, L. (2011) Promised delivery time and capacity games in time-based competition. *Manage-ment Science*, 57 (3), 599–610.
- Sammut-Bonnici, T. and McGee, J. (2002) Network strategies for the new economy. *European Business Journal*, 14, 174–185.
- Stalk, G. and Hout, T.M. (2003) Competing Against Time: How Time-Based Competition is Reshaping Global Markets, Simon and Schuster.