
Navigating from Strategy to Implementation

MIT Strategy Implementation Research Project

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MIT Strategy Implementation Research Project

- Objective: Improve methods and approaches to strategy development and implementation by advancing the science of strategy
- Areas of focus (year 1):
 - Characterize the phenomenon and current state of research
 - Developing decision support methods for use within cross-disciplinary teams for the identification and evolution of strategic implementation targets
 - Identifying relationships and methods of strategy implementation to enhance organizational learning and capabilities development
- Research sponsored by/in collaboration with the Brightline Initiative (<https://www.brightline.org/>)
- Global Teamwork Lab (GTL) is a research partner



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The strategy-to-implementation gap is profound

- 59% of survey respondents admit that their organizations “often struggle to bridge the gap between strategy development and its practical, day-to-day implementation”
- On average, organizations fail to meet 20% of their strategic objectives because of poor implementation. No single barrier to success dominates, and simple solutions to improve performance are not obvious
- Only 10% of survey respondents—the Leaders—report that failures in strategy delivery at their organizations, if they exist, did not impede achievement of any strategic goals over the last three years
 - These companies significantly outperformed their rivals financially
- For the Leaders, strategy design and delivery form a continuum, allowing both to evolve as conditions require



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Source: EIU, 2017



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Intelligence
Unit

Strategy implementation example: the BMW Group Engineering Division

- Case study covers the implementation of the BMW Group Number ONE strategy in the Engineering Division (from 2006-2012)
- 24 managers from level 1 (executive) to level 3 (department or project manager) in the E-Division participated in interviews from October 2011 to June 2012
- Interviews were augmented by summary documents and reports that described the activities and outcomes of the strategy implementation



BMW Group Number ONE strategy (2007)

- Announced in 2007 (covering the period up to 2020)
- The strategic objective: To ensure that the BMW Group is the leading provider of premium products and premium services for individual mobility
- ONE stands for “New Opportunities” and “New Efficiency”—to make best use of new opportunities and reach a new efficiency level so as to guarantee the BMW Group’s lead over competitors as well as the power and independence to shape the company’s future actively
- Targets: increase volume of sales in the global premium automobile market to more than two million units per annum by 2020 (by 2012, increase automobile retail to 1.8 million units and motorcycle sales by 50 percent).



Historical context for the strategic transformation

- The 2003-2008 energy crisis weakened the global auto industry accustomed to producing large, high-margin vehicles
- The financial crisis of 2007–2008 began in the subprime mortgage market in the United States (Lehman Brothers collapsed on September 15, 2008)
- Car companies from Asia, Europe, North America, and elsewhere experienced double-digit percentage declines in sales. Rebates, employee pricing, and 0% financing propped up sales but drained cash reserves
- Chrysler was forced into bankruptcy in April 2009 and GM in May
- The Detroit automakers idled many factories and drastically reduced employment levels



Top-down objectives for Engineering

- Improve cost efficiency in order to achieve profitability targets
- Reduce research and development expenditure for new products and technologies to 5.0 % – 5.5 % of revenues (with the same high standards), based on the principle “More output from less input”
- Reduce costs during the development phase by avoiding unnecessary complexity, focusing firmly on achieving value for the customer and creating synergy benefits by the increased use of modular components
- Add 6 new models to the product portfolio



Engineering (E-)Division implementation of the Number ONE Strategy: The E3 Program

- Engineering (E-)Division Objectives—increase efficiency by 1/3:
 - increase the number of development projects by 1/3
 - reduce the development lead time by 1/3
 - improve product quality by 1/3
 - stay within the same budget and staffing levels
 - all within 5 years
- The title E³ captures the priorities:
 - **Exhilarating** products – a stronger focus on being closer and more responsive to what really creates value for the customer
 - **Efficient** processes and structures – develop better products, in less time, and for less money, and improve innovation without driving up cost and lead time
 - **Emotions** and team spirit – develop openness and willingness for change, and help employees take ownership of and responsibility for change

Ref: Rebentisch and Oehmen, 2013

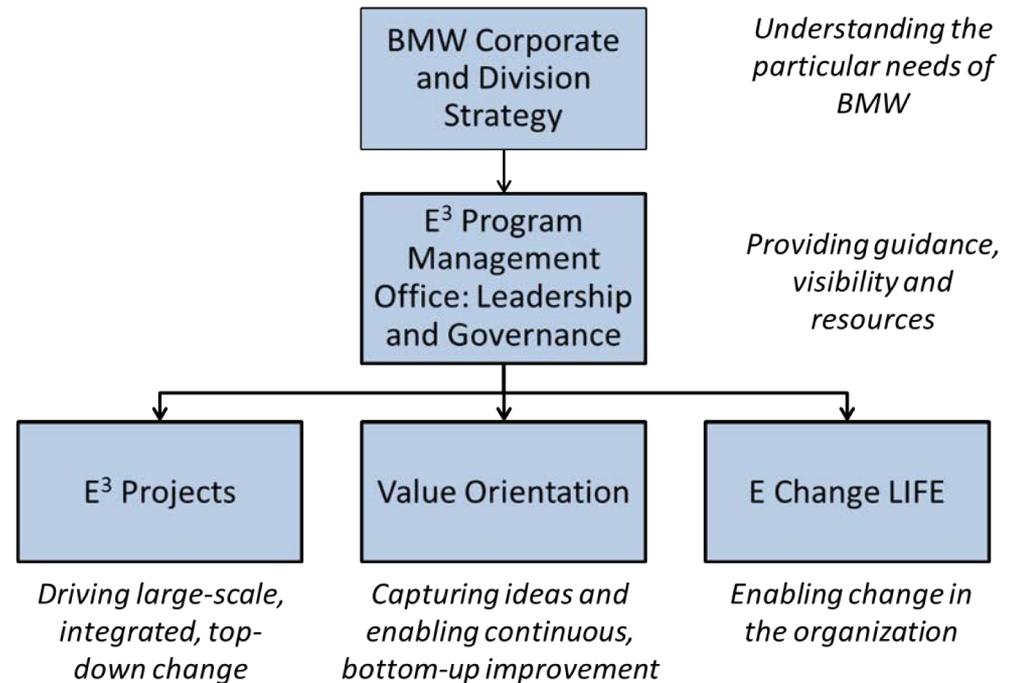


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E3 Program implemented the strategy at multiple levels

- Senior leaders provided the vision and resources, were personally involved in deploying the change
- Project management organization (PMO) managed the change program, provided resources, change tools, and expert coaches
- Strategic (E³) projects to address department-wide opportunities
- Engagement of the entire workforce through bottom-up local improvements
- Developing a shared understanding and commitment to the strategy and priorities



Ref: Rebentisch and Oehmen, 2013

Five primary elements of E³ Program

1. Linking corporate strategy to engineering division transformation goals
2. Developing the Leadership and Governance Team (E-Circle) to steer the transformation through the E3 Program
3. Defining and executing large top-down transformation projects to drive global changes in the engineering organizations (E3 projects)
4. Enabling small bottom-up transformation projects to drive local changes in the engineering organizations (Value Orientation, or “WO”)
5. Creating a climate for structured engagement for every employee to explain the need for transformation and to individually motivate change (E Change LIFE)



Governance through the E-circle

- The E-Circle is the top governance body in the E-Division, and consists of the head of the E-Division, the heads of the main engineering departments, and leaders from HR, Controlling, Quality, and the Engineering Strategy Department
- The E-Circle members played a central role in developing and deploying E³ throughout the E-Division, including:
 - Translating the group strategy Number ONE for specific application within the E-Division
 - Identifying strategic change projects that helped the E-Division to fulfill the vision of the BMW Group strategy Number ONE
 - Collectively reviewing the progress of E³ and updating the plan
 - Communicating E³ priorities
 - Accepting responsibilities as executive leaders of strategic change projects
 - Regularly participating in local improvement activities
 - Demonstrating leadership in and serving as role models and champions for the E³ program
 - Deploying E³ programs and activities within their own departments

Ref: Rebentisch and Oehmen, 2013



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Creating connections across the E-division

- E³ Steering Circle:
 - Network of leaders across the E-Division that included the groups in each of the departments that addressed strategy and development of processes and capabilities within their respective departments
 - The E³ Steering Circle provided the means to coordinate the deployment and implementation of strategy across the E-Division
- Program management office (PMO):
 - Help manage and coordinate the many change projects that emerged from the E3 efforts
 - Provided the competence set and capacity to support the program and maintain the necessary links and relationships across all the participating stakeholder groups
 - Integrate the many existing activities already underway at the time (e.g., the Change Control Board with senior leader involvement and the first wave of E³ projects)



Engineering Strategy Department

- The Engineering Strategy Department comprises internal strategy and management consultants who support strategic initiatives within BMW's Engineering Division
 - Many of the Engineering Strategy Department consultants are recruited from major strategy consulting companies and bring significant experience with them upon entry
- Its work includes:
 - strategy development and goals management for the E-Division (including coordination with the BMW Group, other Divisions at BMW, and departments within the E-Division)
 - project coordination and support for significant (e.g., department-spanning or Division-wide) change projects within the E-Division
 - benchmarking studies of processes and organizational structures to identify new performance targets
 - the development and management of the E³ program



Change Management Consulting Department

- Change Management Consulting Department are part of the human resources division and support all BMW divisions in their change management efforts
- Their primary change management approach encourages the leaders of their client organizations play a central role in bringing about the desired changes
- BMW Change Management Model is based on best practices in organizational development, research, and benchmarking, and pragmatically addresses specific challenges to produce business results outcomes



Top-down E³ initiatives addressed strategic objectives

- 25 top-down, strategy-driven change projects (E³ projects) were launched in May 2007
- E³ project managers enjoyed several important enablers for rapid and effective action:
 - Direct access to the top management level
 - Supported by a network of strategy and process development groups associated with different departments within the Engineering Division
 - Access to the necessary funding and the right people
 - Removing roadblocks in the organization when they arose
 - Fast decision times
- E³ project examples:
 - Virtual Prototyping / Validation
 - Component matrix for modular architecture and platform design
 - Electrical/electronics (E/E) product and process redesign
 - Customer Orientation in the Development Process



Bottom-up initiatives engaged the entire workforce

- “Value orientation” (VO) E³ projects were developed as “the implementation of E³ at the local level” or “E³ for everyone”
- The specification of the project was open—from simple ideas affecting office work with no measurable savings to hardware improvements with millions in savings
- Initially all level 2 and level 3 managers were required to complete a minimum of one VO project
 - ~150 VO projects completed in 2008
 - Expanding to level 4 managers, more than 1200 VO projects completed in 2009
 - A few managers personally conducted multiple VO projects per year, and required the managers under their supervision to do the same



E-Change LIFE teaches the strategy to all

- By 2009, E-Division head became increasingly aware that the engineering workforce had not internalized the Engineering division strategy
 - A fundamental change was needed in how the engineers and other employees of the E-Division approached their work on a daily basis
- Change Management Consulting Department, the Engineering Strategy Department, and members of the E-Circle developed E Change LIFE
- The main elements included:
 - Involving all employees through E Change LIFE workshops – managers teach others, starting from the top of the organization
 - Discussion around a picture representing the current state and future state vision of BMW's engineering division and strategy
 - Strengthening the dialogue between different levels of management and across discipline boundaries
 - Engagement of E-Circle members – towards the end of every E Change LIFE workshop, an E-Circle member would enter into a dialogue with the participants, discuss the business principles and reflect with them on how to live and operationalize them
- Concurrent with the “Number ONE On Tour” effort by the BMW Group leaders to actively engage the 6000-strong BMW upper and middle management and develop a shared understanding of the new strategy and its application

Ref: Rebentisch and Oehmen, 2013

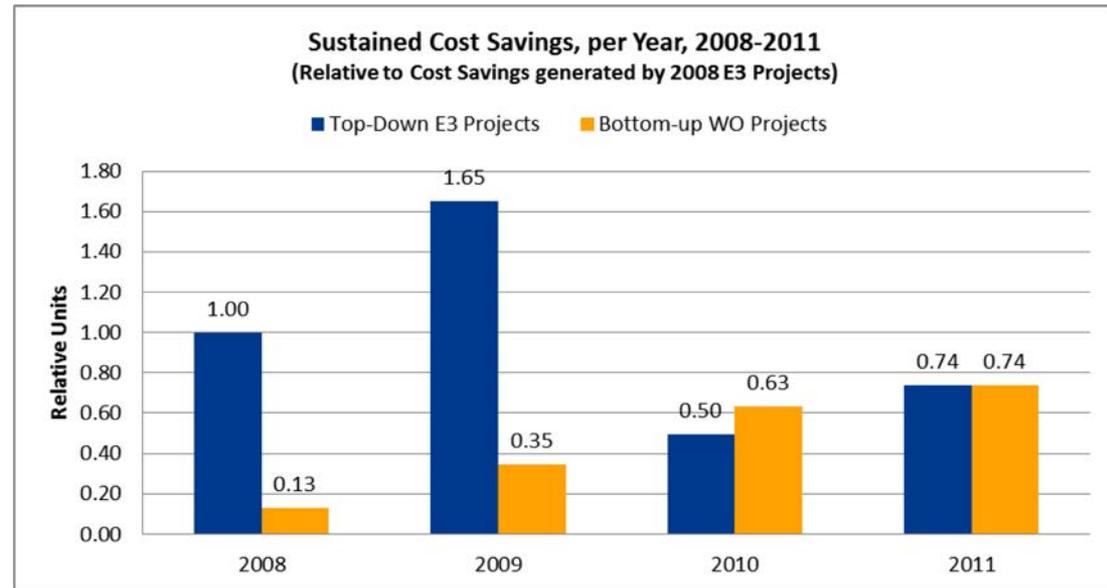


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Top-down and bottom-up initiatives were complimentary

- Bottom-up (WO) initiatives started slowly but eventually equaled top-down projects in savings
- Long-term objective was to change the entire workforce
- E Change LIFE initiative addressed culture change and was concurrent with and complimentary to WO initiative
 - By June 2012, all 8,000 people in the E-Division had participated in the E Change LIFE workshops



Outcomes of strategy implementation efforts in the E-Division (2006-2011)

- Total revenue grew by 40%
- 21% more vehicles were delivered
- Vehicle quality increased by 32%
- The model range expanded by 30%
- The number of car models and derivatives in the pipeline increased by 53%
- The engineering workload increased by 35%
- The engineering cost per derivative and workload decreased by 38% and 31%, respectively
- The overall lead time decreased by 14% (despite greater complexity in the models offered)
- Partway through the changes the global economic downturn punished the auto industry; because of the improvements, BMW managed to remain profitable, did not cut its workforce, and emerged from the downturn stronger and more competitive than many rivals

Ref: Rebentisch and Oehmen, 2013



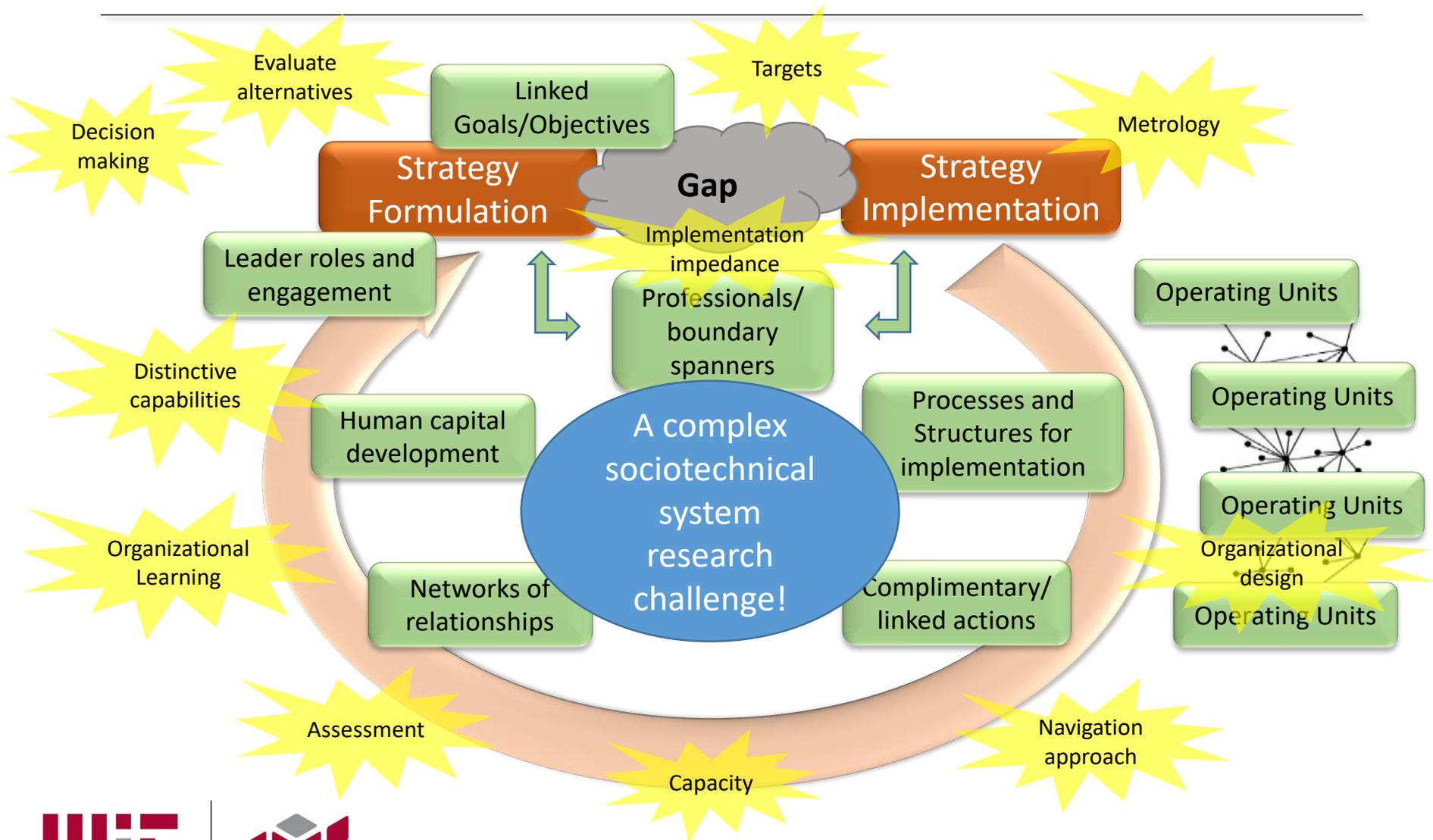
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Key insights from the BMW example

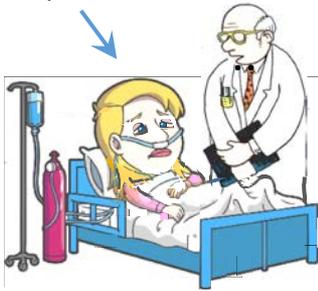
- Deliberate process to cascade strategic objectives throughout the organization
- Direct engagement of leaders across multiple levels in the organization to communicate and reinforce the strategy
- Professional cadre of experts to facilitate implementation of the strategy
- Strategic action defined at multiple levels and through multiple approaches
- Development of networks throughout the organization to span boundaries and develop/reinforce relationships

Mapping the strategy-to-implementation territory



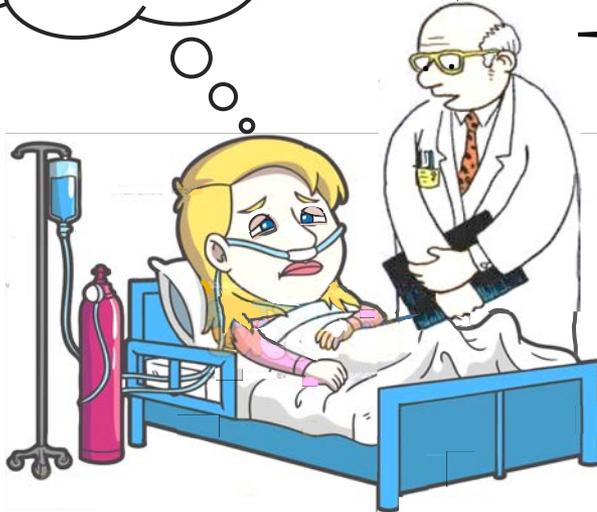
The Strategy-to-Implementation Gap Is a Disease

Miss implementation



Flawed mental-model : the perfect-health speech, wrong answer

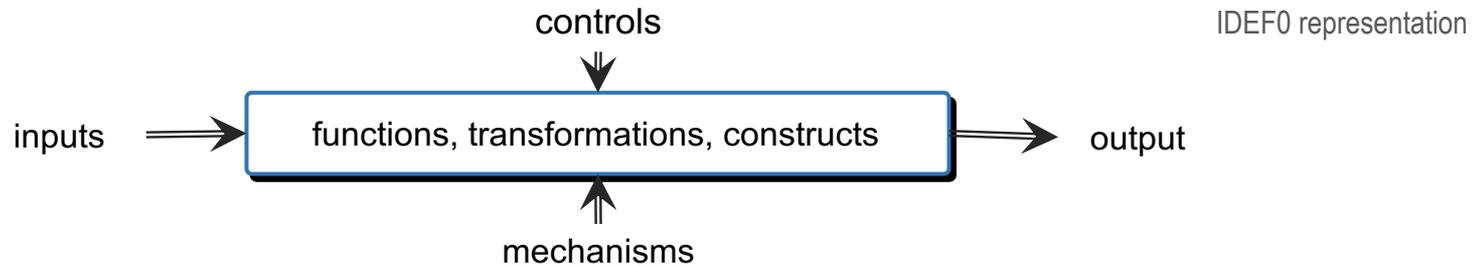
what is disease I got?
what is the cure?
... another speech?



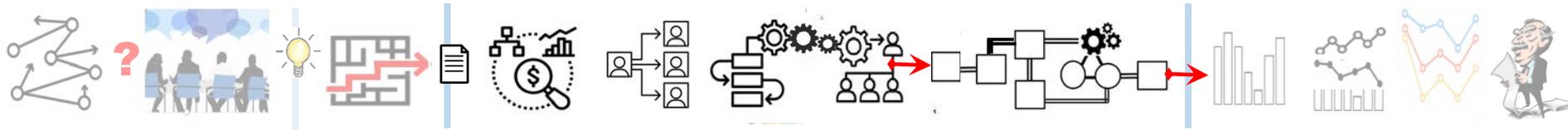
- 95% of the world's population is not healthy, of these 33% have 5 ailments.
- 97% of the people guilty of unhealthy life style.
 - only 4.3% of the US population is healthy.
 - eat only nutritious food.
 - get plenty of sleep.
 - have less stress.
 - have plenty of exercise.
 - have a physical check up every year.
 - drink alcohol in moderation.
 - avoid polluted environments.
- blah ... blah ...blah ...
.. blah ... blah ...blah ... blah ...
-

We attack the causes of the implementation-gap. No speeches on “the perfect-strategy.”

Most general representation of any sociotechnical system

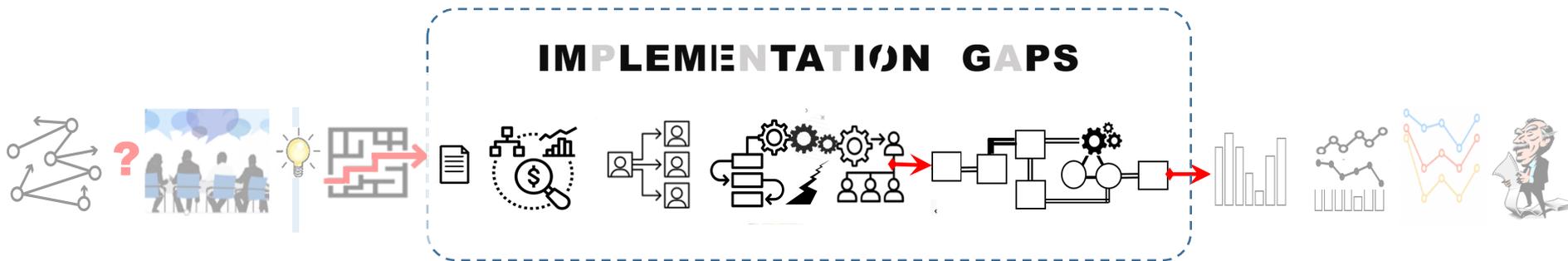


- | | | |
|--|---|-------------------|
| <ul style="list-style-type: none"> inputs functions, transformations, constructs | <p>what you resources you need
for what you want done</p> | capacity |
| <ul style="list-style-type: none"> mechanisms controls | <p>how it gets done
subject to what limitations and constraints</p> | capability |
| <ul style="list-style-type: none"> outputs | <p>for timely and decisive outcomes you want</p> | readiness |
- implementing a strategy is a sociotechnical system in action.
 - effective capacity, capability, and readiness** forms the most parsimonious set of **necessary and sufficient factors** to describe a *fluent* strategy implementation.



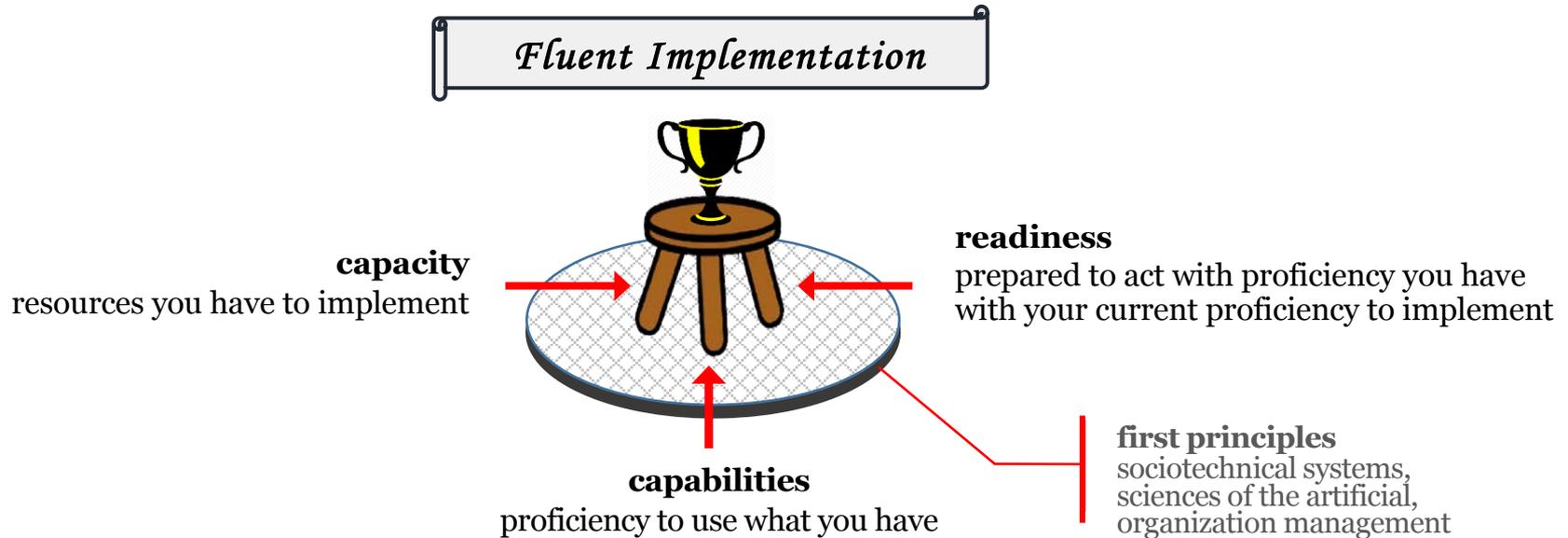
Most general representation of any sociotechnical system

▪ inputs	what you resources you need	capacity
▪ functions, transformations, constructs	for what you want done	
▪ mechanisms	how it gets done	capability
▪ controls	subject to what limitations and constraints	
▪ outputs	for timely and decisive outcomes you want	readiness



- Strategy-to-implementation gaps are symptoms of a non-performing strategy.
- Given that *effective* capacity, capability, and readiness are necessary and sufficient for *fluent* strategy implementation ... it follows that the root-causes of the implementation gap are found in *deficiencies* in *capacity, capability, and/or readiness*.
- *Deficiencies impede implementation*. Hence, we call such flaws *impedances*.

Capacity, Capability, Readiness: Iff factors for any strategy implementation



To close the strategy-to-implementation gap, attack the deficiencies in capacity, capability, and readiness factors in the strategy sociotechnical system.

Why Capacity, Capability, Readiness are important



Consider a bank with hundreds of billion Euros in assets. This bank is registered as a retail and investment bank in dozens of countries worldwide. It boasts a leading edge IT infrastructure. The size of its workforce of finance professionals and customer service personnel would, without exaggeration, rival armed forces of a medium size country. They have also acquired pioneering intellectual capital from leading research centers and entrepreneurial outfits. In terms of tangible assets and intangible assets this bank is used as benchmark in their geography. **Their capacity is second to none.**

This bank however, suffers from two key weaknesses. Its emphasis of leading technology, relentless acquisitions of hardware, incessant building of communication networks, promiscuous buying intellectual capital, all makes training the workforce a challenge. Their proficiency to operate and service their systems, applications and maintain a high level of customer service are not equal to the technology they have deployed. Legacy capacity further incumbers the bank's ability to sustain high performance. **The bank's capabilities are inferior.**

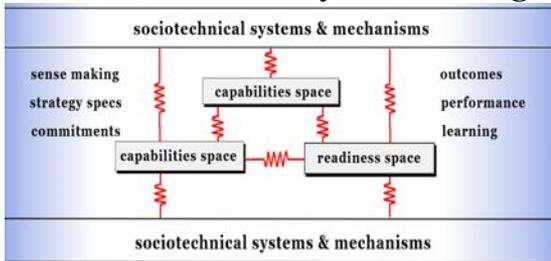
The executives are eager and incented to accumulate capacity and make their workforce proficient. However, middle managers, faced with rapid acquisitions and disruptive technologies, are less eager to jettison much of what they know for another wave and deluge of tangible and intangible assets to learn new technology, methods, tools while simultaneously bringing on-line new business processes. This is exacerbated by the bank's push to foreign countries. Expats do not know the local language and its culture. Locals don't have the same the work style that expats expect in new territories. **Bank's readiness to implement its strategy is flawed.**

By induction, significant implications follow. *First*, capacity and capabilities are distinct concepts. Regrettably, conflation seems the rule. *Second*, capacity, capabilities, and readiness, though orthogonal concepts, interact *systematically* in a way that influences both intended output as well as sociotechnical performance. Third, deficiencies in capacity, capabilities, and readiness *propagate* throughout implementation to negatively influence the intended outputs and the performance of the sociotechnical implementation mechanisms. These deficiencies propagate like sand in the lubricant of the implementation mechanisms. The interactions of these deficiencies produce dysfunctional interactions between the capacity, capabilities, and readiness space. We think of these deficiencies as the causes that produce and intensify the strategy-to-implementation gap. They are the pathogens that cause the strategy disease of ineffective implementations. We call the disease of strategy-to-implementation gap *dysplementation*. We call the deficiencies in capacity, capabilities, and readiness *impedance*.



Summary and Next Steps

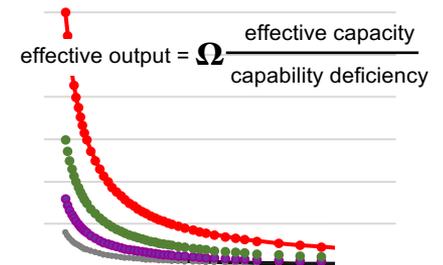
- a minimally parsimonious set, of necessary and sufficient factors, are applicable to *any* strategy implementation. The factors are *capacity*, *capabilities*, and *readiness*.
- deficiencies in these factors are the causes of the strategy-to-implementation gap.
- a specific instance of a deficiency, we call an *impedance*.
- deficiencies of any one factor guarantees *dysplementation*.



- impedances build up and systemically propagate through the sociotechnical system during implementation.
- the implementation-gap is not monolithic or unitary, but an emergent property of flawed implementation.
- *dysplementation* occurs as a systemic and interacting impedances propagate and flare-up during implementation.

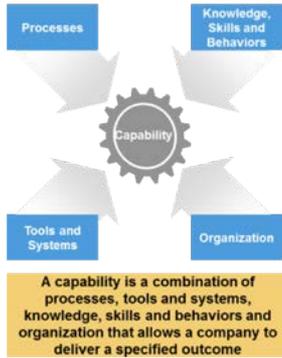
We must test all these hypotheses and claims. Need to:

- *develop a “bill of materials” for each factor to identify their constituent elements.*
- *design and launch research to find evidence that support, or refute our mental models of dysplementation.*
- *critically, we must to develop a **metrology** for capacity, capabilities, and readiness; without which the intensity of deficiencies, impedances and interactions remain qualitative as journalistic narratives.*



Experience with "distinctive capabilities"

Danaher's continuing success is due to a system of five differentiating capabilities



Merger & Acquisition – seek, evaluate, buy, and integrate companies

- Defined process to evaluate and buy companies
- Focus on markets and industries; seek growth and opportunities there first

Platforms for managing and growing business units

- Business units grouped into five strategic segments based on markets and technologies
- Business units given autonomy to achieve performance goals
- Rigorous strategic reviews by business units and platforms

Core Values

- Best Team Wins
- Customers Talk, We Listen
- Kaizen is our Way of Life
- Leading Edge Innovation Defines our Future
- Compete for Shareholders

Process-focused – continually learning to define and promote improvements

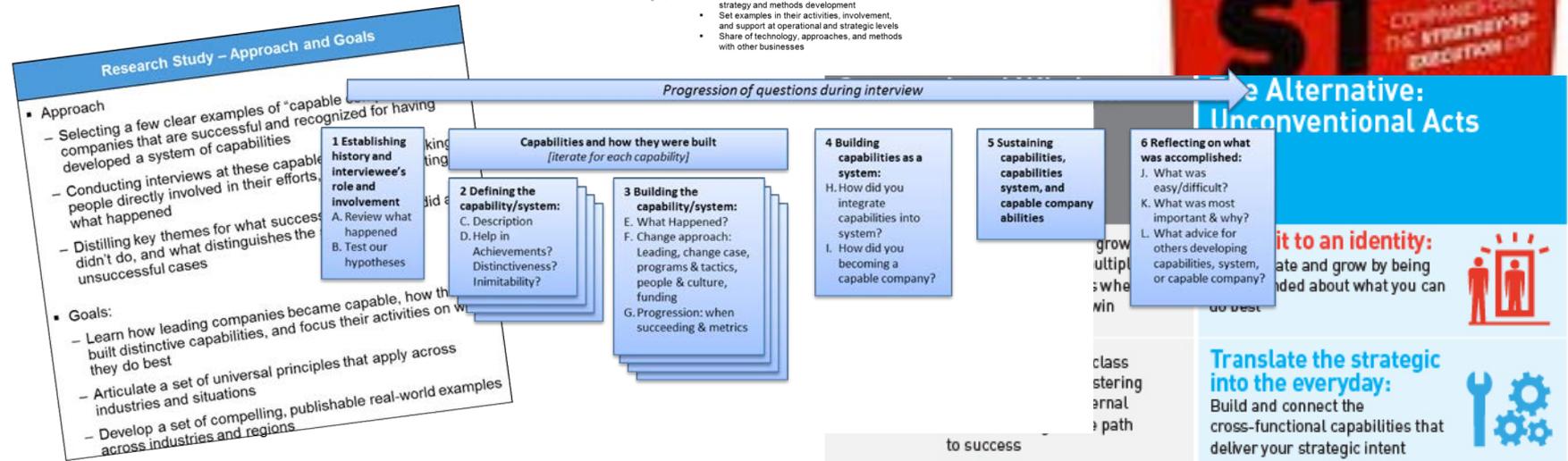
- Culture of continuous improvement, and always room for improvement
- Straightforward and simple metrics (eight core value drivers) to assess and provide feedback on improvement and performance

Danaher Business System – business process knowledge repository

- Suite of tools for operating and improving businesses
- Method of capturing and codifying operational excellence
- Common/shared tools provide discipline and coherence across businesses

Leaders that teach and set expectations

- Executives and Senior VP responsible for platforms and run business units
- Provide coherence through involvement in strategy and methods development
- Set examples in their activities, involvement, and support at operational and strategic levels
- Share of technology, approaches, and methods with other businesses



The Alternative: Unconventional Acts

Put it to an identity:
Create and grow by being defined about what you can do best

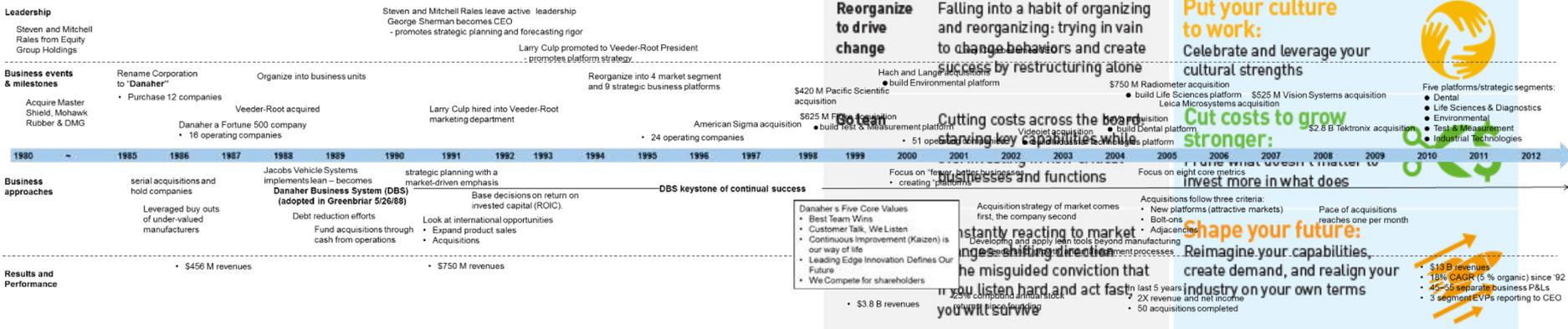
Translate the strategic into the everyday:
Build and connect the cross-functional capabilities that deliver your strategic intent

Put your culture to work:
Celebrate and leverage your cultural strengths

Cut costs to grow stronger:
Invest more in what does



Danaher time line



What are distinctive capabilities?

Distinctive capabilities

Why are they hard to create?

- complex and expensive, with
- high fixed costs in human capital, tools, and systems that are
- purposefully designed and created,
- work in combination with others to leverage complementaries,
- are brought to scale, and
- provide the basis for achieving and sustaining results

Capability system

Danaher's Identity Profile

With headquarters in Washington, D.C., Danaher is a group of companies that produce industrial components, instruments, and other devices for scientific and technological industries, including the life sciences. Since 1980, its annualized returns to shareholders are three times higher than that of the S&P Industrials Index.

In 2015, Danaher announced a forthcoming split into two companies: one for science and technology products and one for industrial components and related products.

Value Proposition: As a "company that builds companies," this integrator adds value through M&A and operational excellence. These capabilities enable its member companies to be B2B category leaders, consistently offering high-quality, reliable products and solutions in what otherwise would be a diverse group of professional, medical, industrial, and commercial enterprises.

Capabilities System

- *Acquisition and integration:* Danaher succeeds by acquiring and integrating underperforming companies that will thrive with its business system, building a long pipeline of potential transactions to ensure that incoming companies fit with its capability system.
- *Leadership development:* Through this capability, the company engages people in learning sophisticated management practices.
- *Intensive continuous improvement* (the Danaher Business System). Applied across product and company boundaries, this capability drives operational improvement of quality, service, reliability, and cost.
- *Scientific and technical innovation:* Danaher's innovation capability is specialized for the development of precision instruments and similar products.

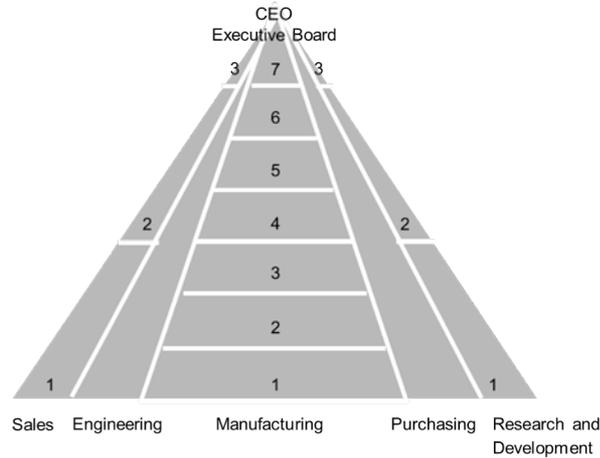
Portfolio of Products and Services: Danaher has grown since the mid-1980s into a conglomerate with almost \$20 billion in annual revenues and forty-one businesses spanning five manufacturing sectors: dental; environmental; industrial technologies; life sciences and diagnostics; and testing and measurement.

Implications for strategy-to-implementation

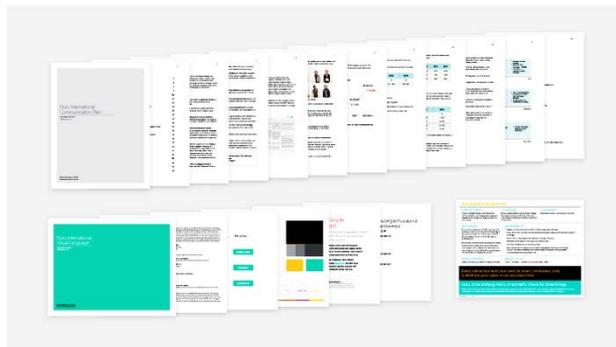
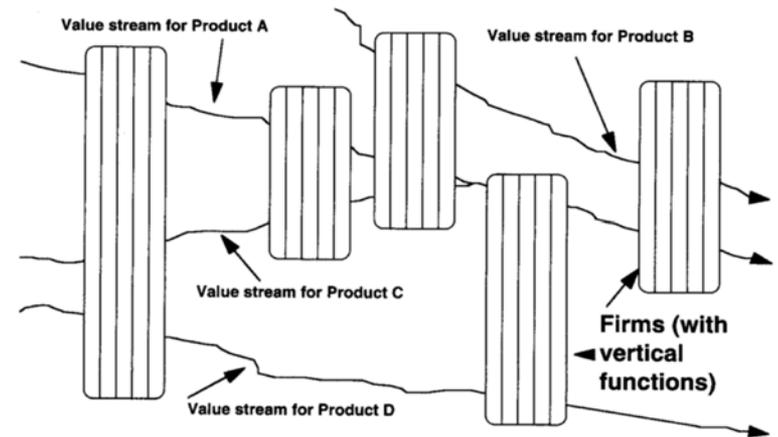


Implications for strategy-to-implementation

From:



To:



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Distinctive Capabilities

1. Listen
2. Katzen is our Way of Life
3. Listen
4. Leading Edge Innovation
5. Define
6. Focus



(non-)Interactive question

What is the knowledge and attraction of **distinctive capabilities** in your organization?

- KNOW, USE and CARE: Great concept! We have been successfully using and will continue to develop capabilities
- CARE and DON'T KNOW: Great concept! We currently have little knowledge but need to focus on capabilities
- KNOW, USE and DON'T CARE: Dubious idea! We effectively focus on our capabilities with little benefit
- DON'T KNOW, USE or CARE: Dubious idea! We don't have a clue or need to know about capabilities

Questions?



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Closing comments

- Research is underway but in early stages
- We invite your feedback and your participation
 - Nominations of organizations that you think navigate the gap between strategy formulation and implementation
 - Our contact information is on the title slide or send us a note via chat
- Participate in the upcoming “Characterizing the Gap” SDM symposium at MIT April 30th-May 1st.

CHARACTERIZING THE GAP between Strategy & Implementation



Hal Gregersen
Executive Director,
MIT Leadership Center



Dava Newman
Apollo Professor of Astronautics
and Engineering Systems, MIT
former Deputy Administrator of
NASA



John Dyson
Director, The Dyson Project
former Head of Global
Capital Strategy & Head of
Global Project
Management,
GlaxoSmithKline (GSK)

3

Keynotes

2

Panels

20

Presentations

14

Posters

3

Hands-on
Workshops

Research into factors which **drive separation or promote integration** between strategy and implementation in organizations.

- The epistemology, ontology and semantics of strategy
- Model-based approaches of strategy for implementation teams
- Model-based approaches of implementation for strategy teams
- Case studies of high performance teamwork that spans strategy and implementation
- Simulation for cascading team choices, organizational constraints and strategic directives

April 30 - May 1, 2018

MIT Campus - Cambridge, MA
Wong Auditorium

Further information

[http://www.](http://www.sdm2018symposium.org)

[sdm2018symposium.org](http://www.sdm2018symposium.org)

Register online by April 22.
(After this date an as-available basis at the door).

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