



# Paradox Times

**Service Managers Day  
Ivrea**

**Nov. 22, 2008**

**Helmut F. Karner**

**Jack Welch**

**„If the Rate of External  
Change Exceeds the Rate  
of Internal Change, the  
End is in Sight!“**

# David Wise

**„In the Future, There will be only  
Two Types of Managers:  
The Quick  
And  
The Dead !“**



CARTIER

# Gary Hamel

In any industry there are

- few **RULE MAKERS**
- many **RULE TAKERS**

and

**??? **RULE BREAKERS****

# AND CHANGE IS NOT ALWAYS HAPPENING CONTINUOUSLY

BUT ALSO THROUGH

- **BREAKPOINTS**

- **Obvious**

- **Hidden**

**BREAKPOINTS ARE DISCONTINUITIES,**

**WHICH CAN BE**

- **ANTICIPATED**

- **EXPLOITED**

- **CREATED**

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"The first rule of life is also the first rule of business: *Adapt or die.*"

—FAST COMPANY

# SURFING

THE EDGE OF

# CHAOS 2



THE LAWS OF NATURE AND  
THE NEW LAWS OF

**BUSINESS**

RICHARD T. PASCALE

MARK MILLEMANN

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20.11.2008

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# 1. Equilibrium is Death

- Alex Trisoglio (LSE): “Recent study of evolution, both in the natural world and in computer based complex systems, has demonstrated the surprising result that the **presence of parasites in a system accelerated evolution dramatically**”
- J. Welch challenged each business head:
  1. Hire 30 to 60 people with-commerce or other nontraditional backgrounds
  2. Protect them from the **organization’s immune defense response**
  3. Come up with viable “destroy your business.com” options within 6 to 9 months
- In the natural world, the dichotomy between genetic uniformity, which perpetuates a winning formula, and **genetic diversity**, which dilutes a winning formula, is resolved by evolution and chance. In the business world, it’s an important matter of choice.

Companies must weigh the benefits of introducing new genetic material – say, in the form of new hires- against the possibly disruptive effects on a smoothly running operation.

It is crucial to protect the reliable core of an organization’s business platform while one simultaneously plants and nurtures the seeds of revolutionary change. One way to do this is to **carefully cultivate the fringes**. Here we adopt another process from nature. The “**verge**” – the boundary between forest and savanna, or the intertidal zone along the ocean’s edge where no single species dominates – is known to foster the most prolific rate of mutation.
- E.g. Xerox Park, Monsanto, BP’s oil exploration unit, Sears revival under Arthur Martinez

# 2. Surfing the Edge of Chaos

- The edge of chaos is a **condition**, not a location. It is a permeable, intermediate state through which order and disorder flow, not a finite line of demarcation. Moving to the edge of chaos creates upheaval but not dissolution. That's why the edge of chaos is so important. The edge is not the abyss. **It's the sweet spot for productive change.**
- Example: **fire ants** can't be eliminated by poison, they flourish. The fire ant appears to thrive at the edge of chaos. When the ant's environment is benign, there is one queen per colony. As environmental adversity intensifies, rival queens will live together in a communal nest until the colony reaches a critical mass, at which time the worker ants will execute all but one of the queens.
- When a complex adaptive system is moved towards the edge of chaos – when hurricanes and typhoons roil the deep seas, or fires rage through forests and prairies – the **potential for generativity is maximized.**
- Images of Life at the Edge of Chaos: Swarms, Jungles, a mad scientist's lab.
- **Navigating the Edge of Chaos:**
  - **Attractors**
    - Point attractors
    - Cycle attractors
    - **Strange attractors** (most important). Strange is an unsettling term. 1. They are co generated. They arise through the convergence of many factors within an organization and its environment. 2. they materialize when what is already present is expressed in a way that provides shape and substance. 3. they **flourish in an environment of adaptive challenge.** 4. they foster breakthrough and outcomes that are unforeseen and unimaginable.
  - **Amplifying and damping feedback** (“feedback is the means by which a system talks to itself”)– accelerate or slow down. Amplifying devices can evoke disequilibrium. One of the most effective of all **amplifiers** is to **overload an organization** so that it cannot continue to conduct business as usual. **Damping conditions:** reaching closure, **defining boundary conditions.** (1) overloading the organization beyond its business-as-usual carrying capacity (2) using **deadlines**, public scrutiny to sustain disequilibrium (3) **identify the adaptive challenge**
  - **Fitness landscapes** – used by ecologists to map the relative competitive advantage of species. Advantages: (1) the landscape imagery makes clear that “**one must go down to go up**” if the goal is to reach a higher fitness peak. The human disruptions and distress associated with that truth are often the most under managed aspect of corporate change efforts. (2) the landscape changes as soon as there is movement on it.



# 3. Self organization and emergence

- **Self Organization** is the tendency of certain (but not all) **systems operating far from equilibrium to shift to a new state when their constituent elements generate unlikely combinations.**
  - A single ant can't fight off a wasp. A single brain cell is a simpleton – but a few tens of billions of them can perform miracles
  - “Ants have shown us that there is almost nothing so small in the world that it cannot be made larger by embedding a bit of interaction in many copies of it, and then connecting them all together.
  - Examples: dental plaque, bees and beehive, Tupperware, DNA
- **Emergence** is the outcome of all this: **a new state or condition.**
  - Networks = Nodes + Connections
  - Harnessing self organization and emergence:
    1. **Increase the number of nodes**
    2. **Increase the number and quality of connections**
  - “If data are volatile and untrustworthy and the interrelationship of key factors is complex and poorly understood, tapping the distributed intelligence of the entire system usually generates better solutions than a central authority. In these situations, it is better to **enrich the connections among the nodes** and let them play an instrumental role in evolving the way forward. It not only takes a village to raise a child (H.R. Clinton) – it often takes a swarm to meet an adaptive challenge”.

# Managing instability

	Strategy for action		Strategy for action	
	steering	regulation	Trial and error	Self-organization
System behavior	stable	stable	instable	instable
organization	simple	complex	simple	complex
Function mode	Cause and effect	Target/actual comparison	Random behavior	Spontaneous reorganization
	<b>Management of stability</b>		<b>Management of instability</b>	

Leadership requirements

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- Exact target definition
- The knowledge to plan ahead
- Precise realization of objectives
- Factual motivation

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- Convincing idea (emotion)
- Process understanding
- Step-by-step movement
- High tolerance for uncertainty
- Personal credibility

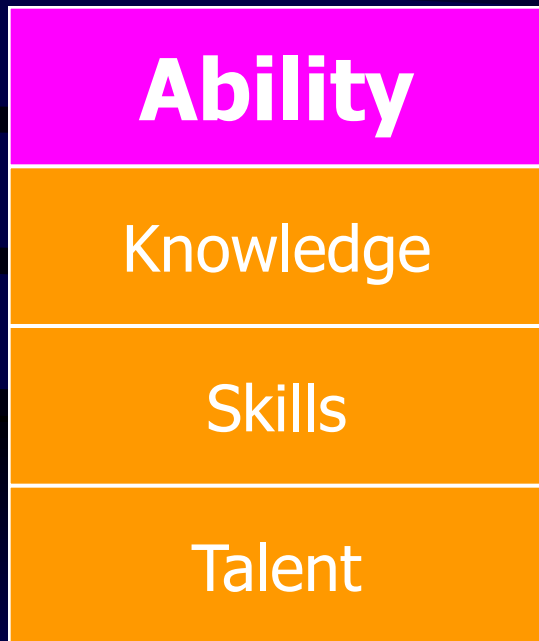
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# 4. Don't direct a complex adaptive system

- ... because you can't
  - Example: 3 Bio \$ were spent over the past 100 years to „control“ the coyote. Today it is 20% larger and significantly smarter than its predecessors
  - FedEx goal to increase pilot productivity by streamlining aircraft routing. The linear game plan evoked a non-linear response
- Efforts to direct living systems beyond very general goals are counterproductive.
  - Living systems cannot be directed along a predetermined path, but, like herding the proverbial butterfly, can be **ushered forth** with reasonable expectation of progress.
  - Issue: contemporary reward systems (most rewards are dissatisfiers) – rewards and punishments are two sides of the same coin (Herzberg). Don't disregard rewards, but regard them as imperfect!
- Consequence:
  1. **Design, don't engineer!**
  2. **Discover, don't dictate!**
  3. **Decipher, don't presuppose!** (decipher the unforeseen consequences before the begin to take form!)

# Innovation has Three Critical Success Factors

# Innovation =



**Innovation is as much about discipline as it is about creativity.**  
Peter F. Drucker



**Each of them: Individual & Organizational**

# Innovation has Three Different Levers

The strongest

Product  
Innovation

Process  
Innovation

Business Model  
Innovation



Efficiency Oriented

Effectiveness Oriented

# Effectiveness versus Efficiency

- “Nothing is less productive than to make more efficient what should not be done at all !”

(P. Drucker)

**EFFICIENCY**

efficient

not efficient

**EFFECTIVENESS**

not effective

effective

<b>DYING (slowly)</b>	<b>THRIVING</b>
<b>DYING (quickly)</b>	<b>SURVIVING</b>

Source: Malcolm Mac Donald



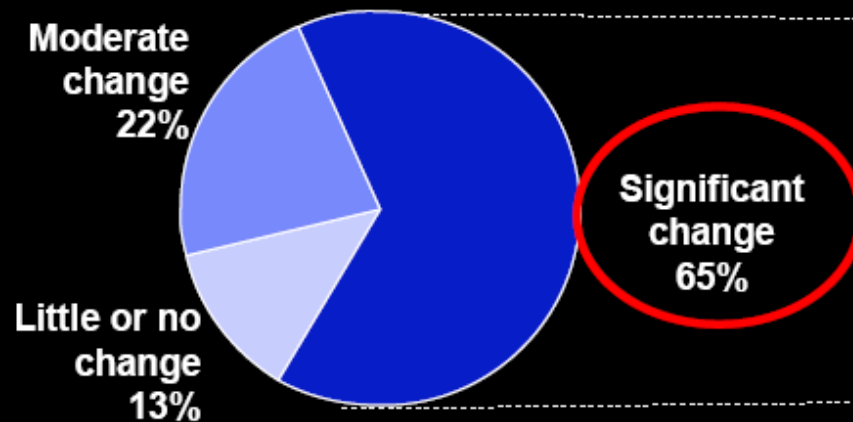
IBM Business Consulting Services

# Expanding the Innovation Horizon: The Global CEO Study 2006

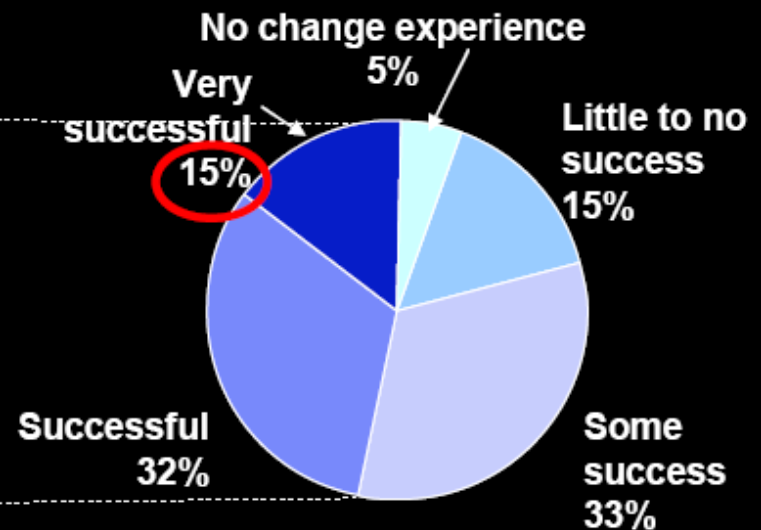
**Ginni Rometty**  
**SVP, Enterprise Business Services, IBM**

## Two-thirds of CEOs see significant change in next 2 years

Extent of Fundamental Change Needed Over the Next Two Years

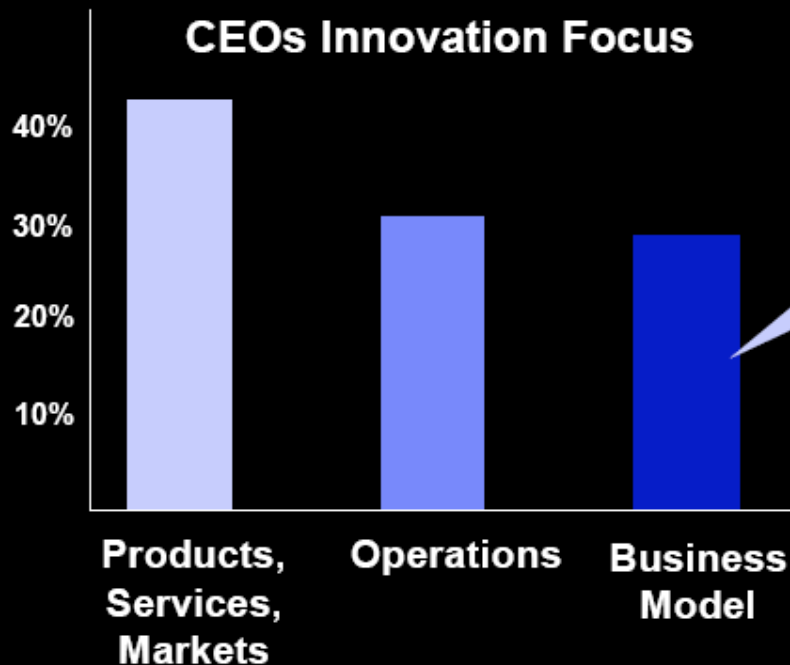


Past Level of Success at Managing Fundamental Change





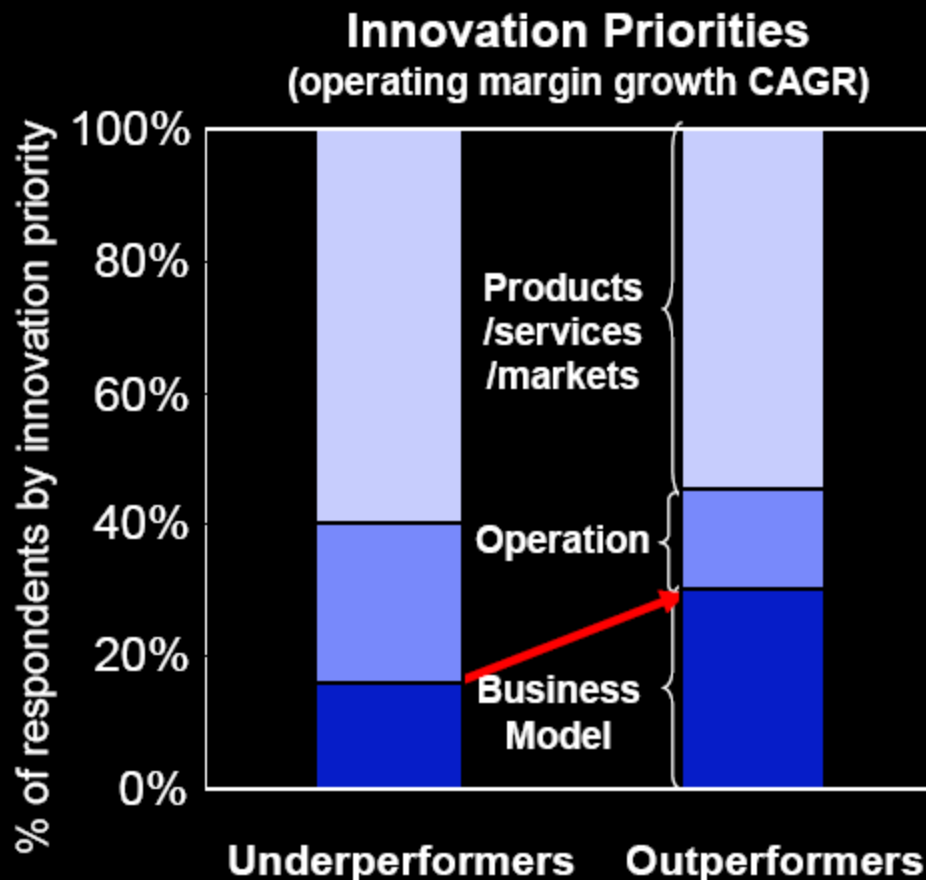
## Business model innovation gains prominence



Organization Structure Changes (66%)  
Building Strategic Partnerships (53%)

*"We need to develop a business model based on strategic partnerships that creates value for our company...and for the industry...in this era of specialization"*

## Outperformers double their focus on the business model



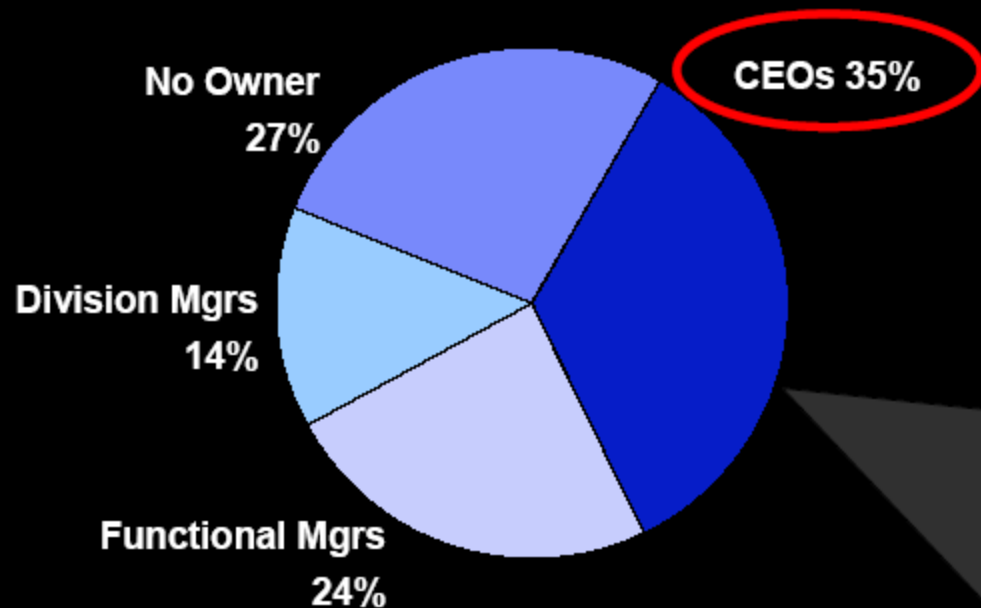
*“The business model we choose will determine the success or failure of our strategy.”*

*“Products and services can be copied, the business model is the differentiator.”*

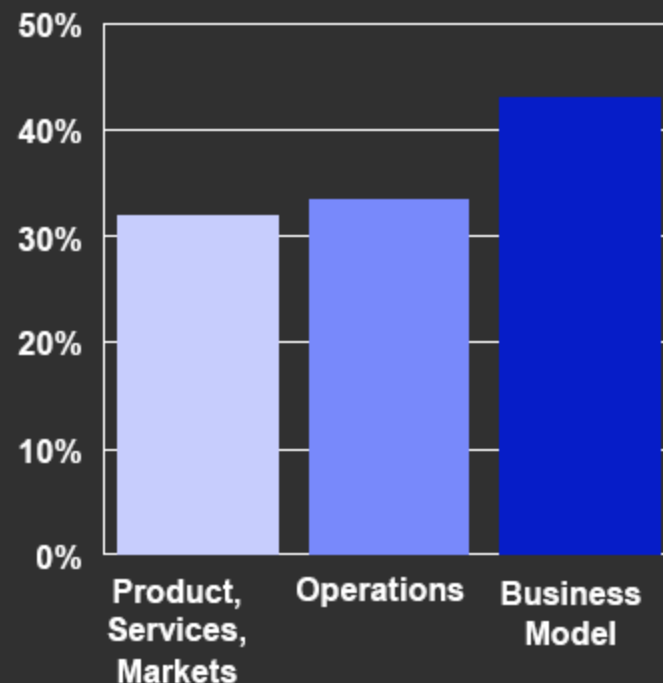
*“Our greatest focus is on business model innovation, which is where the greatest benefits lie.”*

# Who is responsible?

## Responsibility for Innovation Leadership



## CEOs Innovation Leadership





THE  
**FUTURE**  
OF MANAGEMENT

**GARY HAMEL**

WITH BILL BREEN

**Oct. 2007**

HARVARD BUSINESS SCHOOL PRESS

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The Economist calls him "the world's reigning strategy guru," and in the opinion of the Financial Times he is a "management innovator without peer." Recently, the Journal of Business Strategy listed Hamel as one of the 20th century's 25 most influential business thinkers, along with business pioneers such as Henry Ford and Bill Gates. For the past two years, Executive Excellence magazine has ranked Hamel as the world's most influential management speaker.

Hamel's landmark books, *Leading the Revolution* and *Competing for the Future*, have appeared on every management bestseller list and have been translated into more than 20 languages. His latest book, *The Future of Management*, will be published by Harvard Business School Press in October 2007.

Over the past twenty years, Hamel has authored 15 articles for the Harvard Business Review and is the most reprinted author in the Review's history. He has also written for the Wall Street Journal, Fortune, The Financial Times and many other business publications around the world.

Since 1983, Hamel has been on the faculty of the London Business School where he is currently Visiting Professor of Strategic and International Management.

As a consultant and management educator, Hamel has worked for companies as diverse as General Electric, Time Warner, Nokia, Nestle, Shell, Best Buy, Procter & Gamble, 3M, IBM, and Microsoft. His pioneering concepts such as "strategic intent," "core competence," "industry revolution," and "management innovation" have changed the practice of management in companies around the world. As one of the world's most sought after management speakers, Hamel has addressed the World Economic Forum, the Fortune 500 Global Summit and many other similarly prestigious gatherings. Hamel has also advised government leaders on matters of innovation policy, entrepreneurship and industrial competitiveness.

At present, Hamel is leading an effort to build the world's first "Management Innovation Lab." The Lab is a pioneering attempt to create a setting in which progressive companies and world renowned management scholars work together to co-create "tomorrow's best practices" today. The goal: radically accelerating the evolution of management knowledge and practice.

Hamel is a Fellow of the World Economic Forum and the Strategic Management Society.

# Management Innovation in Context

Management Innovation

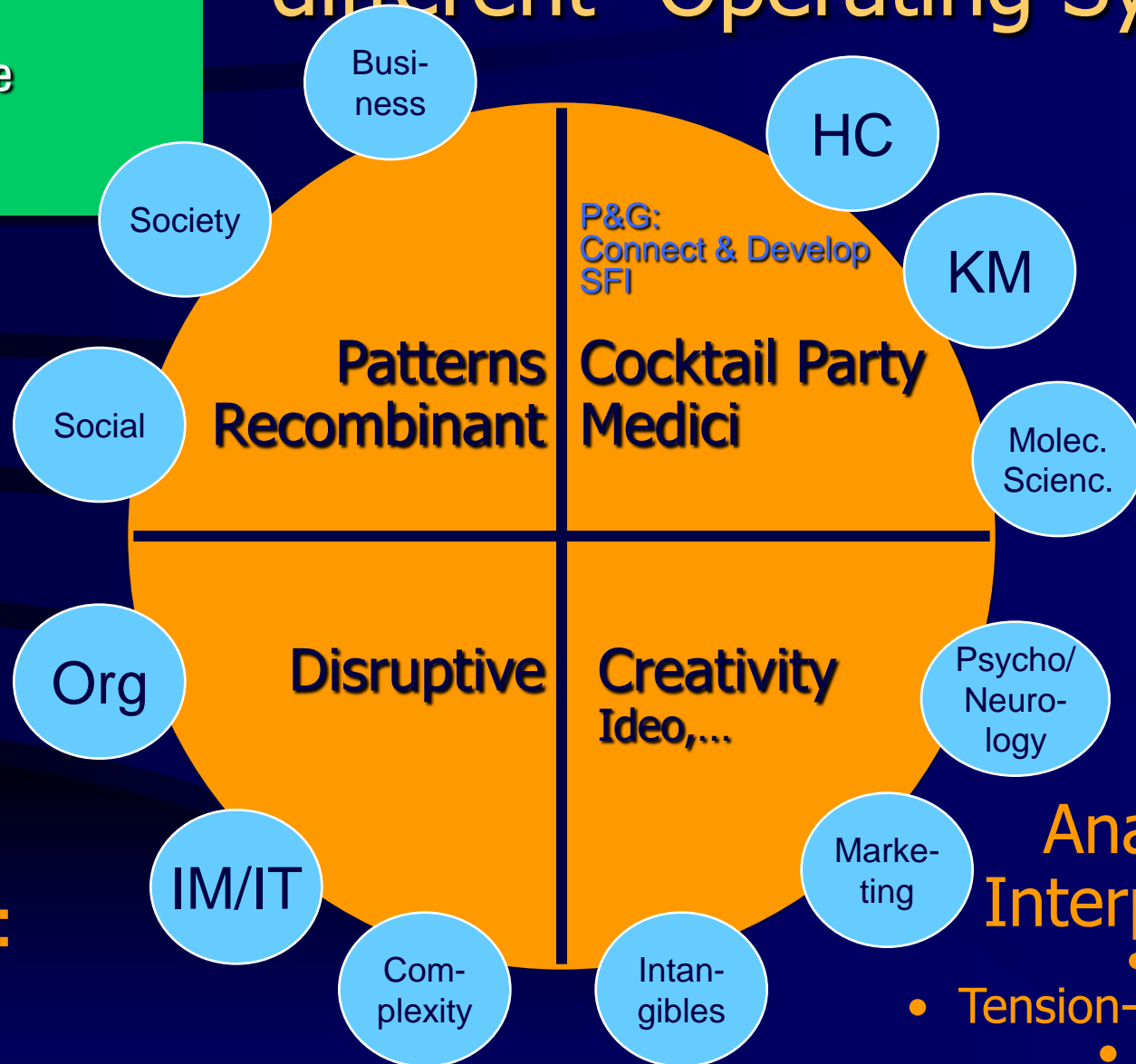
Strategic Innovation  
(Business Model I.)

Product/Service Innovation

Operational Innovation

# Innovation comes in 4 different "Operating Systems"

„Innovation is the single most important factor determining any economy's future success".  
The Economist



**Analytical:**

- Aristotelian
- rational

**Analytical & Interpretative:**

- Ambiguous
- Tension-Conversation
- Tacit-implicit
- Paradox
- Creative

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# John Chambers in an interview with HBR, Nov 2008

- A market transition occurs when there is a subtle but clear disruptive shift. It could be social, economic, or technological, and it begins many years before the market actually grasps its significance and adapts to it. A market transition gives you a glimpse of a new opportunity to take market share or move into new market adjacencies.
- How are market transitions different from market disruptions? Which is the chicken and which is the egg?
- I'd say that market transitions are the precursors to market disruptions, and in many cases, transitions cause the disruptions. Transitions can be driven by the customer, by the industry, or by economic factors, and they usually occur well before the rest of the world realizes what's happening. Disruption occurs as the market responds to a transition with a game-changing innovation.

**Prosit!**

**Cheers!**

**Salute!**