

Process Hierarchies: Beyond the Limitations of Taylorism

New Design Principles for Chaordic Systems

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Extended Abstract

Context

Our world is changing at ever-increasing rates and with that business environments are changing as well. The context of business life has changed drastically over the last century, however the fundamentals of organisational constructs have remained largely the same (Friesen, 2005; Ritzer, 1993). Task specialisation and hierarchic organisation structures are still the dominant forms of organisational management today (Friesen, 2005; Pruijt, 2000). These principles were developed and introduced in the times of Adam Smith and Frederic Winslow Taylor¹, when the technological, sociological and economical contexts of businesses were completely different than those of today's (Friesen, 2000; Mills, 1987).

One of the thoughts behind Taylorism is that for each task, the one best way is designed and laid down in rules (Adler & Cole, 1995). In today's world where information is considered a public good and decays at a rapid rate, the amount of options that a manager is confronted with are abundant (Friesen, 2005). It is therefore unthinkable that a manager can still choose the best possible answer to every problem, standardize it, and then delegate the job to a specialised worker. Furthermore, the decision-making capability of a person within an organisation is dependant on the amount of information and subsequently the amount of options a person must choose from (Friesen, 2005).

Although it was thought that Taylorism was diminishing over the last decades, it actually was still in upswing during the '90s² (Ritzer, 1993; Schumann, 1994, 1998). It is strange to see that management constructs that date back centuries, are still dominant in modern businesses, while they have reached, or possibly passed, their limits in today's world.

¹ Adam Smith (1723-1790), Frederick Winslow Taylor (1856-1915).

² Think of the standardization as brought by McDonalds or the resurgence of the assembly line in the automobile industry (Ritzer, 1993; Schumann, 1994, 1998).

This Paper

In this paper we claim that the conventional organisational paradigms as used today, fall short in the turbulent environments of modern businesses. We assume that the essence of organisational management is the decision-making process (Lin, 2005; Scott, 1987; Simon, 1947). Decision-making is what keeps an organisation alive and prosperous when coping with uncertainty in its environment (Lagadec, 1982; Perrow, 1984). It is thought to be driven on and guided by information flows that enter the organisation from its environment and are passed on to a certain extent within the organisation's structure³. Decision-making is thus influenced heavily by the speed at which information can travel and the range of people it can reach within an organisation. These two factors are thought to be less positive in hierarchical structures as opposed to other structures such as networks (Friesen, 2005; Mintzberg, 1971).

In the light of decision-making it is thus interesting to investigate organisational structures and its effects on information flow. The dominant tayloristic thinking limits the speed and efficiency with which organisations can respond to environmental changes. Considering the specifics about information flows and decision-making, we believe, and have found, that there must be organisational structures that are at least as efficient as – if not more efficient than – conventional hierarchies.

We will first explain how business environments have changed over the years, by elaborating on businesses' sociological, technological and economical contexts. Next we will put forward our reasoning on why conventional organisational constructs fall short on coping with the modern business environment of today. And finally we will suggest a new way of organising corporate resources to cope with external dynamics in a more productive way⁴ using process hierarchies as an alternative for the taylorist 'command and control' hierarchy and illustrate these principles with the example of a large retail company.

References

- Adler, P.S., & Cole, R.E. (1995), Designed for learning: a tale of two auto plants. In: Sandberg, Å. (Ed.), *Enriching production. Perspective on Volvo's Uddevalla plant as an alternative to Lean Production* (pp. 157-178). Avebury: Aldershot.
- Aldrich, H.E. (1979). *Organisations and environment*. Englewood Cliffs, New Jersey: Prentice Hall.
- Friesen, G.B. (2005). "Organisation design for the 21st Century", *Consulting to Management*, 16 (3), September, 32-51.
- Lagadec, P. (1981). *Major technological risk: An assessment of industrial disasters*. Pergamon Press, translated from French by H. Ostwald, Anchor Press Ltd., 1982.
- Lin, Zhiang. 2005. Environmental determination or organisational design: An exploration of organisational decision making under environmental uncertainty. *Simulation Modeling Practice and Theory*, 14, 438-453.
- Mintzberg, H. (1971). Managerial work: Analysis from observation", *Management Science*, 18 (2), B97-B110.
- Quinn Mills, D. (1987). *Not like our parents*. New York, NY: William Morrow

³ We view an organisation as a system that is open to its environment (Aldrich, 1979; Scott, 1987), where in our case the environment is perceived as the market in which it operates.

⁴ More productive in the sense of capitalizing on opportunities (effectivity) as well as in utilizing corporate resources (efficiency).

- Perrow, C. (1984). *Normal accidents: Living with high risk technologies*. New York, NY: Basic Books
- Pruijt, H. (2000). Repainting, modifying, smashing Taylorism. *Journal of Organisational Change Management*, 13 (5), 439-451.
- Ritzer, G. (1993). *The McDonaldization of society: An investigation into the the changing character of contemporary social life*. Thousand Oaks, CA: Pine Forge Press.
- Schumann, M. (1998). New concepts of production and productivity. *Economic and Industrial Democracy*, 19 (1), 17-32.
- Schumann, M., Baethge-Kinsky, V., Kuhlmann, M., Kurz, C., & Neumann, U. (1994). *Trend report Rationalisierung: Automobilindustrie, Werkzeugmaschinenbau, Chemical Industry*. Berlin: Sigma.
- Scott, W.R. (1987). *Organisations: Rational, natural, and open systems*. Englewood Cliffs, New Jersey: Prentice Hall.
- Simon, H.A. (1947). *Administrative behavior*. New York, NY: Free Press.

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