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Why management models and metaphors need to change

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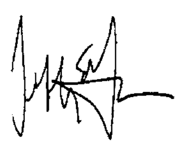
To build innovation-age organizations, business leaders need to rethink their conceptual models and management metaphors. The *organization-as-obedient-machine model* takes leaders down the pathway of central planning, coordination and control, setting targets and "fixing" the results, measures for control, and reactive change – including the constant restructuring and reorganizing of the organization's parts.

In this article, Jeremy Hope explains the *organization-as-a-living-system* model, where systems are seen as wholes rather than parts, and attention is given to *relationships within those systems*. The model leads to decentralization, rapid response and self-regulation. It enables empowerment, innovation, and adaptation. On the pages that follow, Jeremy explores these concepts and their implications for understanding performance management.

"Why Management Models and Metaphors Need to Change" is the second in a new series of papers written for the IBM Cognos® Innovation Center for Performance Management by Jeremy Hope, Research Director of the Beyond Budgeting Round Table. Jeremy is an advisor to the Innovation Center. He is also a tireless champion for innovation in performance management theory and practice, believing that business-as-usual is NOT a route to success.



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To some degree or other, we are all prisoners of our experiences and mental models. But to build adaptive, devolved, and innovative organizations, CFOs, as well as other business leaders and managers, need to re-think their notions of how organizations work, especially if they entered the management ranks prior to the 1990s when the "command-and-control" organization was (and in many cases still is) the *de facto* standard.

This type of organization was described in detail in Alfred Chandler's 1962 landmark book, *Strategy and Structure*, in which he explained the adoption of the multi-divisional organization (the "M-form") by fifty of the largest companies in America. In this management model, top management was the fount of knowledge, strategic planner, and resource allocator; middle managers were the controllers; and frontline managers were the implementers. While this model has been subject to much criticism over recent years (it focuses on the hierarchy rather than the customer, stifles sharing and innovation, and requires high costs to support the bureaucracy), we must remember that, like mass production, it served twentieth-century companies and their customers extremely well.

Just as the "M-form" structure and "command-and-control" management model describe the traditional organization, the "organization-as-machine" with levers that can be pulled to change efficiency, speed, and direction, remains the prevailing metaphor for how organizations work. Leaders spend much of their time retuning and re-engineering the parts in the expectation that the whole will fire on all cylinders.

Why do these models matter so much? The answer lies in how they influence management thinking. If you follow *Model A* in *Figure 1* you will see how our *management* models are directly influenced by our organizational models. The consequences of this thinking are increasingly dangerous in a changing world. The machine metaphor, for example, gives leaders the illusion that everything is controllable if an organization can be broken down into its constituent parts, and if the right metrics and steering mechanisms can be used to ensure that each part achieves its optimum performance (each part is likely to have its own target and measures independent of others). If there is a problem with any part, a range of *tools* can be used to *fix* or *re-engineer* the problem. The trouble is that focusing on separate parts is likely to lead to dysfunctional behavior as one unit tries to improve its performance, often at the expense of another (this is sometimes known as *suboptimization*).

Figure 1 – Mental models

	Model A	**Model B**
Organization model	• Organization is a machine (origins are in Newtonian physics) • Leader is chief commander and controller (military metaphor) • Organization is a collection of replaceable parts (parts can be optimized and fixed) • Organizations comprise of cause-and-effect relationships that are predictable	• Organization is a living system (origins are in quantum physics) • Leader is chief director and conductor (orchestra metaphor) • Organization is a holistic system (whole system can be optimized and fixed) • Organizations are webs of relationships that are unpredictable
Management model	• Business model is plan-make-and-sell • Organizations need central planning, coordination and control • Focus is on ends (targets); means are fixed to meet ends • Information is dictated and directed • Theory X (people want instructions) • Motivation is extrinsic (people need rewards) • Change is project-based	• Business model is sense-and-respond • Organizations are self-organizing and self-regulating • Focus is on means (processes and people); ends take care of themselves • Information is open and transparent • Theory Y (people want responsibility) • Motivation is intrinsic (people want to win) • Change is continuous and adaptive

This machine-like model represents the current "management cockpit" view of leadership – a sort of twenty-first century computer game in which a few leaders at the center control the actions of hundreds of front-line managers by monitoring variances against a plan in real time. Flashing icons – traffic lights and "happy" or "miserable" faces – appear on variance reports to tell remote leaders when action needs to be taken. In this model, measurement replaces management. The aim is to design judgment out of the system. Many leaders see this vision as the ultimate goal of technology – a sort of IT-and-accounting Holy Grail. But it reinforces the *them* (planners and controllers) and us (implementers) management model in which knowledge gravitates to the center, enabling corporate leaders to make the best decisions. Suppliers, employees, and external partners are all sub-contractors to the board, who see their roles in terms of creating shareholder value. This leads to multiple reorganizations, acquisitions, divestments, and constant tinkering with tools, targets, and incentive schemes in the effort to satisfy shareholders. Private equity funds are the arch exponents of this management approach.

There is, however, deep cynicism about traditional organizations based on machine-like assumptions. It is tough (and expensive) to keep strategies, structures, and systems in constant alignment in an unpredictable world. Endless restructuring, reorganizing, and reengineering programs come and go with no apparent effect. Employees are but small cogs in the giant organizational wheel. The result is that leaders are not connecting with their people and are failing to harness the huge amounts of intellectual capital that reside in their heads.

So what's the alternative? Meg Wheatley, in her classic book *Leadership and the New Science*, explains that organizations are less like machines and more like living systems. She believes that the correct scientific metaphor should be taken from *quantum* rather than *Newtonian* physics. One of the key differences is a focus on holism rather than parts. Systems are understood as whole systems, and attention is given to *relationships within those networks*. "When we view systems from this perspective," notes Wheatley, "we enter an entirely new landscape of connections, of phenomena that cannot be reduced to simple cause and effect, or explained by studying parts as isolated contributors. We move to a land where it becomes critical to sense the constant workings of dynamic processes, and then to notice how these processes materialize as visible behaviors and forms."[1]

In the quantum world, nothing happens without something encountering something else. In other words, *nothing exists independent of its relationships*.[2] And these relationships are only temporary as processes or people connect and combine to produce results (hopefully for customers). This means that a concept such as *cause-and-effect* that is fundamental to many of our concepts of planning and control (and strategy tools such as the balanced scorecard) is an illusion. Let's dwell on this for a moment. While there are always causes for any effect, causes are often very complex, can only be ascertained by working backward from the effect, and rarely, if ever, occur in the same way again. While causality looks seductively simple on strategy maps and spreadsheets, in the real world of complex human relationships, it can be dangerous.

Cutting a million dollars from the payroll, for example, rarely, if ever, results in an extra million dollars bottom-line profit. The effects will be "unknown and unknowable," as Deming said. There will likely be adverse effects on productivity, overtime, customer service, absenteeism of remaining staff, and other costs that are not so apparent in the spreadsheet numbers.

There is another problem with causality: The gestation period between a decision and a result can be months and sometimes years. Managers always want to measure progress and get frustrated if they can see no short-term result. The right context for success is to design processes and systems that naturally connect to create customer value and then to measure that value continuously.

One of the champions of this alternative view is Professor Tom Johnson. After being one of the great performance measurement innovators of the 1980s (with Robert Kaplan), Johnson went through a sort of "road-to-Damascus" conversion in the 1990s. According to Johnson, in companies where work corresponds to principles observed in natural systems—companies that manage by *means* (or well-designed processes) rather than *ends* (or predetermined targets)—the financial results will take care of themselves. Most managers, however, are not prepared to accept this nature lesson. They think they can do a better job; and they do it by perverting the means. Deming used words like "tampering" to describe how managers manipulate the means without understanding what they're doing. They learn that targets (ends) are the most important thing, and then do what it takes to meet them without understanding the damage their actions cause.

Managing by means particularly involves nurturing relationships among employees, customers, suppliers, and the community, as well as attending to the company's relationship to the environment. Companies that manage by means—whether explicitly or not—recognize the importance of financial well-being, but they believe it is best achieved by attending to factors such as process improvement, employee development, and environmental responsibility. In practice, managers who adopt this approach give employees opportunities to make independent decisions, collaborate, recognize and solve problems, and develop new approaches to accomplish tasks.

Toward the adaptive organization

While the command-and-control model remains dominant even today, there are many organizations that base their beliefs and organization models on *Model B* in *Figure 1*. They include companies such as Japanese car manufacturer *Toyota*, US carrier *Southwest Airlines*, Swedish bank *Svenska Handelsbanken*, German retailer ALDI, US glass manufacturer *Guardian Industries*, Swiss executive recruitment consultants *Egon Zehnder*, and US steelmaker *Nucor Steel*. Not only are these companies adaptive organizations, but their performance management models are strikingly similar. And their performance records have been outstanding – not just last year or the year before, but for decades.

These companies share a number of common traits. They see their organizations as webs of relationships that rapidly adapt and respond to threats and opportunities without breaking stride. The role of their leaders is to provide governance frameworks that enable coordinated actions across the organization without the intervention of corporate staff. Front-line teams make decisions based on fast and open information. Their responsibility cultures attract management talent like bees to a honey pot. Strategy is a direction rather than a destination, and managers focus on continuously improving processes rather than meeting predetermined targets. They are ethically sound and speak with "one truth." They beat their rivals – most of the time – on just about any financial indicator you care to name. And, perhaps above all, they seem to have vast reserves of that rare commodity, *common sense*. They neither use management fads or fashions, nor do they use fixed targets and plans to program the actions of their people.

These consistently successful organizations give us a different view of today's reality. It recognizes that organizations exist in an unpredictable world and that leaders can no longer plan and control their way to future success. The new metaphor is that organizations are more like "living," "natural," or "social" systems that constantly evolve and adapt to the changing environment.

Toyota is a well-known example of an adaptive organization. Instead of pushing products through rigid processes to meet sales targets, its operating systems *start from the customer—it is the customer order that drives operating processes and the work that people do*. The point is, that in adaptive organizations, predetermined plans and fixed performance contracts are anathema and represent insurmountable barriers. *That's why adaptive organizations like Toyota don't have them.*

There are many other examples of self-organizing, self-regulating organizations including *Linux*®, *eBay* and *Amazon*. Take *Visa*. By 1968, the credit card industry was facing a crisis with an increasing number of incompatible systems. So the main players got together and set themselves a challenge: how to build a system that would allow banks to cooperate in credit card branding and billing while still competing fiercely for customers. The team selected to meet this challenge came up with the following set of principles that have laid the foundation for one of the most successful non-stock, for-profit organizations the world has seen:

- Power and function in the system must be distributed to the maximum degree possible.
- The system must be self-organizing.
- Governance must be distributed.
- The system must seamlessly blend both collaboration and competition.
- The system must be infinitely malleable, yet extremely durable.
- The system must be owned cooperatively and equitably.

Perhaps the real lesson for business leaders is that if an organization really wants to "sense and respond" to individual customer requests, it must not only redesign its operating processes, but must also redesign its performance management model (e.g., how it formulates plans, manages resources, and measures performance). Otherwise, a fatal collision will be inevitable as managers respond to (vertical) functional targets that cut across (horizontal) customer-oriented business processes. If both systems are in harmony the benefits can be huge.

The challenges

This alternative worldview challenges most economic thinking of the past hundred years or so, which remains rooted in the industrial economy. For example, most economists still believe in functional integration, agency theory, and "rational economic man," that is, someone who only responds to "carrot-and-stick" performance drivers such as targets and incentives. This is the Theory X view of management. It's no wonder that some people call it a dismal science. The real problem, however, is that while most business leaders would not support Theory X as a set of management principles, their systems support it in practice.

Arie De Geus, the award-winning author of *The Living Company*, believes that firms basing all their beliefs on an economic model focused on central control and short-term profits to the exclusion of everything else, usually fail to learn or survive (the average lifespan of a Fortune 500 company is less than 50 years).[3] In his research into what distinguished long-term survivors, he discovered one major distinction: "The long-term survivors did not see themselves as primarily economic units to produce profits and value for the entrepreneur and the shareholder. They saw themselves as living systems composed of other living systems—the people who worked for them and thus belonged to them."[4]

Convincing leaders to take these issues seriously is not easy. While most leaders are happy to agree with adaptive management ideas, it is command and control that they know and trust. Many would point out that command-and-control management has worked reasonably well for over a hundred years, and much longer if you think about churches and military organizations. But that doesn't mean it is right for the future and shouldn't be replaced. There is increasing evidence that those companies that replace it with a more devolved or adaptive management approach do much better and sustain their success over a longer period. And the first movers in each sector can gain a real advantage over their rivals.

The successful organizations of the twenty-first century will be more devolved than before to cope with a competitive environment in which fast response, talented people, continuous innovation, operational excellence, customer intimacy, and ethical behavior will be the defining success factors.

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[1] Margaret Wheatley, *Leadership and the New Science* Berret-Koehler Publishers, San Francisco, 1999, pp10-11

[2] Margaret Wheatley, *Leadership and the New Science* Berret-Koehler Publishers, San Francisco, 1999, 69

[3] Quoted in Randall Rothenberg Arie de Geus, *The Thought Leader Interview Strategy and Business*, Issue 23

[4] Randall Rothenberg Arie de Geus, *The Thought Leader Interview* Strategy and Business, Issue 23

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