

## Featured Articles

# How can Hitachi's Management Consulting Practice Help Realize Social Innovation?

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*OVERVIEW: Hitachi, Ltd.'s commitment to and strategic focus on Social Innovation Business presents great opportunities for Hitachi Group companies. It provides a platform for Hitachi businesses to collectively develop strong and differentiated technology capabilities and services that provide targeted solutions to clients in an innovative and integrated fashion. To help accelerate the Social Innovation Business, Hitachi Consulting's Management Consulting practice is keen to take on a role as solution integrator and business incubator. This article discusses the ramifications and the opportunities of such an approach.*

## HITACHI CONSULTING MANAGEMENT CONSULTING

HITACHI Consulting Corporation's Management Consulting (HCMC) practice carries more than 25 years' experience in working with large, international companies, helping them realize their business visions. HCMC delivers positive and sustainable change for the world's leading companies in chemicals, consumer, energy, industrials, life sciences and metals and mining industries.

HCMC experience covers the entire spectrum of operations management with a core focus on performance improvements, behavioral change management, and strategy development. Its capabilities span end-to-end operations to address specific performance challenges across the supply chain, manufacturing, research and development (R&D), sales, services and administration.

Assessed by external, international analysts, HCMC is rated amongst the best Business Operations Consultancy Practices in the world\*.

### Turning Complexity into Opportunity

In a world where 75% of all change programs fail, 95% of HCMC's change programs succeed. And its clients call it "money well spent." The difference lies in one core value: humility. True transformation does not come from consultants. It is guided by consultants, HCMC's subject matter experts who – with experience

from industry and specialty knowledge within supply chain optimization, asset management, maintenance operations and production environments – join the clients' subject matter experts on their premises to establish a common vision for future operations. Based on deep insight and experience from more than 2,000 projects across the world, the most important lesson is that consultants must truly engage with clients in order to achieve outstanding results. It is not the other way around. Every client is unique and every project needs to be treated as a partnership. This approach enables consultants to identify high-value opportunities and unlock hidden potential.

### The 5-Box Model

In every project HCMC seeks to improve performance radically. A framework called the 5-Box Model (see Fig. 1) shows how processes and the management system have to be improved in combination with their vital human interfaces in order to achieve real behavioral change. And only through real behavior change can sustainable improvements be delivered.

HCMC uses this framework to understand, identify, develop, and implement solutions aligned to the strategic objectives of the client's business.

The goal is to make improvements sustainable. To achieve this, the starting point is firstly to understand the processes that add value for clients' customers. Secondly, to identify the critical management and control points that drive process performance. And thirdly, to assess how the organization is shaped around these processes to ensure results.

\* Source: Gartner, Inc. and Kennedy Consulting Research & Advisory

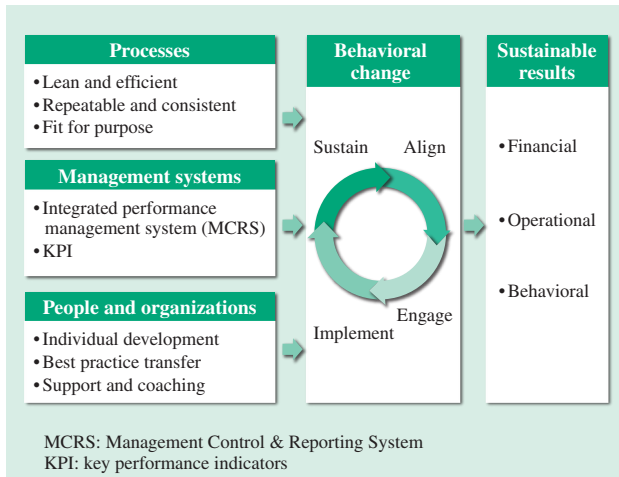


Fig. 1—Hitachi Consulting's 5-Box Model.  
The 5-Box Model's key elements link business strategy to capabilities and ultimately to business results.

Sustainable results are only achieved through effective behavior change – and people will not truly change their beliefs and habits unless they can actually see the benefit and understand how to incorporate the changes into their daily work routines. Experience has shown that reducing complexity, clarifying roles and responsibilities, and installing effective performance management are critical for efficient decision making and increasing the effectiveness of any organization.

The Closework approach is HCMC's proven method for achieving sustainable behavior change. Working closely with people at the heart of the client's business, walking side by side, and "getting their hands dirty," enables consultants to understand how people can work better. Involving the client in the process of change is the way HCMC ensures that behavioral change is permanent, and does not end the moment consultants leave the premises. This leaves a legacy of measurable benefits. Hitachi Consulting's Closework approach ensures that consultants sit on the same side of the desk, working side-by-side with the clients' organization to help eliminate the obstacles, both large and small, that impede performance improvement.

Four basic phases are followed:

- (1) Analyze and Align. Get buy-in for the change that needs to happen in the organization through effective and sustained communication from leadership.
- (2) Engage and Design. Get commitment from the organization and formalize it through setting targets and key performance indicators (KPIs).
- (3) Implement. Make it happen by developing rigorous plans, installing effective governance structures, and

getting expert input on managing change to ensure the program runs smoothly and at pace.

(4) Sustain. To make the change stick, clients will need to work differently, which requires training and coaching on what different behaviors are now required.

This holistic and integrated approach makes change happen quickly and effectively.

Every project is customized and typically follows a phased approach:

- (1) Scoping – this is where HCMC works with the client to gain an insightful understanding of performance in the organization. The objective is to assess opportunities.
- (2) Analysis – this phase is a deep dive into the organization to quantify and qualify the business case.
- (3) Implementation – realizing the business opportunities through a thorough process of design, install and coaching the new ways of working.

All projects are designed to deliver substantial results. Financial and operational results are measured via results plans and a robust evaluation methodology. Behavioral assessment tools are used to evaluate, monitor, and drive performance-enhancing behaviors across all levels of the organization.

## CASE STUDY

One of the world's largest confectionery companies had invested heavily in new technologies and reconfigured their supply chain. Management wanted to double its historical 1.5 to 2.0% annual rate of productivity improvement. The project goal was to deliver \$130 million in improved margin across 45 plants over the course of three years.

Working closely with a small client team, HCMC co-designed a 12-month program with multiple waves.

In wave 1, driven by HCMC, sites were selected to enable rapid geographic rollout and to support in-year delivery of benefits. In wave 2, HCMC stepped back into a supporting role. 73 practitioners from 32 sites were each trained for an average of five months to enable them to lead the transformation program at each site. In wave 3, the client teams assumed full responsibility with no HCMC support.

Each site undertook a two-phased approach beginning with a five-week diagnostic aimed at establishing a case for change, specified financial and operational targets, which were agreed to by local management, and a project plan with resources and milestones. The second phase was a 32-week implementation designed to deliver project improvements, train continuous improvement practitioners, and install the new capabilities.

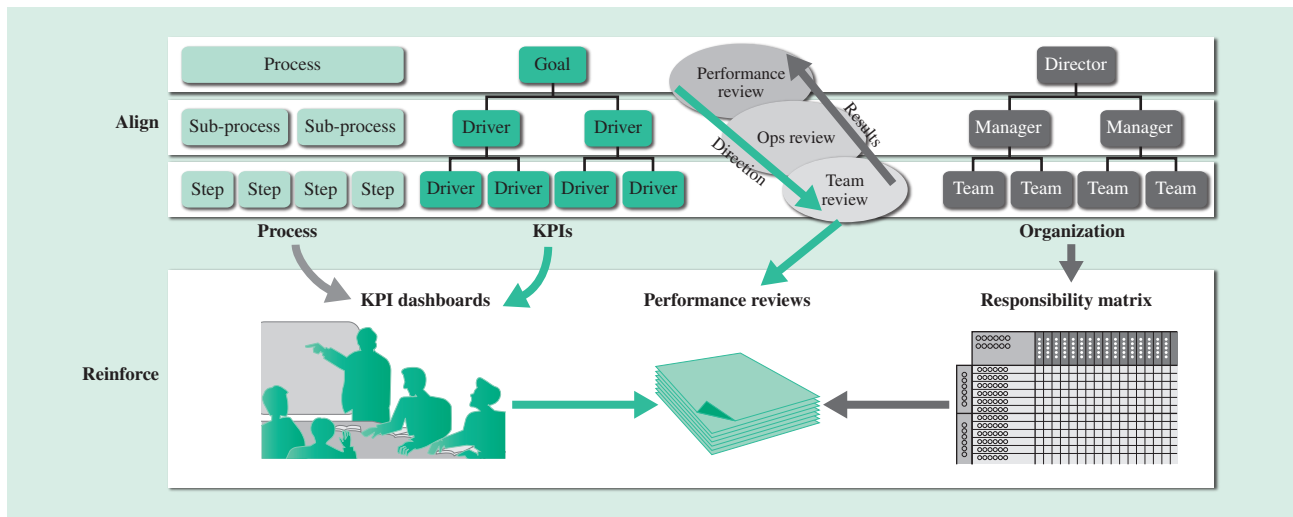


Fig. 2—Hitachi Consulting’s Management Control & Reporting Systems (MCRS). A holistic approach which in a closed-loop system comprise of information, documents and meetings used to (a) ensure accountability for the execution of business plans and (b) deliver sustained performance improvements via the right behaviors.

One of the key elements of the approach was to make performance – via Hitachi Consulting’s robust Management Control & Reporting System (MCRS) framework (see Fig. 2) designed globally and fit for local purposes – fully transparent and comparable. Step-back meetings were held periodically to share lessons learned, promote best practices, and ensure a common language and consistency of approach where appropriate.

After 12 months, the program was on track and had delivered cumulative and cashed benefits of \$20 million from just four sites. Annualized run-rate savings were at \$31 million and growing. Additional sites were expected to deliver significant improvement towards the overall three-year target.

“This program has been great at delivering results in engagement, acceptance and technique. It has developed a group of people who understand the links between programs, systems and execution – and that 80% of success is through influencing and changing behaviors.” Client Manufacturing Manager

**EMPOWER THE ORGANIZATION**

**Capturing the Management System**

A critical component to successful change is to understand how performance is driven within the organization. A starting point is to capture the “as is” management system – from visual boards to management reports, review meetings, KPIs and action logs. HCMC has a unique framework, called MCRS.

In workshops with leaders, this methodology is used to evaluate and identify areas that help drive performance improvement.

One major cause of reduced performance is a management system that does not empower the people best placed to make decisions and take direct corrective actions. By understanding this reality, it is possible to define and install a new management control and reporting system framework that gets the organization working at the correct level.

**Pioneer of Value-based Consulting Model**

\$60 million in realized benefits, 15% reduction in total costs, 25% increase in sales, 28% more production output – these are merely snapshots of typical results achieved in HCMC projects. HCMC is founded on the philosophy that delivering results must be an obsession. The obsession is deeply rooted into everything its consultants do and is directly reflected in its pricing model. Every project is assessed based on its ability to create value for its clients and its clients’ clients. Clearly-articulated targets are defined together with the client and a shared ownership of delivering quantifiable results is established. This forms the basis for any engagement and will directly impact the way each project is remunerated – HCMC pioneered value-based consulting, and through specific risk-sharing components, the contracts are closely linked to the realization of results.

Shared ambitions, clearly-articulated targets and agreed methods of tracking results throughout the client engagement is at the heart of HCMC’s way of

working. Any HCMC project seeks rapid return on investment. In the words of a client: “At nearly a 3 to 1 payback, you can’t go wrong.” Plant Manager, Honeywell International Inc.

## REDEFINING OPERATIONAL EXCELLENCE IN A DIGITAL AGE

HCMC has had unprecedented success with its consulting model, and in helping its clients realize value through custom-designed implementation programs. Currently Operational Excellence is at a stage, where improvements that were once difficult or impossible to realize, can now be delivered through integrating operational technology with information technology (IT).

Technological improvements can have a tremendous impact on manufacturing. Overall, the ability to manage the supply chain of an organization has increased. Connectivity and data from point-of-sales or from client transactions can now be communicated instantaneously throughout the organization. Supply and demand can be managed in real time. The organizations ability to handle problems in the supply chain can be done with much greater speed and accuracy than was possible just five years ago.

However, the adoption of many of these tools has been slow or the implementation of them has been poorly executed. Overall supply chain planning continues to be an area that has not yet taken full advantage of Machine-to-Machine communication technologies or the advancement of visualization technologies. Use of these tools can significantly increase an organization’s ability to troubleshoot, reduce waste in both materials and time, and in general increase the flexibility of the supply chain.

HCMC believes that increased communication, integration and visualization can dramatically reduce the need for specialized resources, tasked with solving problems or managing large groups of operators. In the future, the tasks of prioritization and supervision will in general be handled by a much more integrated and automated IT platform. This platform will be able to pinpoint necessary interventions and activities more efficiently, and without the same level of manual human involvement, through simulations and more total supply chain connectivity. HCMC believes that initially, it will provide predictive solutions that gradually become more prescriptive in nature.

However, most important to the development of digital manufacturing, is the ability to harvest and use

vast quantities of data – or Big Data as it is commonly referred to.

Most manufacturing organizations have invested heavily in robotics and other types of automation that have taken over many of the manual processes that were earlier performed by operators. Simultaneously, sensor technology has been developed and deployed across an ever increasing part of the supply chain. These sensors can take the form of measurement sensors, registration sensors, video feeds, etc. And all of these technologies produce vast quantities of data that are fed into both centralized and decentralized repositories. HCMC believes that it is this data that will drive the most significant improvements in industry in the future.

On the other hand, even though most businesses register and save data at an increasing rate and speed in their supply chains, many of these organizations have yet to begin to understand how valuable proper analysis of this data can be. By combining its understanding of Analytics and Big Data with its experience and knowledge of Operational Excellence, HCMC can help take clients’ organizations to a different level of productivity and efficiency in the future.

HCMC is starting to see that by taking advantage of increasingly integrated supply chains, connectivity improvements, and its ability to analyze and understand the Big Data ecosystem, asset productivity gains and supply chain improvements will be transformational rather than incremental in the near future.

## COLLABORATION AND ANALYTICS IS THE FUTURE

Digital manufacturing is a concept and a methodology that HCMC is now in the process of bringing to market. The first part of this program will involve sharing experiences and embarking on an ambitious training program of resources of Hitachi Consulting, Co., Ltd. in Japan (HCJ) as well as some of the researchers from Yokohama Research Laboratory (YRL) of Hitachi, Ltd. By doing this, HCMC and HCJ will expand their global capacity and at the same time learn from each other. Ultimately, this will also allow HCMC to take best practices developed on client assignments in the USA and Europe and transfer these to Japanese clients, and vice versa.

The second part of this program will be to start delivering this common approach to internal Hitachi, Ltd. clients as well as external clients in Japan, South East Asia, Europe and the USA. This will be closely

linked to the training, and will allow HCMC not only to pass on critical tools and methodologies, but also to coach and train people in real life situations.

The third step of the program will be to introduce Big Data technologies to the joint analysis and implementation processes. This will be done in close collaboration with the Hitachi Global Center for Innovative Analytics (HGC-IA), YRL and other Hitachi group companies focusing on the development of Big Data technology.

To prepare for the launch of these solutions, HCMC has for the past 18 months worked closely with HGC-IA to develop different proofs of concept that will now be integrated into the overall solutions. As an example, HCMC is currently working on assisting Hitachi Rail Europe Ltd. with a predictive maintenance solution. This program combines HCMC's understanding of Operational Excellence, Hitachi Consulting's IT systems and planning capabilities, and Hitachi, Ltd.'s ability to construct predictive decision systems from Big Data. This will result in improved reliability and availability of trains, reduced maintenance costs, improved passenger experience, improved safety, and reduced inventories.

## CONCLUSIONS

Competitiveness in what has been called the 4th Industrial revolution will require a combination of a number of different capabilities that all need to be brought together in large transformation programs.

To begin with, the ability to understand a customer's industry and its specific processes is critical, and a starting point for any improvement program. However, the capacity to develop new and innovative business models is even more important in the new competitive landscape that is emerging. The convergence of industries and the disruption of existing business models will be common place, and an ability to see around the corner is essential.

Furthermore, a deep knowledge of both information and operational technology as a driver for step change improvements in performance is another key requirement. The pace of digitization of companies and industries will continue to speed up as technologies mature. Being at the forefront of all of this rapid development is absolutely critical.

Finally, effective transformations do not happen in a vacuum, they require leadership and experience as well as tools and methodologies to effectively move an organization through periods of transformational change.

At the end of the day, it is not one or the other of these capabilities that will determine success, it is the right mix of strategic insight, technological skills, and a passion for change that will drive results in the future.

At Hitachi's Management Consulting, all of these ingredients come together. It is committed to helping its clients develop their businesses to new levels of competitiveness and success, and to jointly redefine Operational Excellence in the Digital Age.

## ABOUT THE AUTHORS



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