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June 1, 2009



# BUILDING A SMARTER PLANET



The world is smaller and flatter.

## The reality of living in a globally integrated world is upon us.

- Frozen credit markets and limited access to capital.
- Economic downturn and future uncertainty.
- Energy shortfalls and erratic commodity prices.
- Information explosion and risk/opportunity growth.
- Slowing superpowers and emerging economies.
- Increasingly complex supply chains and empowered consumers.

The world is connected:  
economically, socially and technically.

The need for progress is clear.

2% of Malaysia's GDP  
RM10B per year

Annual impact of congested roadways in KL

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The opportunity for progress is clear.

20%

LESS TRAFFIC

**Traffic system:** Stockholm, Sweden

The city cut traffic by 20%, lowered emissions by 12% and reported 40,000 additional daily users of public transportation.<sup>1</sup>

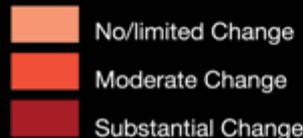
# The way the world works is changing— and leaders must lead through the unknown.

## 8 in 10

CEOs anticipate turbulent change and bold moves.

## 3x

Increase in the gap between leaders' need for change and their ability to manage it.



Companies with fewer than 1000 employees have a far greater challenge and are less successful managing change

The “change gap” triples

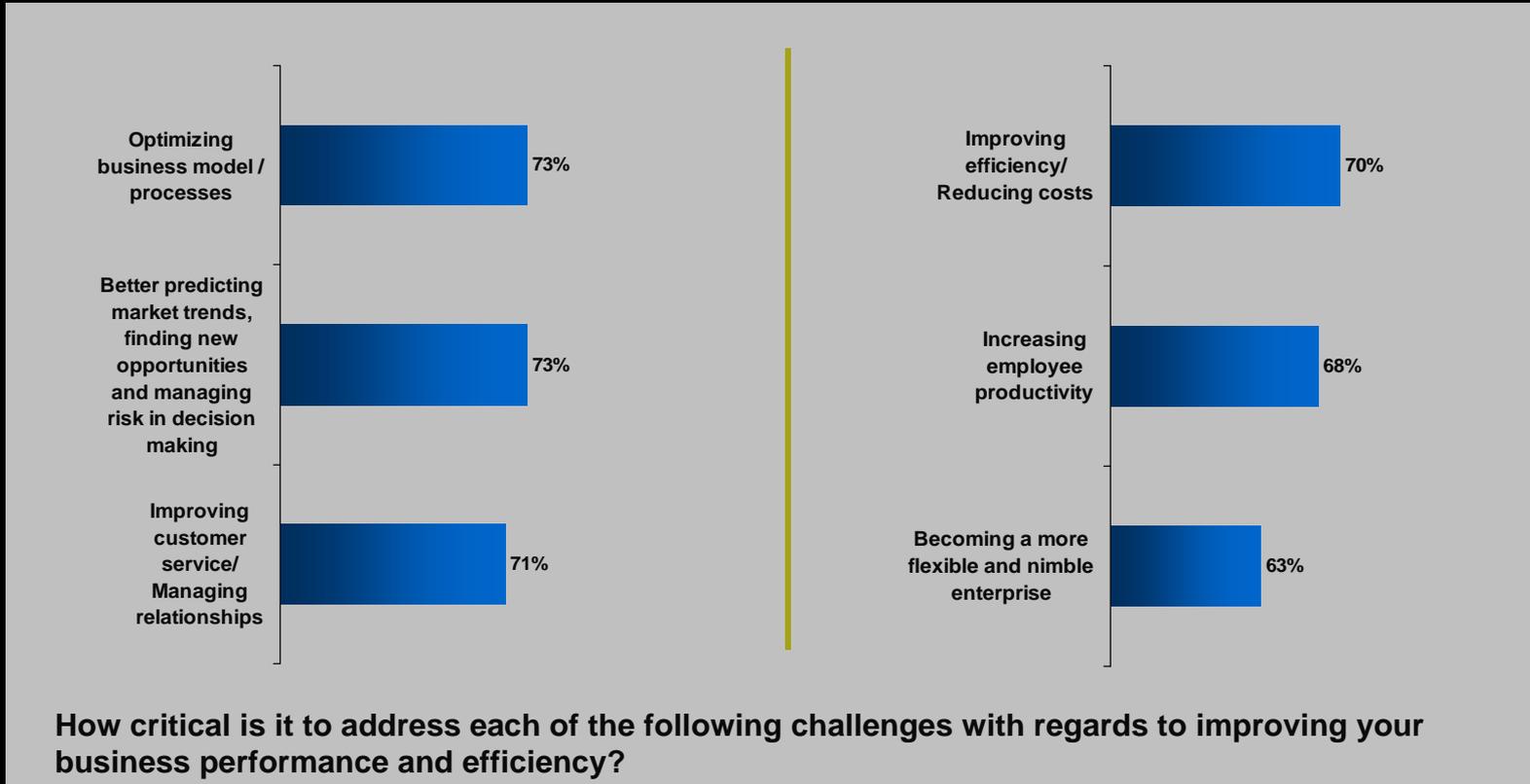
- Midsize company CEOs see a change gap 32% greater than that of the global sample

Multiple external forces are impacting midsize organisations as they manage change

- Market factors, people skills, and regulatory concerns have converged over the last four years, each requiring dedicated time from the CEO

CEOs who embrace change and managed it effectively were 22% more likely to outperform financially

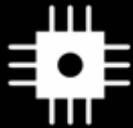
# Malaysia midmarket companies are facing critical business challenges with changes required



Source - IBM survey of 80 midsize Malaysian companies

A mandate for change is a  
mandate for smart.





Our world is becoming

**INSTRUMENTED**



Our world is becoming

**INTERCONNECTED**

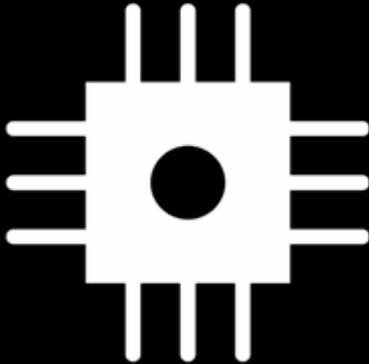


Virtually all things, processes and ways  
of working are becoming

**INTELLIGENT**

## INSTRUMENTED

**We now have the ability to measure, sense and see the exact condition of everything.**

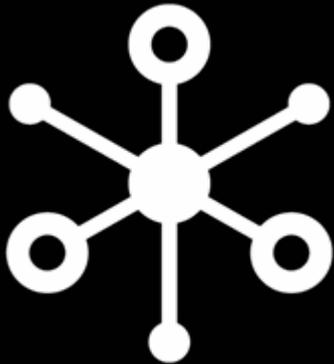


- *Today, there are 1 billion transistors for each person on the planet.<sup>1</sup>*
- *By 2010, 30 billion RFID tags will be embedded into our world and across entire ecosystems.<sup>1</sup>*

**Everything will become instrumented:  
supply chains, healthcare networks,  
cities and even natural systems like rivers.**

## INTERCONNECTED

**People, systems and objects can communicate and interact with each other in entirely new ways.**



- *The internet of people is 1 billion strong. Almost one third of the world's population will be on the web by 2011.<sup>1</sup>*
- *There will be nearly 4 billion mobile phone subscribers worldwide by the end of 2008.<sup>1</sup>*

**The Internet of things—cars, appliances, cameras, roadways, pipeline, pharmaceuticals and even livestock—is headed to 1 trillion.**

## INTELLIGENT

**We can respond to changes quickly and accurately, and get better results by predicting and optimizing for future events.**



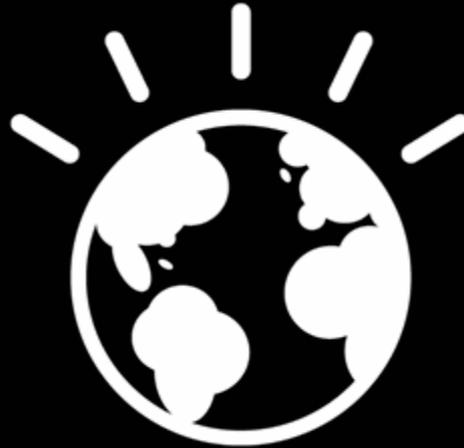
- *Every day, 15 petabytes of new information are being generated. This is 8x more than the information in all U.S. libraries.<sup>1</sup>*
- *An average company with 1,000 employees spends \$5.3 million a year to find information stored on its servers.<sup>1</sup>*

**New computing models manage the massive amounts of data generated by the proliferation of end-user devices, sensors, and actuators. Combined with advanced analytics, these technologies are making us smarter.**



An opportunity to think and act in new ways—  
economically, socially and technically.

**Smarter planet:** Thinking and acting in new ways to make our systems more efficient, productive and responsive.



- **NEW INTELLIGENCE**

- **SMART WORK**

- **GREEN AND BEYOND**

- **DYNAMIC INFRASTRUCTURE**

Today, more than ever, organizations are under pressure to leverage a wealth of information to make more intelligent choices.

### **VOLUME OF DIGITAL DATA**

With the proliferation of end-user devices, sensors and actuators, the nature of data is changing. Data volumes and network bandwidth are expected to grow tenfold in the next three years.

### **VARIETY OF INFORMATION**

With the expansion of information comes large variances in the complexion of available data—very noisy with lots of errors and no opportunity to cleanse it in a world of real-time decision-making.

### **VELOCITY OF DECISION-MAKING**

The market demands that businesses optimize decisions, take action based on good information and utilize advanced predictive capabilities—all with speed and efficiency.

### **SHIFT IN WHAT WE ANALYZE**

Enterprises need a broader, systems-based approach to the information they examine and optimize. Stream computing and event processing capabilities are enabling the analysis of massive volumes.

## New Intelligence:

A smarter planet gives organizations the vision to see without being there.



**Matiq:** Employs RFID tags to trace meat and poultry from the farm to store shelves to ensure safety and freshness and provide more transparency to consumers.<sup>1</sup>

Today, businesses understand the need to drive greater efficiencies by taking action on energy, the environment and sustainability.

### **LAWS, REGULATIONS AND STANDARDS**

Governmental regulations and laws are designed to reduce emissions of greenhouse gases, protect natural resources and limit further damage.

### **GROWTH OPPORTUNITIES**

Worldwide demand for greener products, technologies and services has opened up the best emerging market opportunities since the Internet boom of the 1990s.

### **STAKEHOLDER EXPECTATIONS**

From investors to market analysts, from employees to consumers and NGOs, the clamor for consideration of environmental and economic consequences of activities is growing.

### **COSTS AND AVAILABILITY**

Leaders face rising costs and uncertain availability of energy, waste disposal, water and raw materials. Risks for physical assets due to climate change and global warming are real.

## Green and Beyond:

A smarter planet empowers organizations to do more, using less.



**Landmark:** Revolutionizes petroleum frontier exploration in Texas by integrating data sources to increase the likelihood of finding profitable sources of oil.

Today, organizations can work smarter, supported by flexible processes modeled for the new way people buy, live and work.

### **ECONOMIC PRESSURES**

Increasing strains on the global economy are galvanizing leadership to build visibility and control into their business models to mitigate risk and optimize profit.

### **GLOBAL COMPETITION**

In a global economy, intense competitive pressure is driving more efficient markets. To stay ahead, businesses will need to build more agile models and be the first to seize golden opportunities.

### **THE DEMANDING CONSUMER**

Customer expectations have never been higher. By figuring out exactly what people want, companies are tapping into hidden opportunities and rolling out innovative products and services.

### **IT INTEGRATION**

Breakthrough applications like Cloud and Web 2.0 are empowering the business user, driving the convergence of business and IT, and blurring the lines between companies and their customers.

## Smart Work:

A smarter planet puts organizations in position to be first and be right.



**Max Bahr:** A Dynamic Inventory Optimization Solution enables the retailer to meet demand for any of 40,000 products in more than 80 outlets with low replenishment and storage costs—boosting customer service ratings to 99%.

In today's economy, we need dynamic infrastructures that drive down costs, and are intelligent and secure.

### **RISING COST PRESSURES**

Business and IT assets are underutilized and difficult to manage; operational cost and complexity are reaching unsustainable and uncompetitive levels.

### **HIGHER SERVICE EXPECTATIONS**

Increasingly savvy customers demand quality service and continuous availability across an expanding range of assets and applications.

### **NEW RISKS AND THREATS**

Security, resiliency and compliance challenges are created by the accelerating pace of change and the proliferation of operating, IT and "smart" assets that compromise the underlying infrastructure.

### **EMERGING TECHNOLOGIES**

Smarter and more adaptive technologies, such as virtualization, must be harnessed effectively to drive business innovation, efficiency and responsiveness.

## Dynamic Infrastructure:

A smarter planet enables organizations to solve the problem before the problem.



**UBench International:** Uses in-car wireless telemetry to automate the auto leasing process from end to end, cutting per-vehicle administrative costs by 35% while increasing customer satisfaction and retention.

# Becoming Smarter Businesses: Examples of companies with between 100 and 999 employees

Building a smarter planet



Robust and sturdy systems and solutions ensure business continuity and operational reliability which customers rely on during peak business hours

Streamlined business management workflow from planning, forecasting, back-office and store-front functions to significantly improve customer service and sales



With retail solutions, employee productivity at Secret Recipe increased by 5%, and service delivery times improved between 10% and 20%. Overall, company's sales grew by approximately 10%

Vietnamese fish farms are now able to track their products throughout their export lifecycle – from harvesting and shipping to retail - to help ensure food safety effectively and efficiently

What smart things are happening  
in your industry today?

Where are the greatest  
opportunities for progress?

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# Changes in the economic environment will bring disruption and transformation on a global scale.

## **DISRUPTIVE**

- Unprecedented constraints on access to credit and capital.
- Falling demand and increased price sensitivity.
- Disruptions in supply chains, partner and customer arrangements.

## **TRANSFORMATIVE**

- Restructuring of industries:  
Firms fail and are sold off overnight.
- New regulatory regimes.
- Stress on global inter-dependencies



*Urgency for real change provides an impetus to harness new opportunities.*

To realize the potential of a smarter planet, organizations need to do three things.

# 1

## FOCUS ON VALUE

### Do more with less

- Cash/capital focus
- Flexibility

### Focus on the core

- Businesses
- Initiatives

### Re-align relationships

- Financial solidity of suppliers, partners and customers
- Revisit/renege

# 2

## EXPLOIT OPPORTUNITIES

### Capture share

- Disrupt weak competitors
- Acquisitions

### Build future capabilities

- Protect and acquire talent
- Initiatives

### Change your industry

- Bold moves
- Position globally

# 3

## ACT WITH SPEED

### Manage change

- Clearly communicate simple goals
- Seek and leverage experience

### Leadership

- Get the information to act
- Set the agenda

### Risk and transparency

- Business performance management and analytics
- Risk management



We've only just begun to uncover what is possible on a smarter planet.

The world will continue to become smaller, flatter and smarter. We are moving into the age of the globally integrated and intelligent economy, society and planet.

The question is, what will we do with it?