

E-LEADER CONFERENCE

“INNOVATIVE LEADERSHIP: Integrating Marketing, Manufacturing and R&D”

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INTRODUCTION

The size of the waste for the society:

- ✓ Only one in ten R&D projects succeed in the market
- ✓ 46% of all resources dedicated to product development and commercialization is spent on products that are cancelled or fail to yield adequate returns



INTRODUCTION

There are three ways to overcome the problem:

✓ To do **projects right**:

- Environment – competition is stable.
- Success factor is efficiency.
- Competencies: **know-how**, **know-why** and **know-what**.
- Background strategy encompasses vertical integrations, owning assets and scale economy.



INTRODUCTION

There are three ways to overcome the problem (cont.):

✓ To do the **right projects**:

- Environment – competition is dynamic.
- Success factors are efficiency, variety and uncertainty
- Competencies: **know-what**, **know-why** and **know-how**.
- Background strategy encompasses limited investments for specific use, modular organization, speed-to-market, and scattered simultaneous and autonomous development process.



INTRODUCTION

There are three ways to overcome the problem (cont.):

✓ To do the **convenient projects**:

- Environment – competition in evolution.
- Success factors are efficiency and variety.
- Competencies: **know-why**, **know-what** and **know-how**.
- Background strategy encompasses long-term alliances, group strategy, critical resources accumulation, and time-to-market.



THE NEW COMPETITION

The Manufacturing Function to cope with the new competition must focus on total process efficiency, having as positive effects:

- low overhead and bureaucracy;
- greater variety at lower costs;
- optimum quality;
- high production flexibility;
- elimination of waste (all the types);
- low total costs;



THE NEW COMPETITION

- continual process improvement;
- sense of community;
- low inventory carrying costs;
- high utilization of and investment in worker skills;
- high labour productivity, and
- integration of thinking and doing.

A possible detrimental effect may be stressing to much the work force.



THE NEW COMPETITION

The Research & Development Function, in order to cope with the new competition, should focus on a continual incremental innovations, getting as possible effects:

- integration of innovation and production;
- mutually beneficial relationships with other firms;
- frequent process innovations;
- low costs and short cycle times;
- continual improvements, eventual technological superiority, and
- better fulfillment of customer wants and needs.

A possible detrimental effect may be lack of true innovation projects.



THE NEW COMPETITION

Let's consider now the influence of the new competition on the Marketing Function. Its focus should be gaining market share by fulfilling customer wants and needs, first domestically, then in export markets, having as positive effects:

- ability to respond quickly to changing customer needs;
- technology – intensive products;
- filling the niches;
- high sales domestically and through exports, and
- market takeover.

A possible detrimental effect may be to become too enamored of technology.



THE NEW COMPETITION

The logical principles of this new competition, in full, are as follows:

- Demand for individual has become unstable. What used to be large demand for standard mass-market products has fragmented into demand for different “flavours” of similar products.
- Because demand has fragmented, the large, homogeneous markets have become increasingly heterogeneous. The niches are becoming the market, shifting power to buyers who demand higher-quality goods that more closely match their individual desires.
- Since profits cannot be maintained the old way, it seems preferable to go after some of the niches with the additional variety desired, then try to meet the changing needs and wants of these niches. At first this can be done through post production methods of tailoring the product to niches (often through services), but it is an expensive alternative; increased variety must eventually come through production.



THE NEW COMPETITION

The logical principles of this new competition, in full, are as follows (cont.):

- Creating high levels of variety in production cannot be accomplished through the specialized mass production techniques: creating variety requires flexibility in manufacturing processes, the antithesis of mass production.
- The production system must therefore be changed. Now driven by market and customers, it must produce a number of different, high-quality products via short production runs, short changeover times, and low work-in-process. This requires general-purpose machinery and highly skilled workers.
- Because the resulting new products more closely meet customer desires, a premium price can often be charged. This extra profit margin offsets any loss of efficiency due to the lower volumes. And, as experience is gained in mass customization processes, it is often found that products with many variations can be produced at the same or lower costs.



THE NEW COMPETITION

The logical principles of this new competition, in full, are as follows (cont.):

- Because the new niche markets are smaller and constantly shifting, continued success can be achieved only by producing ever greater variety more quickly. The rate of product technology change increases dramatically; product development cycles must therefore be reduced as dramatically.
- Along with shorter development cycles comes shorter product life cycles. Driven by the need to more closely fulfil customers desires, products and technologies are constantly improved upon and replaced.
- The result is less demand for each individual product – demand fragmentation – but increasingly stable demand for the company and its products relative to the old system and to its competitors. Ever-smaller niches to fill with ever-more variety can be sought.



THE NEW VERSUS OLD COMPETITION

	OLD COMPETITION	NEW COMPETITION
FOCUS	Efficiency through stability and control	Variety and customization through flexibility and quick responsiveness
GOAL	Developing, producing, marketing and delivering goods and services at prices low enough that nearly everyone can afford them	Developing, producing, marketing, and delivering affordable goods and services with enough variety and customization that nearly everyone finds exactly what they want
KEY FEATURES	<ul style="list-style-type: none"> • Stable demand • Large homogeneous markets • Low-cost, consistent quality, standardized goods and services • Long product development cycles • Long product life cycles 	<ul style="list-style-type: none"> • Fragmented demand • Heterogeneous niches • Low-cost, high-quality, customized goods and services • Short product development cycles • Short product life cycles

Figure 1 – Old competition vs. New Competition

Source: Adapted from PINE, 1999.



VALUE INNOVATION STRATEGY

The Five Dimensions of Strategy	Conventional Logic	Value Innovation Logic
Industry Assumptions	Industry's conditions are given.	Industry's conditions can be shaped.
Strategic Focus	A company should build competitive advantages. The aim is to beat the competition.	Competition is not the benchmark. A company should pursue a quantum leap in value to dominate the market.
Customers	A company should retain and expand its customer base through further segmentation and customization. It should focus on the differences in what customers value.	A value innovator targets the mass of buyers and willingly lets some existing customers go. It focuses on the key commonalities in what customers value.
Assets and Capabilities	A company should leverage its existing assets and capabilities.	A company must not be constrained by what it already has. It must ask, What would we do if we were starting anew?
Product and Service Offerings	An industry's traditional boundaries determine the products and services a company offers. The goal is to maximize the value of those offerings.	A value innovator thinks in terms of the total solution customers seek, even if that takes the company beyond its industry's traditional offerings.

Figure 2 – Strategic logics and dimensions of strategy

Source: Adapted from Kim and Mauborgne (1997).



R&D – CRITICAL SUCCESS FACTORS

- seek differentiated, superior products – the majority of products are tired “me too” with little to distinguish them from competitors, or are technical solutions in search of a market;
- up-front homework pays off – solid pre-development homework drives up new-product success and is strongly correlated to financial performance, according to real world experience;
- build in the voice of the customer – sadly, a strong market orientation and customer focus is noticeably absent from many businesses’ new-product projects;
- demand sharp, stable and early product definition – a failure to define the product before development begins is a major cause of both new-product failure and serious delays in time-to-market;



R&D – CRITICAL SUCCESS FACTORS (CONT.)

- plan and resource the market launch early in the process – the need for a quality launch should be obvious, well planned, properly resourced and well executed; but not every project team and business devote the same effort and attention to this;
- build tough go/no go decision points into your process – too many projects move too far into development without serious scrutiny, indeed having tough go/no go decision points (or gates) is strongly correlated to the profitability of new-product efforts;
- organize around true cross-functional project teams – good organizational design means projects that are organized with a cross-functional team, led by a strong project leader, with a proper profile (achievement motivation, team work, problem-solving and communication skills are some important traits), accountable for the entire project from beginning to end, dedicated and focused;



R&D – CRITICAL SUCCESS FACTORS (CONT.)

- attack from a position of strength – the new product creation process is better when it leverages the business’s core competencies, meaning a strong fit between the needs of the new-product project and the resources, strengths and experience of the company in terms of marketing, distribution, selling, technology and operations;
- build an international orientation into your new-product process – new products aimed at international markets and with international requirements build in from the very beginning perform better at the market place; and
- the role of top management is central to success – top management proper support is a must, its role is to set the stage, to be a “behind-the-scenes” facilitator who is much less an actor; this stage-setting is vital for the innovation process.



THE VALUE CURVE CONCEPT

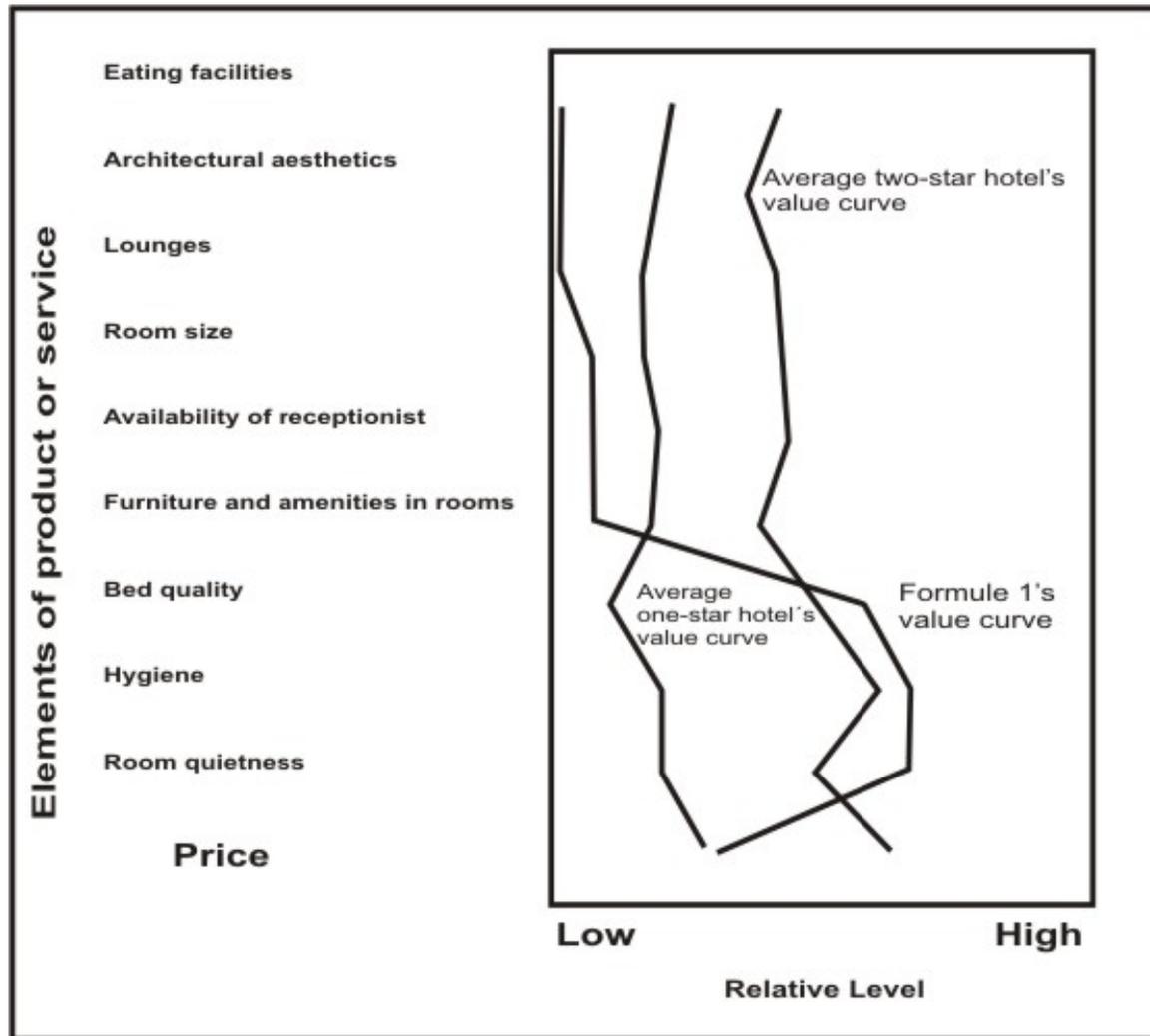


Figure 3 – Formule 1 value curve

Source: Adapted from KIM and MAUBORGNE (1997).



INNOVATION STRATEGY DEFINITION

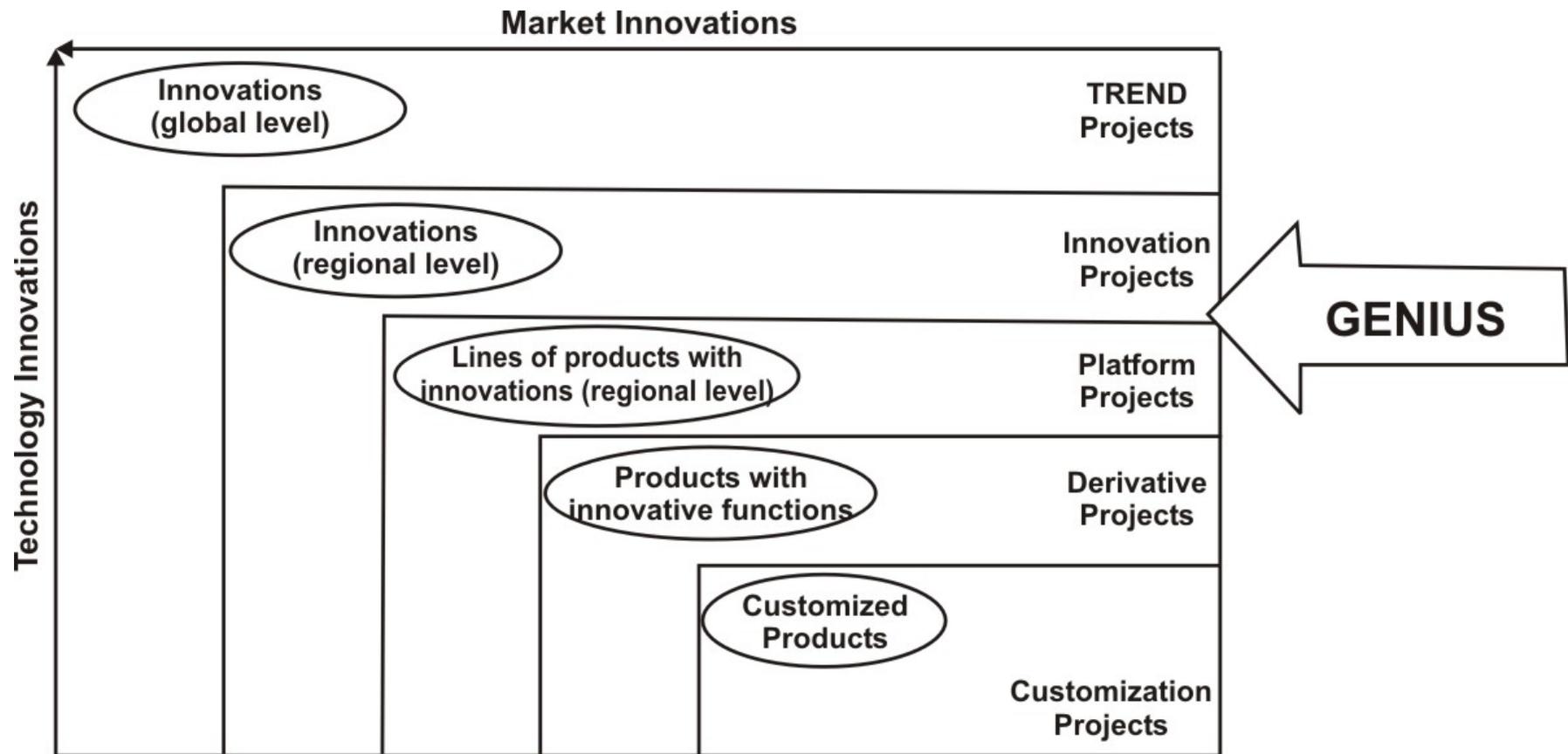


Figure 4 – Positioning on the Harvard Innovation Model

Source: Adapted from Lisboa (2001).



VALUE INNOVATION DEVELOPMENT MODEL

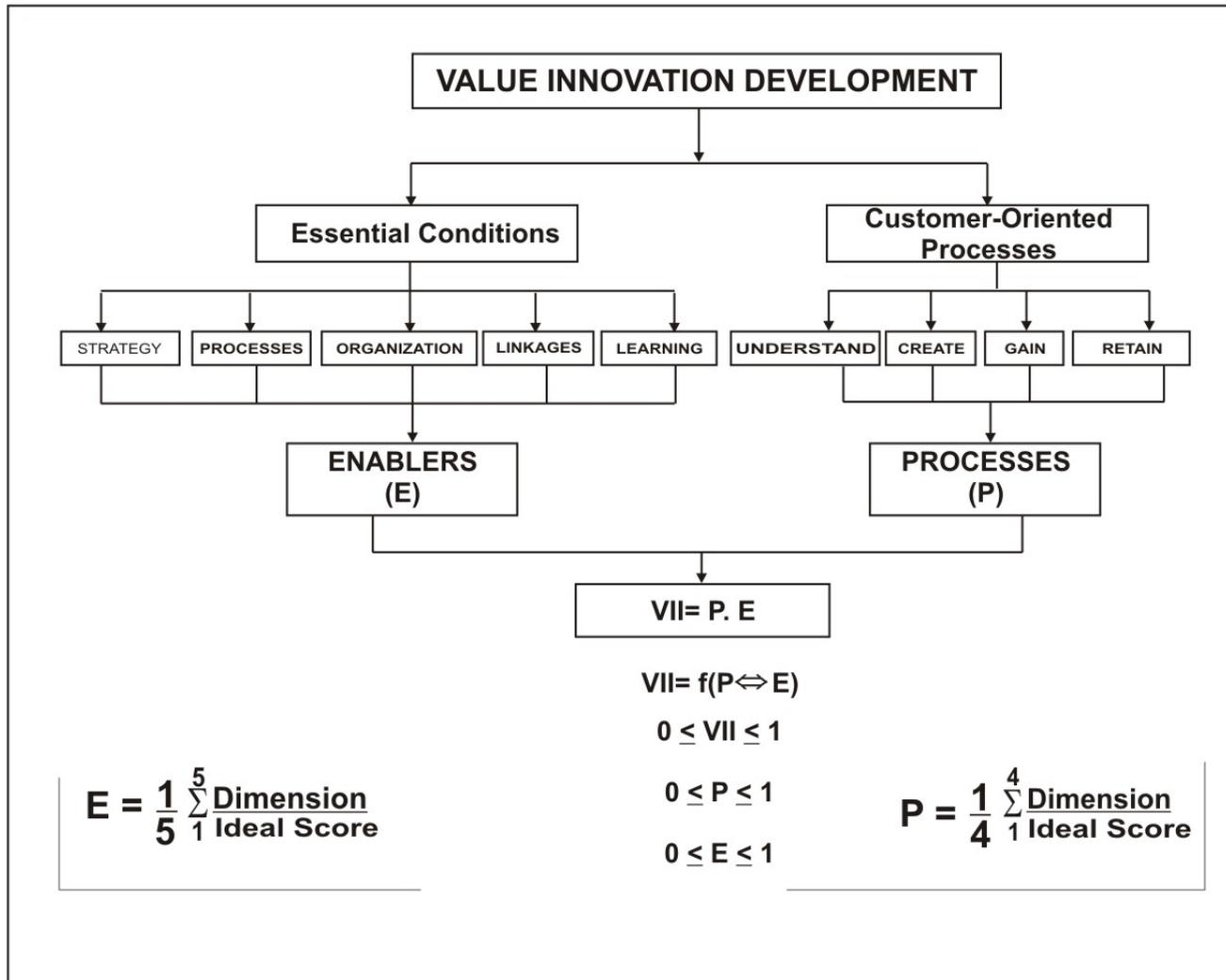


Figure 5 – Value Innovation Development Model Framework

Source: Bruno (2005).



VALUE INNOVATION DEVELOPMENT MODEL (CONT.)

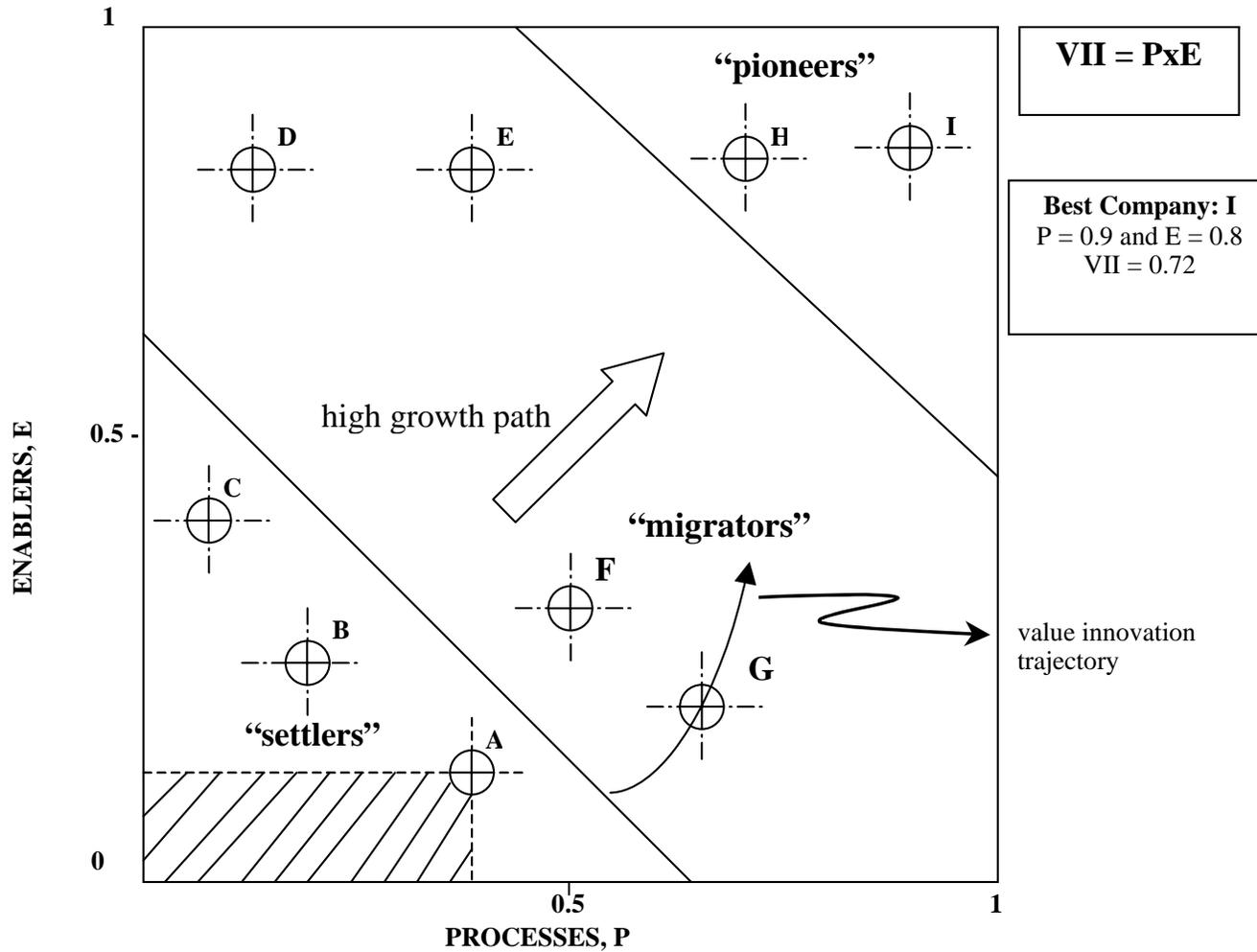


Figure 6 – Value Innovation Development Model

Source: Bruno (2005).



VALUE INNOVATION DEVELOPMENT MODEL (CONT.)

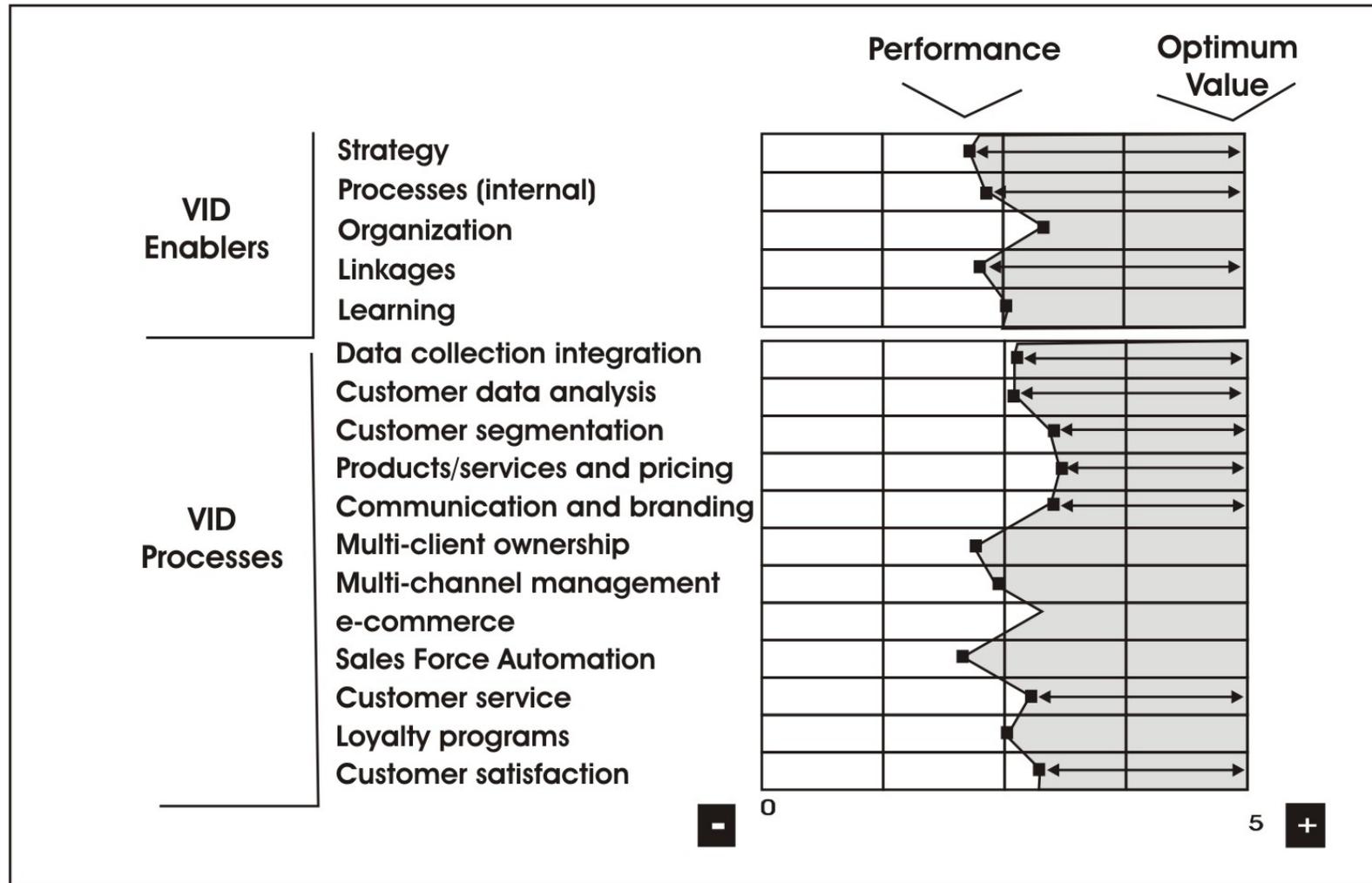


Figure 7 – Gap analysis by dimension

Source: Bruno (2005).