



# The Canadian Economy and the Apparent Innovation Paradox:

**There is No Paradox –  
it's mostly a matter of  
Management and Culture!**

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# **Core message concerning Business Innovation in Canada**

**Investments are not the fundamental issue for  
the Canadian Innovation Gap (“*Paradox*”).**

**The issue is Innovation Management!**

**... and LEADERSHIP nurturing a culture of entrepreneurship  
and pursuing innovation *comprehensively, competitively  
and methodically!***

**Question: How do we bring Firm Innovation  
Management knowledge to the people that  
matter: in industry and in governments?**

# From Industry Analysis to Action

## REPORT CARD

### Innovation

1	Switzerland	A
2	Sweden	A
3	U.S.	A
4	Denmark	B
5	Netherlands	B
6	U.K.	B
7	Finland	B
8	Ireland	C
9	Japan	C
10	France	C
11	Germany	D
12	Australia	D
13	Canada	D
14	Norway	D
15	Austria	D
16	Belgium	D

Note: Data for the most recent year available were used.  
Source: The Conference Board of Canada.

## Topic:

**Is there a Canadian paradox concerning:**

❖ **Good Canadian Science & Technology Research**

VS.

❖ **Poor Canadian Business Innovation?**

**No! There is a disconnect between reality and some outdated perceptions (myths)!**

**This is not about innovation in the research labs but about firm-level business innovation that leads to tangible performance where it counts: in the market!**

## Agenda:

- ◆ **Business Innovation**
- ◆ **Perceptions & Reality of Canadian Industry Innovation**
- ◆ **Summary: What's To Be Done**

***Innovation is the central issue in economic prosperity.*** (Michael Porter)



# What is Business Innovation? Why Innovate?

There is a lot of buzz around INNOVATION.  
However, there is much confusion about what it really means  
and how to manage it properly.



## Goal of Innovation:

### Create Value, Ensure Growth, Enhance Competitiveness

- Amaze and attract **customers** with new/better value in products & services
- Surprise **competition** through more effective internal & external processes
- Be more competitive, grow and achieve **your vision**



# Innovation is Means to an End → “Success”

Success of an company is predicated on:

1. A **MARKET** of sufficient significance &/or growth

2. The **COMPETITIVENESS** of the organization in serving this Market as determined by:

- a) **Desirability** and **affordability** of its **Products** (Good & Services)
- b) **Effectiveness** of its **Interactions with the Market** (environment) in terms of understanding of, promoting to, accessing to and satisfying of its targeted **customers** & its **stakeholders**
- c) **Efficiency** of its **Operations** (including management, development, production, HR, **quality**, supply, distribution, etc.)
- d) **Financial Strength**,

3. The **CULTURE** pervasive in the **Organization** (including **Leadership**, **Skills**, **Competencies**, etc.); and

4. **Luck & Timing**

***Innovation is the specific instrument of entrepreneurship.  
The act that endows resources with a new capacity to create wealth.***

Peter Drucker

# Business Innovation is Much More than just R&D

*Innovation is about creating value.  
Business value can be seen only in the context of the market.  
Social value can be seen only in the context of the community.*

**Business innovation may address all aspects at all times**



**“Innovation is a process through which economic and social value is extracted from ideas and knowledge through the generation, development, and implementation of new or improved strategies, capabilities, products, services, or processes.”**

**Data from: 2012 Canadian Industry Survey on Firm-level Innovation Metrics & Management**  
**Center for Business Innovation at Conference Board of Canada**

☐ **Inside the Firm Understanding of Innovation**

☐ **Across all industry sectors**

☐ **Across the wide geography of Canada**

☐ **Firms of all ages, sizes and revenues**

☐ **Over 600 responses to questions on:**

➤ **Competitive Interests**

➤ **Innovation Focus & Investments**

➤ **Innovation Management Practices**

➤ **Metrics**

➤ **Factors affecting innovation effectiveness**

➤ **With significant impact conclusions thanks to performance correlations**



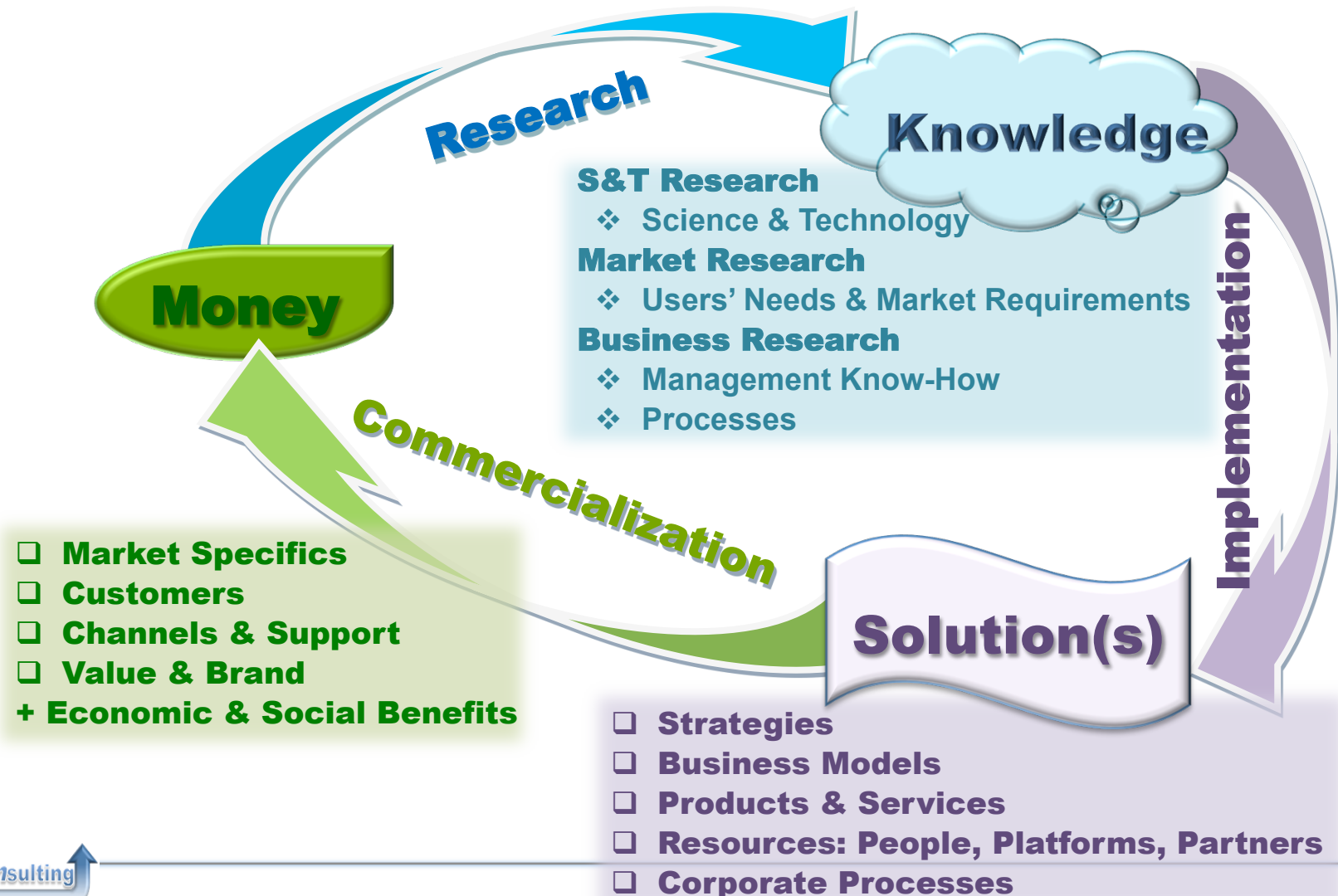


# Myth #1: S&T Research = Innovation

**Reality,** simply put, is that:

**Research = Transformation of Money into Knowledge**

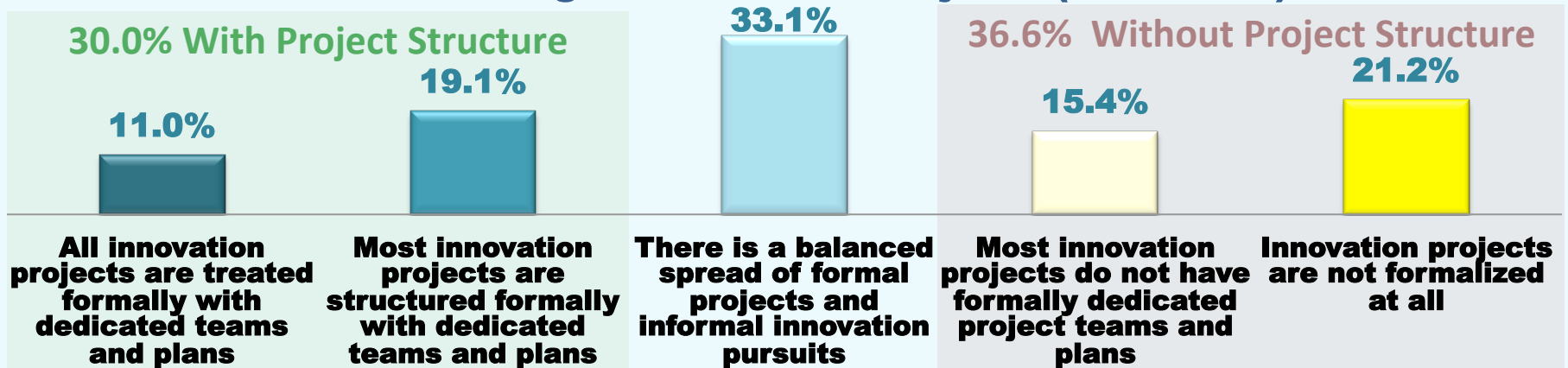
**Innovation = Transformation of Ideas & Knowledge into Money (etc.)**



# Myth #2: Innovation is Having Ideas

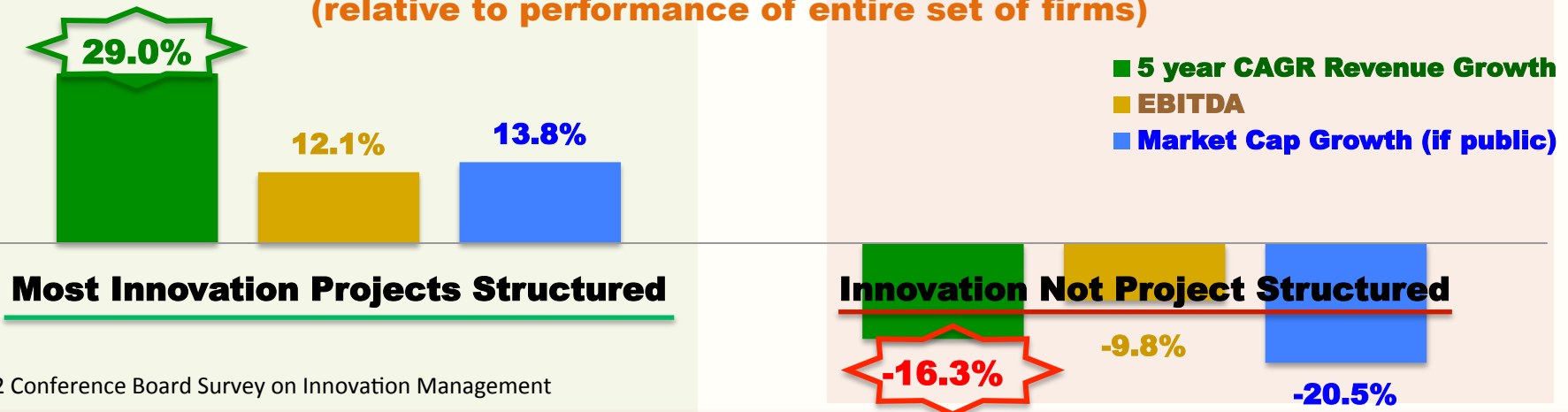
**Reality: Innovation is Structured Work to transform Ideas into tangible Market Value and higher Competitiveness**

## Handling Innovation as Projects (% of firms)



2012 Conference Board Survey on Innovation Management

## Performance of Groups with/without Innovation Project Structure (relative to performance of entire set of firms)

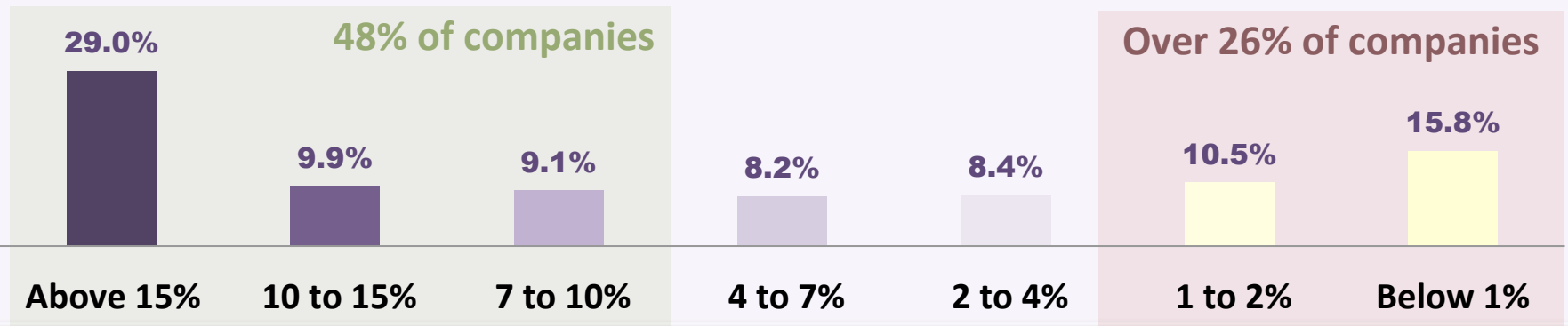


2012 Conference Board Survey on Innovation Management

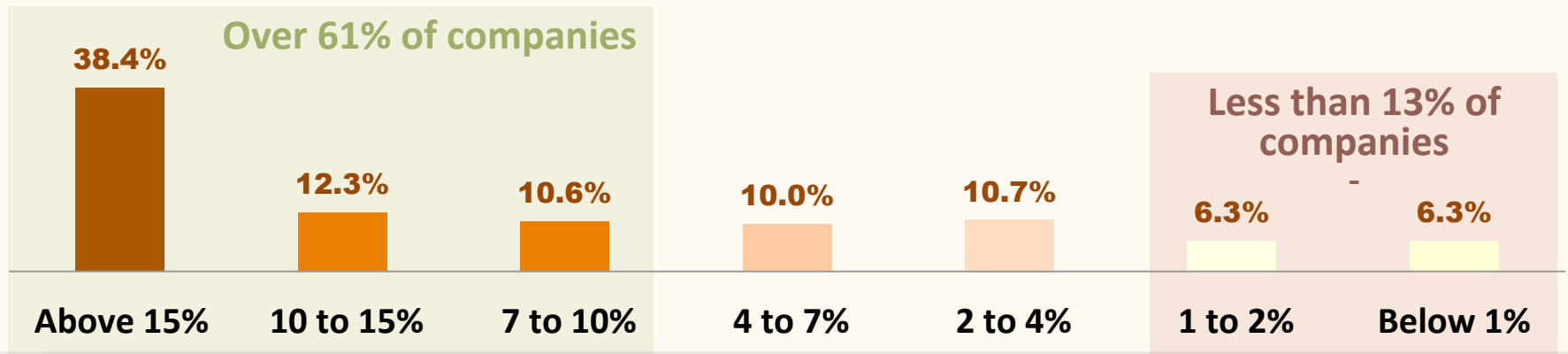
# Myth #3: Canadian Industry Does Not Invest Enough in Innovation

## Reality #1: Canadian Industry Invests a Lot in Innovation beyond R&D

**R&D Intensity as % of Revenues (% firms)**



**Innovation Time Intensity as % Total Time (% firms)**

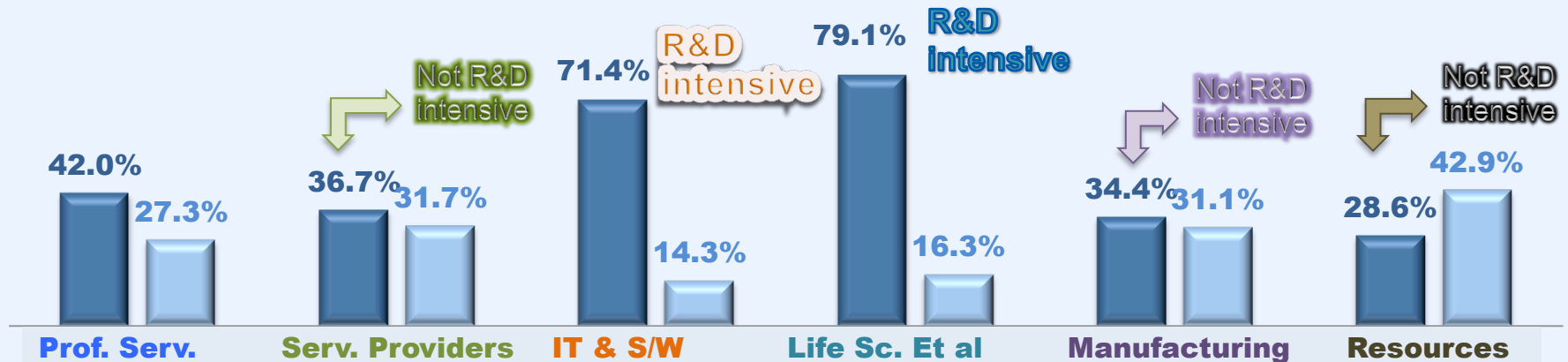




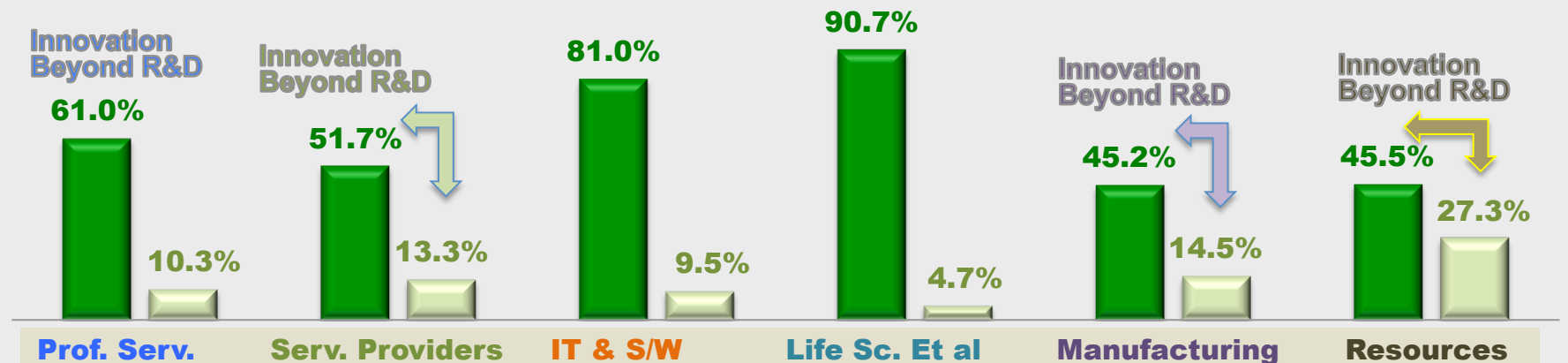
## Reality #2:

# Innovation Investments and Pursuits Are Sector Dependent

% of firms with R&D Intensity Investments ■ Over 7% ■ Under 2%



% Firms with Time Intensity of Innovation ■ Over 7% ■ Under 2%

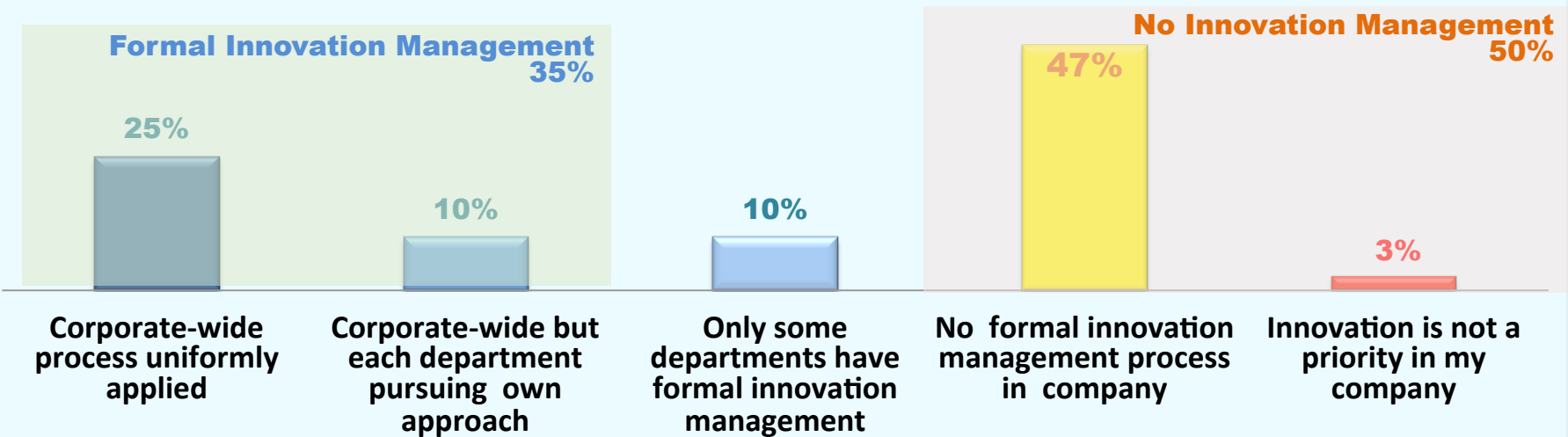


*Sectors have specific needs and pursue different types of innovation.*

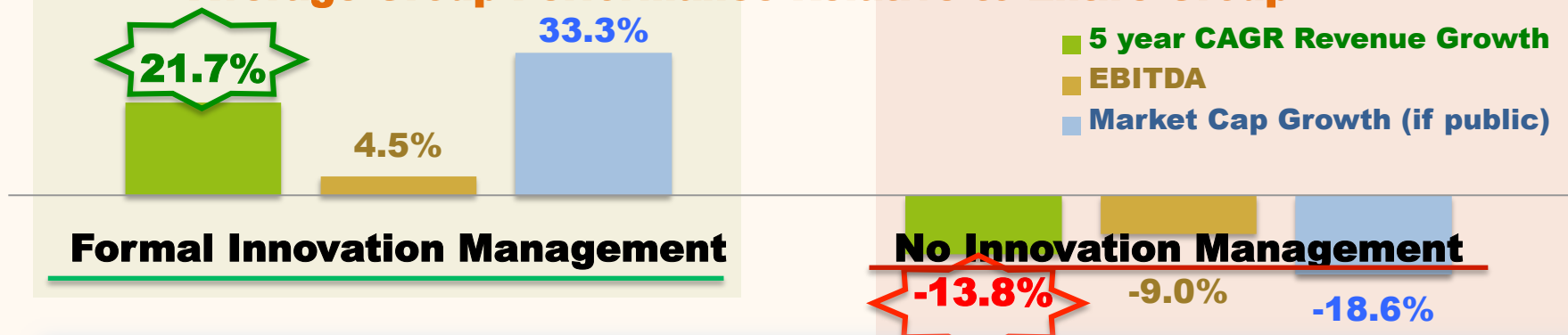
# Myth #4: Innovation Results are Strictly Proportional to Investments

**Reality:** Yes... But If and Only If Innovation is Managed Adequately

## Innovation Management Process Handling – in Canada



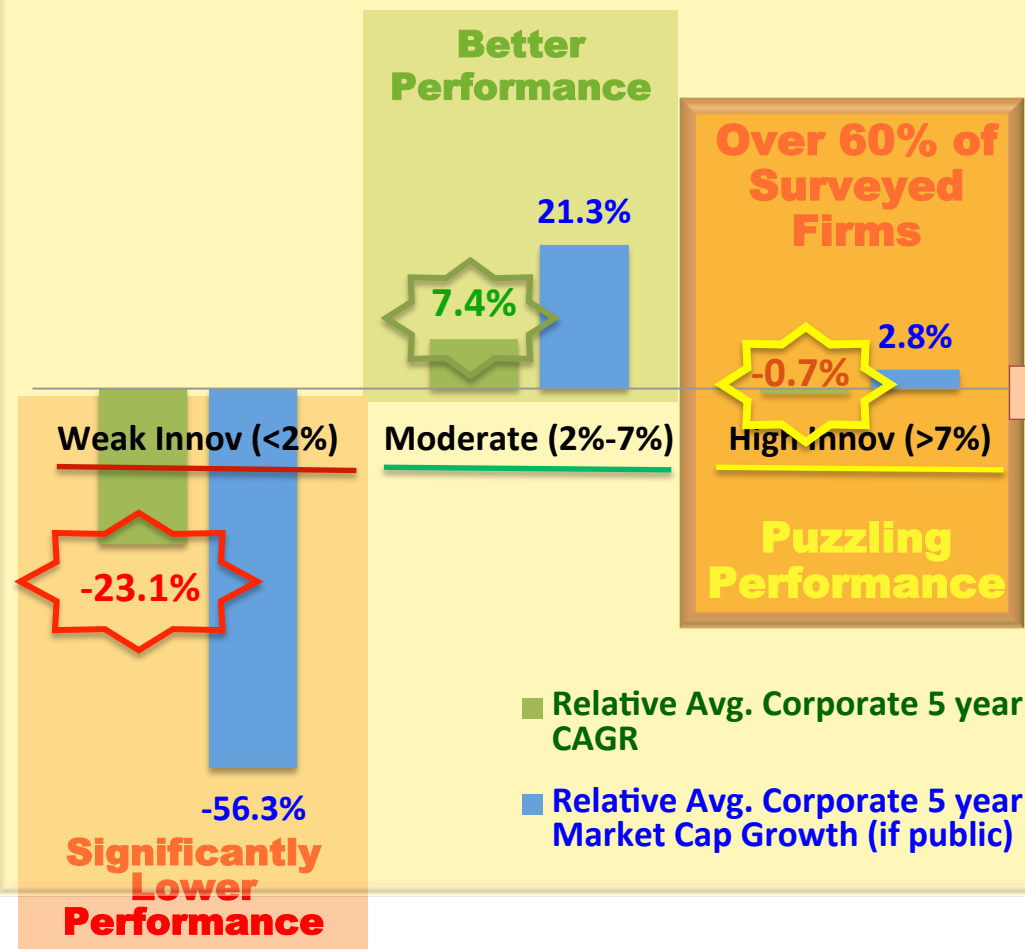
## Average Group Performance Relative to Entire Group



**50% of Canadian firms surveyed do not manage properly their innovation!  
That is the problem!**

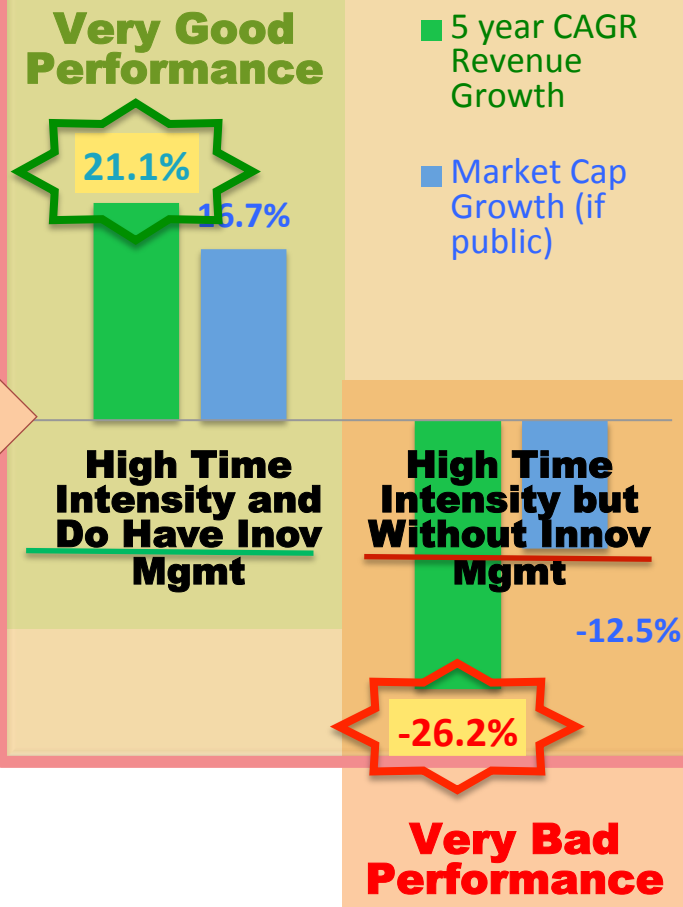
# Corollary: Investing a Lot in Innovation is Meaningless unless Innovation is Managed Adequately

## Relative Average Performance by Innovation Time Intensity



Splitting by Innovation Management

## Innovation Management Impact on Performance



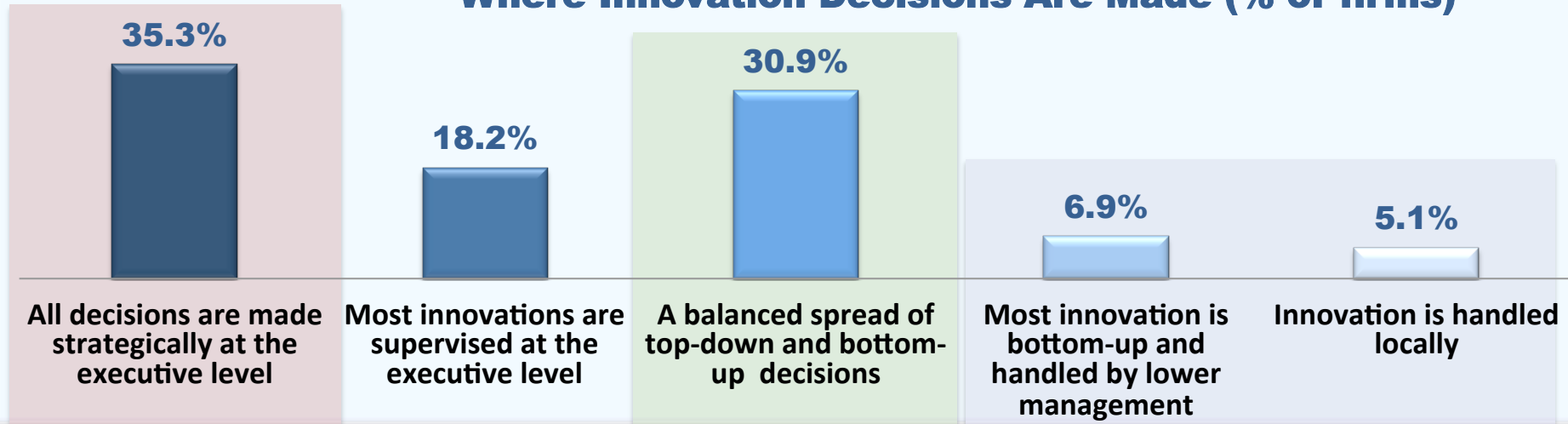


## Myth #6:

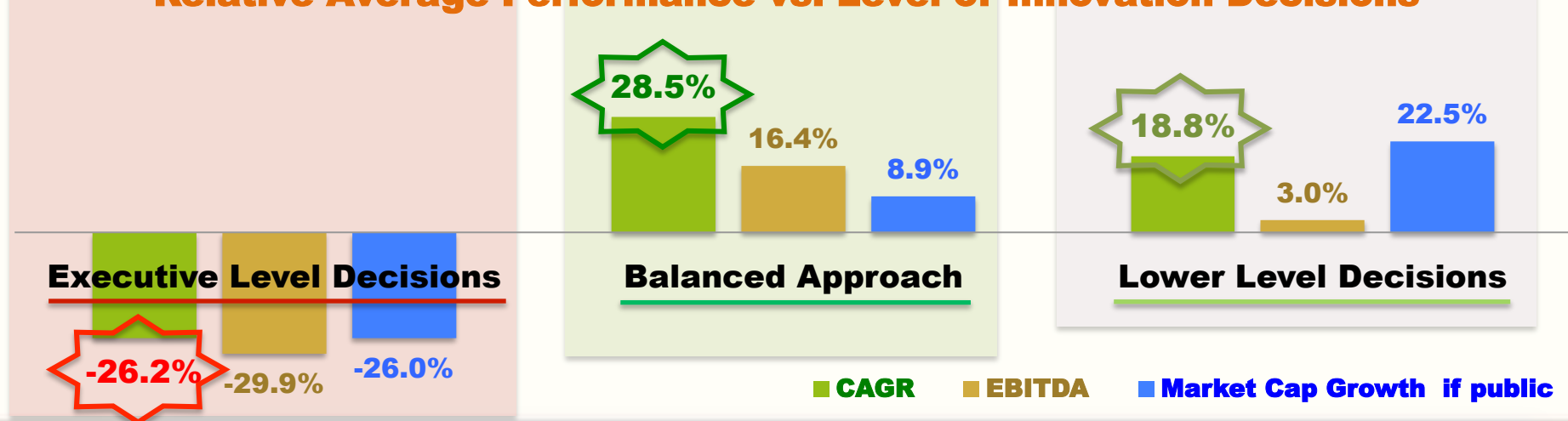
## Reality:

# Executives Know Innovation Best A Balanced Approach Top-down & Bottom-up is much Better

Where Innovation Decisions Are Made (% of firms)



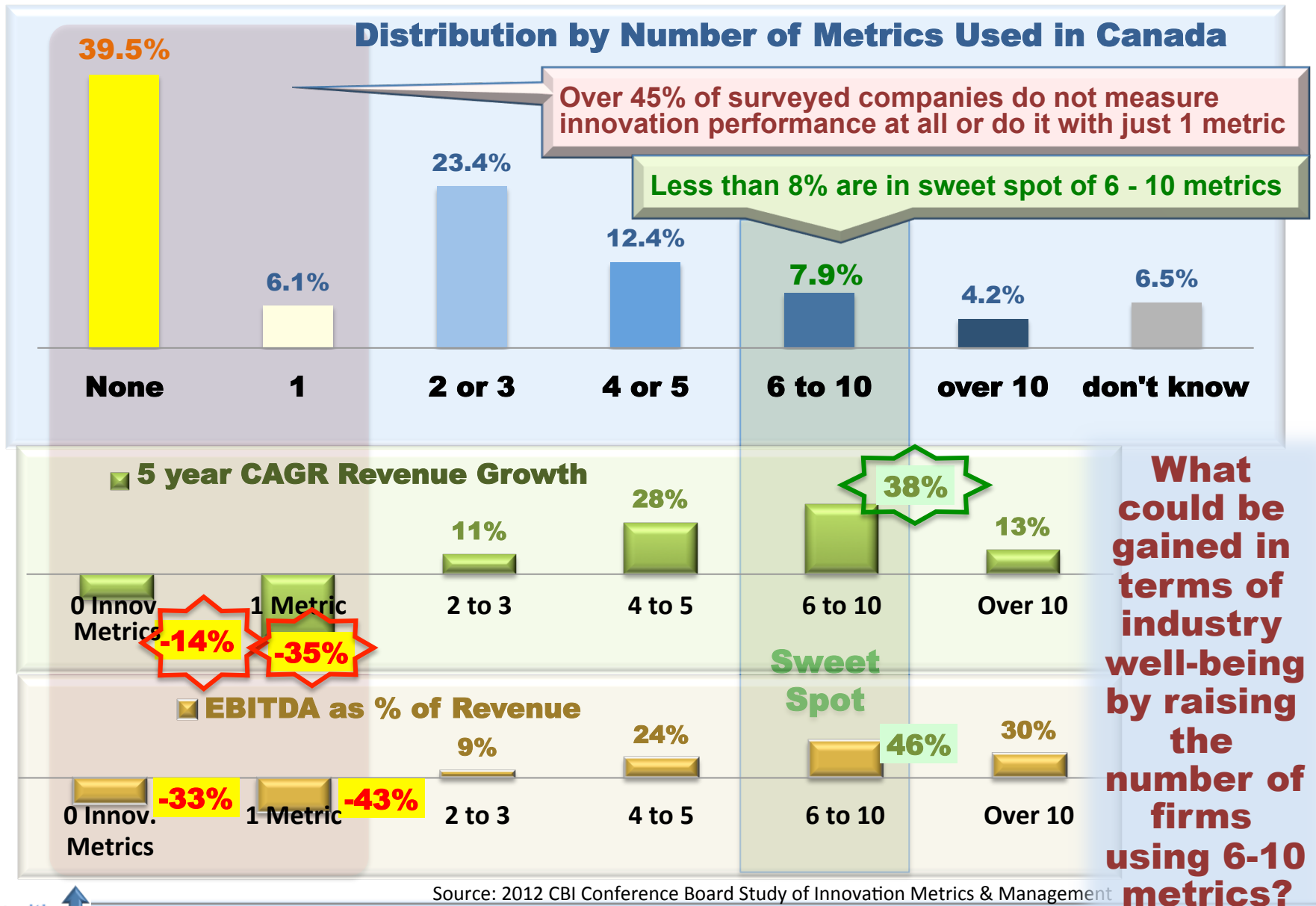
Relative Average Performance vs. Level of Innovation Decisions



Culture matters a lot, and a culture of constructive debate is more productive.

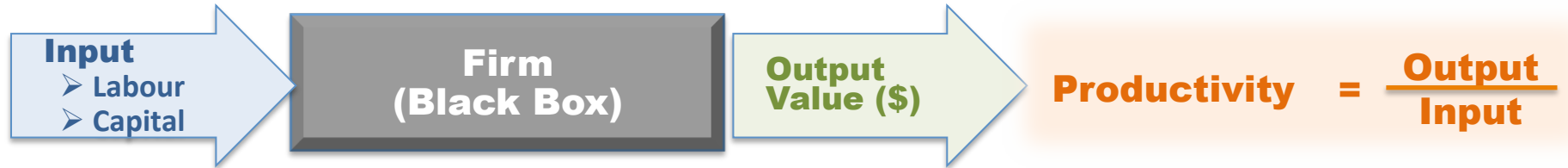
*"When all think alike, then no one is thinking"* (Walter Lipmann)

# **Reality: Many Canadian firms use too few metrics and their performance suffers**



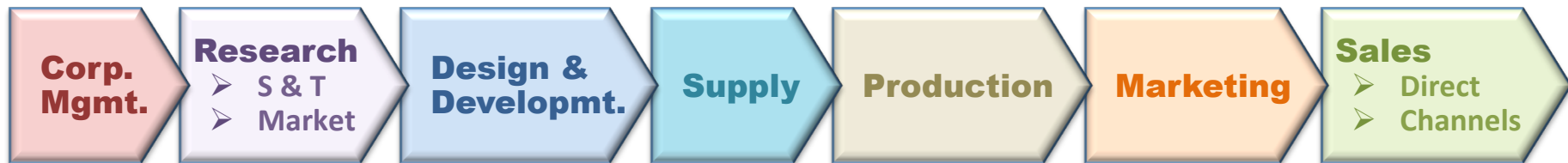
## Myth #7: Productivity Gains is a Good Innov. Metric

**Reality:** Innovation is a complex multi-stage process and Productivity Gains is an obfuscating Innovation Metric unless balanced by others



- ✧ The Innovation Value Chain links productivity and quality factors at all stages
- ✧ Look inside the Productivity Value Chain to determine the Weak Links

For Illustration:



$$\text{Productivity} = P_{CM} \times Q_{CM} \times P_{RST} \times Q_{RST} \times P_{RM} \times Q_{RM} \times P_{D\&D} \times Q_{D\&D} \times P_{Sup} \times Q_{Sup} \times P_{Prod} \times Q_{Prod} \times P_{MKT} \times Q_{MKT} \times P_{Sales} \times Q_{Sales}$$

What value is in blaming the **Workers'** "productivity" if **Management** took lousy decisions or **Product Design** was unappealing or **Supply** got materials of poor quality or **Marketing** was ineffectual or **Sales** channels were weak?

***To find solutions one needs to address the real problem(s)!***



# What have we learned? What's to be done?

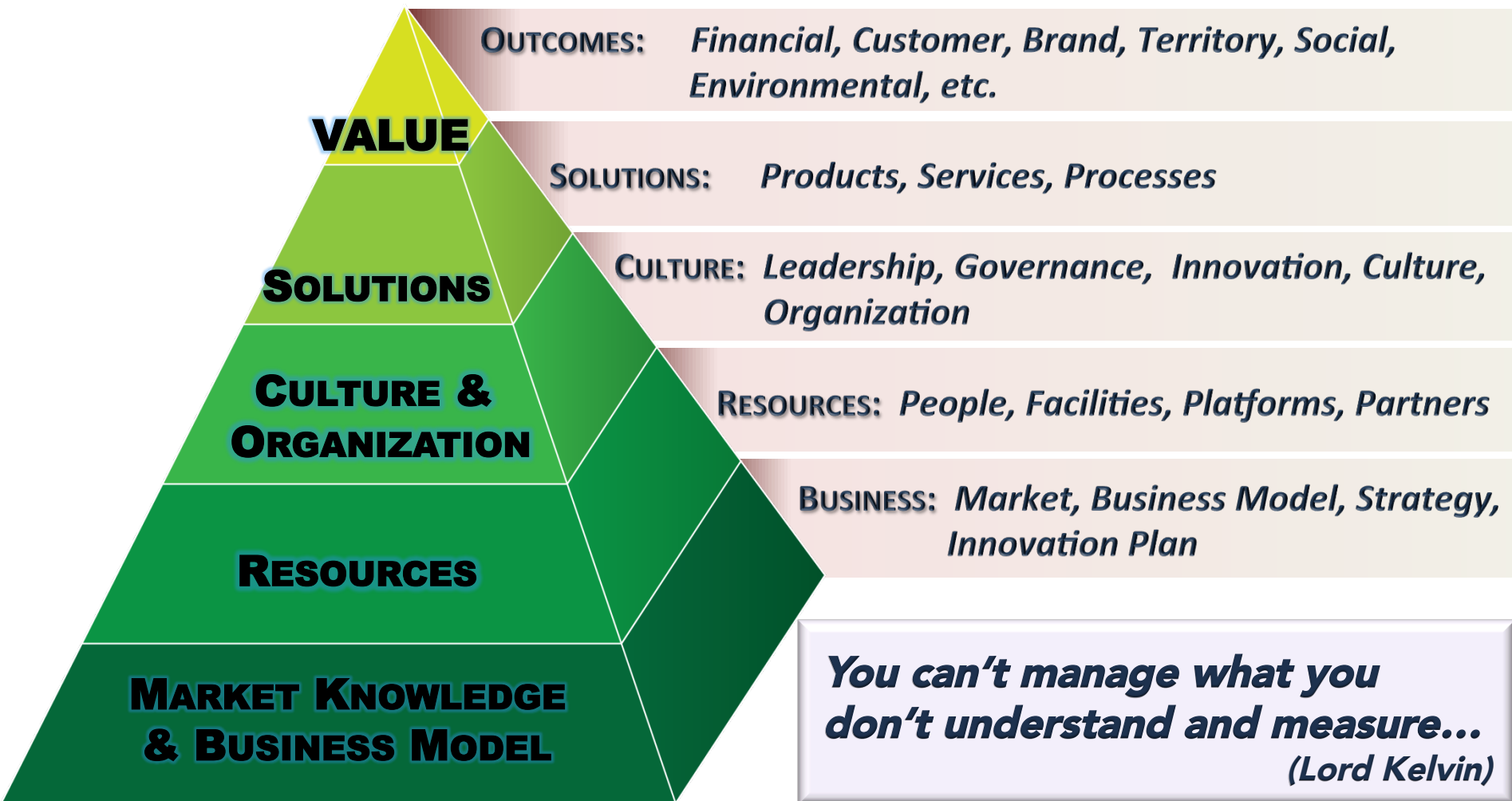
## It's mostly about management!

... and leadership that nurtures a culture of entrepreneurship and pursues innovation *comprehensively, competitively and methodically!*

### What truly matters:

- ❖ Showing Leadership with compelling Vision & manageable Goals; and ensuring/instilling competitive Will
- ❖ Knowing about the Market, Yourself and the Competition
- ❖ Focusing on winning Business Models and the right Competitive Imperatives
- ❖ Having the necessary and sufficient means: Funding, Expertise, Connections, Structure, Processes and “Tools”
- ❖ Applying effective Metrics-based Innovation Management
- ❖ Timely evaluating & adjusting the firm's innovation portfolio
- ❖ Nurturing a Culture of Innovation/Entrepreneurship and a suitable Organization

# Manage Innovation *Comprehensively*



Value-add Corporate Innovation Management  
(vCIM)

***Metrics drive behaviour!***

# Manage Innovation *Methodically* with Metrics-based Techniques & Tools







**Innovation is a Renewable Corporate & National Resource to be developed, used and commercialized for economic and social benefits.**

## **It's mostly about management!**

**... and leadership that nurtures a culture of innovation and entrepreneurship!**

- ✧ **Business Innovation is much more than R&D**
- ✧ **Canadian industry invests a lot in innovation**
- ✧ **Industry needs to manage better its innovation activities – comprehensively, competitively and methodically**
- ✧ **Corporate culture matters a lot and being entrepreneurial is crucial**
- ✧ **It is up to all of us – industry first, governments & academia to better it**

**... How do we bring all this knowledge to the people that matter: in industry and government?**

# **Questions?**

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