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ABSTRACT The acceleration of change necessitates strategies to control time, considered not only as a variable that influences the temporal evolution of phenomena but as one that directly influences phenomena itself. This study tries to present the logic of time compression and time to market, as well as the main instruments for the formulation of time-based strategies, not only by observing how the value of time is perceived as a contraction of production and distribution lead times but also by considering the choice of the most opportune moment to start a business and introduce (or withdraw) a new product. Starting from a discussion of time-based competition managerial approaches, this study develops a theoretical framework showing different time-based methodologies (JIT, MRP, OPT, FMS, PERT, HSM) that help management to adopt time-based strategies. It also puts forward a taxonomy of time-based strategies as well as a logical strategic path to time value.						Frequently Asked Questions	
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References [1] H. I. Ansoff, " Corporate Strategy: An Analytic Approach to Business Policy for Growth and Expansion," McGraw-Hill, Canada, 1965.							
[2]	D. E. Hussey, " How to Manage Organisational Change," Kogan Page Ltd., London, 1995.						
[3]	M. E. Porter Boston, 2008	r, " On Competition, U 3.	odated and Expanded	Edition," Harvard Bus	iness School Press,		
[4]	N. Rich and Supplier Ass No. 3-4, 199	P. Hines, " Supply-Ch ociation," Internationa 7, pp. 210-225. doi:10	ain Management and Il Journal of Physical Dis 1108/09600039710170	Time-Based Competitio stribution & Logistics Ma 0584	n: The Role of the anagement, Vol. 27,		
[5]	J. Abegglen a	J. Abegglen and G. Stalk, "Kaisha, The Japanese corporation," Basic Books, New York, 1985.					
[6]	G. Jr. Stalk, "Time: The Next Source of Competitive Advantage," Harvard Business Review, Vol. 66, July- August 1988, pp. 41-51.						
[7]	R. Towill, " Information	R. Towill, " Time Compression and Supply Chain Management — A Guided Tour," Logistics Information Management, Vol. 9, No. 6, 1996, pp. 41– 53. doi: 10.1108/09576059610148694					
[8]	R. Mason-Jones and D. R. Towill, "Total Cycle Time Compression and the Agile Supply Chain," International Journal of Production Economics, Vol. 62, No. 1, 1999, pp. 61-73. doi:10.1016/S0925- 5273(98)00221-7						

[9] K. B. Clark and T. Fujimoto, " Product Development Performance: Strategy, Organization, and Management in the World Auto Industry," Harvard Business School Press, Boston, MA, 1991.

- K. M. Eisenhardt and J. A. Martin, "Dynamic Capabilities: What Are They?" Strategic Management Journal, Vol. 21, No. 10-11, 2000, pp. 1105-1121. doi:10.1002/1097-0266(200010/11) 21:10/11<1105::AID-SMJ133>3.0.CO; 2-E
- [11] G. Stalk and T. M. Hout, " Competing Against Time," Free Press, New York, NY, 1990.
- [12] A. P. de Geus, " Planning As Learning," Harvard Business Review, March-April 1988, pp. 70-74.
- [13] A. De Toni and A. Meneghetti, "Traditional and Innovative Paths Towards Time-Based Competition," International Journal of Production Economics, Vol. 66, No. 3, 2000, pp. 255-268. doi: 10.1016/S0925-5273(99)00140-1
- [14] C. P. McLaughlin and J. A. Fitzsimmons, "Strategies for Globalizing Service Operations," International Journal of Service Industry Management, Vol. 7, No. 4, 1996, pp. 43-57. doi:10.1108/09564239610129940
- [15] D. Hall and J. Jackson, " Speeding Up. New Product Development. JIT Can Help Put Products in Customer Hand Faster," Management Accounting, Vol. 74, No. 4, 1992, pp. 32-36.
- [16] M. M. Helms and L. P. Ettkin, "Time-Based Competitiveness: A Strategic perspective," Competitiveness Review, Vol. 10, No. 2, 2000, pp. 1-14.
- [17] G. Taguchi and D. Clausing, "Robust Quality," Harvard Business Review, Vol. 68, No. 1, 1990, pp. 65-75.
- [18] A. K. Bhattacharya, J. Jay and A. D. Walton, "Product Market, Turbulence and Time Compression: Three Dimensions of an Integrated Approach to Manufacturing System Design," International Journal of Operations & Production Management, Vol. 16, No. 9, 1996, pp. 34-47. doi:10.1108/01443579610125570
- [19] P. Kotler and J. Stonich, "Turbo Marketing Through Time Compression," The Journal of Business Strategy, Vol. 43, No. 10, 1991, pp. 24-29. doi:10.1108/eb039439
- [20] T. Ohno, "The Toyota Production System; Beyond Large-Scale Production," Productivity Press, Portland, OR, 1988.
- [21] J. K. Liker and J. M. Morgan, "The Toyota Way in Services: The Case of Lean Product Development," Academy of Management Perspectives, Vol. 20, No. 2, 2006, pp. 5-20. doi:10.5465/AMP.2006.20591002
- [22] C. A. Ptak, "MRP, MRPII, OPT, JIT, and CIM. Succession, Evolution, or Necessary Combination," Production and Inventory Management Journal, Second Quarter, 1991, pp. 7-11.
- [23] W. C. Benton and H. Shin, "Manufacturing Planning and Control: The Evolution of MRP and JIT Integration," European Journal of Operational Research, Vol. 110, No. 3, 1998, pp. 411-440. doi:10.1016/S0377-2217(98)00080-0
- [24] W. Jiang and J. Han, "The Methods of Improving the Manufacturing Resource Planning (MRP II) in ERP," International Conference on Computer Engineering and Technology, Vol. 1, 2009, pp. 383-389. doi:10.1109/ICCET.2009.18
- [25] A. Neely, " Measuring Performance: The Operations Management Perspectives," In: A. Nelley Ed., Business performance measurement. Unifying theory and integrating practice, 2nd Edition, Cambridge University Press, Cambridge, 2007, pp. 64-81.
- [26] R. W. Schmenner, " Production/Operations Management: From the Inside Out," 5th Edition, Prentice-Hall, Englewood Cliffs, NJ, 1993.
- [27] R. I. Levin and C. A. Kirkpatrick, " Planning and Control with PERT," McGraw-Hill, New York, NY, 1966.
- [28] M. L. Pinedo, " Planning and Scheduling in Manufacturing and Services," 2nd Edition, Springer, New York, 2009. doi:10.1007/978-1-4419-0910-7
- [29] G. Tuttle, "High-Speed Management and New Product Development," In: S. S. King and D.P. Cushman, Eds., High-speed management and organizational communication in the 1990s, State University of New York Press, Albany, 1994, pp. 195-218.
- [30] J. Chen and N. Zhang, "Customer Incentives in Time-Based Environment," Service Enterprise Integration Integrated Series in Information Systems, Vol. 16, 2007, pp. 103-129
- [31] J. D. Blackburn, "Time-Based Competition: The Next Battleground in American Manufacturing,"

Business One Irwin, Homewood, IL, 1991.

- [32] S. Hum and H. Sim, "Time-Based Competition: Literature Review and Implications for Modeling," International Journal of Operations and Production Management, Vol. 16, No. 1, 1996, pp. 75-90. doi:10.1108/01443579610106373
- [33] M. Hiraiwa and K. Nakade, "Periodicity of Cycle Time in a U-Shaped Production Line with Heterogeneous Workers under Carousel Allocation," Journal of Service Science & Management, Vol. 2, 2009, pp. 265-269
- [34] C. D. J. Waters, " Global Logistics: New Directions in Supply Chain Management," Kogan Page, London, 2007.
- [35] G. Plenert, "Focusing Material Requirements Planning (MRP) Towards Performance," European Journal of Operational Research, Vol. 119, No. 1, 1999, pp. 91-99. doi:10.1016/S0377-2217(98) 00339-7
- [36] T. G. Schmitt, "Resolving Uncertainty in Manufacturing Systems," Journal of Operations Management, Vol. 4, No. 4, 1984, pp. 331-345. doi:10.1016/0272-6963(84)90020-2
- [37] E. L. Appleton, "How to Survive ERP," Datamation, Vol. 43, No. 3, 1997, pp. 50-53.
- [38] O. W., Wight, "Manufacturing Resource Planning: MRP II: Unlocking America' s Productivity Potential," CBI, Boston, MA, 1995.
- [39] F. R. Jacobs, " The OPT Scheduling System: A Review of a New Production Scheduling System," Production and Inventory Management, Vol. 24, No. 3, 1983, pp. 47-51.
- [40] E. M. Goldratt and J. Cox, " The Goal: A Process of Ongoing Improvement," North River Press, New York, NY, 1986.
- [41] H. Boer and K. Krabbendam, "Organizing for Manufacturing Innovation. The case of Flexible Manufacturing Systems," International Journal of Operations & Production Management, Vol. 12, No. 7-8, 1992, pp. 41-56. doi:10.1108/EUM000000001302
- [42] A. Kusiak, "Flexible Manufacturing Systems. Methods and Studies," North-Holland, Amsterdam, 1986.
- [43] A. Genus, "Flexible Strategic Management," Chapman & Hall, London, 1995.
- [44] J. D. Goldhar, M. Jelinek and T. W. Schlie, "Flexibility and competitive Advantage Manufacturing Becomes a Service Business," International Journal of Technology Management, Vol. 6, No. 3-4, 2009, pp. 243-259
- [45] J. A. Buzacott and D. D. Yao, "Flexible Manufacturing Systems: A Review of Analytical Models," Management Science, Vol. 32, No. 7, 1986, pp. 890-905. doi:10.1287/mnsc.32.7.890
- [46] L. R. Lamberson and R. R. Hocking, "Optimum Time Compression in Project Scheduling," Management Science, Vol. 16, No. 10, 1970.
- [47] R. D. Archibald, " Managing High-Technology Programs and Projects, John Wiley & Sons, New Jersey, NJ, 2003.
- [48] J. E. Jr. Kelley and M. R. Walker, "Critical-Path Planning and Scheduling," Proceedings of the Eastern Joint Computer Conference, Boston, Mass, 1-3 December 1959, pp. 160-173.
- [49] E. Conde, " A Minmax Regret Approach to the Critical Path Method with Task Interval Times," European Journal of Operational Research, Vol. 197, No. 1, 2009, pp. 235-242. doi:10.1016/j.ejor.2008.06.022
- [50] Z. Cemal and ?. Mehtap, " A Field Research on the Relationship Between Strategic Decision-Making Speed and Innovation Performance in the Case of Turkish Large- Scale Firms," Management Decision, Vol. 46, No. 5, 2008 pp.709-724. doi:10.1108/00251740810873473
- [51] S. S. King and D. P. Cushman, " Communication and High-Speed Management," State University of New York Press, Albany, 1995.
- [52] R. I. Winner, J. P. Penell, H.E. Bertrand and M. G. Slusarczuk, " The role of concurrent engineering in weapon systems acquisition," IDA Report, 1988.
- [53] S. Evans, " Implementation: common failure modes and success factor", in: H.R. Parsaei and W.G.

Sullivan, Eds., Concurrent engineering: contemporary issues and modern design tools, Chapman & Hall, London, 1993, pp. 42-60.

- [54] H. H. Jo, H. R. Parsaei and W. G. Sullivan, "Principles of concurrent engineering," in: H. R. Parsaei and W. G. Sullivan, Eds., Concurrent engineering: contemporary issues and modern design tools, Chapman & Hall, London, 1993, pp. 3-23.
- [55] T. Arai, T. Hara and Y. Shimomura, "Scientific Approach to Services: What is the Design of Services?," Manufacturing Systems and Technologies for the New Frontier, Part 1, 2008, pp. 25-30. doi:10.1007/978-1-84800-267-8_6
- [56] J.A. Robbins, " Simultaneous engineering for new product development: manufacturing applications," John Wiley & Sons, New York, NY, 2000.
- [57] M. Yoshimura, "Product optimization in simultaneous engineering", in U. Roy and J. M. Usher, Eds., Simultaneous engineering: methodologies and applications, Gordon and Breach Science Publishers, Amsterdam, 1999, pp. 109-134.
- [58] M. Jelinek and C. B. Schoonhoven, "The Innovation Marathon: Lessons from High Technology Firms," Basil Blackwell, Oxford, 1990.
- [59] G. A. D. Preinreich, " Annual Survey of Economic Theory: The Theory of Depreciation," Econometrica, Vol. 6, No. 3, 1938, pp. 219-241. doi:10.2307/1907053
- [60] P. G. Smith and D. G. Reinartson, Making products in half the time, Van Nostrand Reinhold, New York,