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**Innovative Ecosystem:  
Orchestrating Innovation  
DNA**

by

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# **INNOVATIVE ECOSYSTEM: ORCHESTRATING INNOVATION DNA\***

## **Abstract**

*The paper provides some selected findings of a survey, which polled the Poznan-Atlanta MBA students on innovation. The basis of this examination is a quantitative analysis of a questionnaire distributed to current students and graduates of the Poznan-Atlanta MBA Program. The discussion starts with a synopsis of various approaches to innovation and proceeds with the survey outcome. The results are analyzed across a selection of key dimensions of innovation including innovation typology, sources, compelling events, the decision making and governing models as well as reasons for innovation failures. The innovation ecosystem is examined with reference to critical agents pinpointing their role and the power they exert throughout the whole innovation process. The findings are presented within the context of the key conclusions of selected McKinsey and Conference Board surveys on innovation.*

**Keywords:** sustaining innovation, disruptive innovation, innovation agent, sources, innovation governance and decision making model

**JEL codes:** O3, O31, C44.

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## **1. Introduction**

Innovation has become a corporate buzzword and one of the key concepts in the executive dictionary. The need to innovate is the imperative for all organizations, regardless of size and industry, market gyrations, economic downturns or financial turmoils like the one we face today. Under the best of circumstances achieving and sustaining a profitable growth is a difficult task at best; but without innovation, all organizations eventually fade and fail. As a result, if they desire to compete in today's markets - referred to as "creativity economies" or "innovation economies" - organizations should learn how to transform the initial "out-of-the box" innovation into a sustainable success (Barwise, Meehan, 2006, p. 69).

Ironically, innovation failures often reflect the natural consequences of the very forces that created the organizations past success. Michael Tushman and Charles Reilly characterize this phenomenon as the "tyranny of success" (1997, p. 3). In essence, those practices that focus on making the most of success by driving out variance, replicating what works well, and maximizing current profits are the opposite of those that drive innovation by enhancing variance, breaking from what worked well and seeking profits in the future. Furthermore, a short-term success often increases the chance of long-term failure because organizations playing the efficiency game fall into inertia and cherishing "their core competency" lose the sense of how to energize innovative thinking and the pertaining change. In addition, Kotter (2008, pp. 20-22) argues that success over time creates a sense of complacency and invulnerability and combined with a focus on internal issues makes organizations blinded to what is going on in the external environment.

## **2. Synopsis of innovation approaches behind the survey**

There are some significant theories that define the strategies for fostering innovation, consider innovation agents and sources that boost innovative culture. According to Gary Hamel, neither innovation nor adaptability is a natural part of an organization's make-up, often referred to as its DNA. But in the face of the digital era's technological change, globalization and the declining predictability of strategic planning model, only new approaches to talent management can equip companies with a sustainable competitive advantage. Because the old organizational structures hinder creativity, the most successful organizations harness innovative management practices that place a premium on collaboration and talent. In Hamel's view, the new challenges and opportunities created by technology and globalization, lead to three key questions that need to be answered in the first place: how to manage companies which are as nimble as change itself, how to mobilize and monetize the imagination of every employee on a daily basis, and how to run companies which are engaging workplaces to work (Hamel, 2008, pp. 1-9).

A good way to understand what is meant by innovation, especially, the "out-of-the box" or "breakthrough" one is to start with Christensen's and Raynor's disruption theory as well as Ulwick's outcome driven approach to innovation (ODI). Christensen and Raynor (2003) refute the myth that innovation is a chaotic and unpredictable process. In their view the outcome may seem not precisely defined, but the process itself, including the forces and drivers, is predictable and repeatable. In essence, innovative thinking assists in creating ventures with predictable success as disruptors rather than disruptees, that is, businesses that out-manuever well-

established competitors that are the market incumbents. A basic borderline is drawn between:

- *a sustaining innovation* which targets high-end customers through better performance than that delivered by existing products and services. Sustaining innovations may be leapfrog-beyond-the-competition products or just year-by-year improvements but it is the established competitor that wins the battle by providing better products, sold for higher profits to the best customers. Sustaining innovations are so attractive that the companies tend to neglect disruptive threats to discover that the game is over after the window for effective action has closed;
- *a disruptive innovation* which introduces products or services that are not as good as the available products but offer other benefits –the offering is simpler, more convenient and less expensive. The challenge of disruptive innovation is to commercialize the offer by attracting new, less-demanding customers or customers unattractive to the current key players. In this case, the incumbents become the disruptees and the new entrants are the disruptors and the winners at the same time (Christensen, Raynor, 2003, pp. 33-34).

Clayton and Raynor make a further distinction between *new-market disruption* and *low-end disruption*. The first competes against the 'non-consumption' with an offering more affordable to own and simpler to use, attracting the set of customers that previously lacked the skills or money to go for the offering of established competitors. Since new-market disruptions don't pull away existing customers, they are initially not perceived as a threat to incumbents but over time they take away their "least desirable

customers". E-mail disrupting postal services or wireless telephony are the most prominent examples in this case. *Low-end disruptions*, on the other hand, originate at the low-end of the mainstream market with performance good enough along the traditional metrics. They are targeted at overserved customers happy to purchase a product with less but good enough performance and at a lower price. As a result, they force incumbents to flee up market, where attractive margins can be preserved. Amazon.com can be cited here as an example of a low-end disruption relative to traditional bookstores (Christensen, Raynor, 2003, pp. 43-59).

There are however some rules to follow for disruptors to be successful. First of all, incumbents win most of the sustaining battles and entrants nearly always win the disruptive ones. Second, market segmentation based on the 4Ps, product type or demographics is frequently deceptive and leads to developing products or services that the market doesn't ask for. As

a result, market segmentation should hinge on the jobs customers are trying to get done. Finally, disruption should be initiated when the company is booming and executives are not preoccupied with corporate belt-tightening and making fatal mistakes. It is when the disruption-based growth efforts lets the "black box" of innovation - the place where novel ideas are either stripped of their market-making potential or profiled into successful disruptions - be fully exploited. According to Christensen, however, this market-making potential is often underestimated because of three financial paradigms which misemployed blur the real future value of innovation. These misapplied financial tools or "innovation killers" as Christensen (2008) calls them are the following:

- the application of the discounted cash flow (DCF) and net present value (NPV) to estimate investment opportunities leading to under-rating the bona fide returns and benefits of investments in innovation,
- the perception of fixed and sunk costs while calculating future investments making the challengers more advantageous and chaining up incumbent businesses that strive to counterattack,
- the myopic focus on earnings per share (EPS) as the imperative stimulus of share price and the value for shareholder against the long-term value creation.

The first financial tool, DCF, generates an anti-innovation bias by comparing the cash stream from innovation against the 'do-nothing scenario' assuming that the company's status quo will be preserved if the investment is not made. As a result, innovation initiatives are considered in isolation disregarding the dynamic business environment, economic downturns, market share losses or gains and this is referred by Christensen as "the DCF trap." Other problems connected with DCF calculations are bound up with estimation errors related to the future cash flows, both in terms of the initial years and "out years," and the terminal value numbers that are calculated then magnifying the errors already contained in early-year assumptions. And what is more, they do not allow for testing the projected discounted cash stream generated by investment against a likely scenario of performance deterioration in the absence of innovation investment.

The second problem impeding innovation decision-making relates to fixed and sunk costs. While evaluating innovation projects, the future or marginal expenditure is worked out, subtracted from the likely marginal



cash inflow, and finally, discounted to the present. If the capabilities to be developed are adequate also for the future success and not only for the past one then the reasoning behind this scheme is perfectly sound. But frequently this hinging on fixed and sunk costs leads to investing in assets and resources that will be useless in the future. Therefore, when creating new capabilities identical to the existing ones, it is advisable then to test the marginal cost against the total cost of creating new resources. But when new capabilities come into play, the marginal cost is the full cost of generating the new. Finally, the third paradigm that creates an anti-innovation bias is overemphasizing EPS over long-term profits. Since share prices and creating value for shareholders are the primary goals of which EPS constitutes the basic driver, short-term stock performance is the most urgent task. As a result, companies are not eager to go for innovation projects that do not reap profits in the immediate horizon.

Christensen and Raynor's "Innovator's Solution" and their underlying premise that customers buy products and services to help get a job done constitute the basis for Anthony Ulwick's Outcome-Driven Innovation (ODI) theory (2005). Ulwick's ODI approach goes beyond the typical customer-driven paradigm that focuses on the customer, the product, or the competition by concentrating on the job the customer is trying to get done. Ulwick argues that organizations pursue a backward innovation process - they develop a new product and then see if customers buy it instead of defining the desired customers' outcomes and using them as clues in product developments. In his view, companies should ignore collecting requirements for products or services that focus on features and shift to understanding the requirements for the job that products or services are designed to perform.

But to capture these requirements, the jobs that customers are trying to get done must be distilled to define what customers are measuring when they judge their satisfaction. This performance is related to three factors: speed, predictability and output. In the outcome-driven paradigm, these metrics or “desired outcomes” are the customer’s key performance measures when getting a job done and the core of the ODI process, a systematic and predictable way to devise a solution by addressing unmet or underserved customer needs. These needs are the real opportunities for value creation (Ulwick, 2005, pp. 26-28). According to Ulwick there are three major types of innovation:

- *product and service innovation* dealing with improving a product or service,
- *operational innovation* focusing on making an internal business process a key strength, such as Toyota did with its automotive production process,
- *business model innovation* creating a new formula for monetizing business ideas such as Google did reinventing the way the company reaps money with advertising on the Web.

With regard to product and service innovation, there are four growth paths of choice with each identifying the job the customer is trying to get done as the single unit of analysis:

- *core market growth* making improvements to products and services that already exist to help customers get a job done better,
- *adjacent or related market growth* improving existing products and services to help customers get related or ancillary jobs done (for ex-

ample, by adding a balm to shampoo or a tongue cleaner to a tooth brush),

- *new market creation* creating a new product or service for customers who are trying to get a job done but cannot since no solutions exist,
- *disruption*, creating a technology that enables a new set of customers to do a job that only specialists could previously perform (e.g. Crest Whitestripes help people to whiten their teeth themselves eliminating the dentist). Here Ulwick's swims away from Christensen's new-market and low-end disruption with his focus on specialists tasks and jobs done (Ulwick, 2005, pp. 1-5).

Moreover, Ulwick pinpoints that identifying opportunities for innovation happens by discovering the underserved jobs in terms of new market creation and the discovery of underserved outcomes with regard to ancillary market growth. He comes up with the so-called "opportunity algorithm" to define and prioritize the most promising opportunities for value creation and innovation:

$$\mathbf{Importance + max (Importance - Satisfaction, 0) = Opportunity}$$

It signifies that an opportunity for innovation exists when a job or an outcome is important and unsatisfied. The more important the job or outcome is, and the less satisfied customers are, the greater the opportunity for value creation exists. The desired outcomes that are most significant and least fulfilled receive the highest priority. In other words, the opportunity algorithm means that opportunity equals importance plus the difference between importance and satisfaction, where that difference is not allowed to

fall below zero. The importance and satisfaction ratings for each job or outcome are entered into the equation to determine the degree of opportunity (<http://www.strategyn.com/opportunity.asp>).

Finally, Ulwick discards the marketing mantra of the Voice-of-Customer (VoC) and the traditional market research because they result in collecting incomplete and incoherent set of inputs: solutions, benefit statements, must haves or excitors without a unified structure, content and format of job. He argues that market segmentation should be defined in non-traditional way on the basis of unmet customer needs. In Ulwick's view, adopting the outcome-driven methodology and using the data it generates is the key to creating an innovative culture and leveraging a core competency in innovation (<http://www.strategyn.com/creativity-innovation-business.asp>).

### **3. Selection of survey findings**

The primary objective of the survey was to examine the innovation ecosystem in which businesses operate. The survey involved both currently enrolled students and alumni of the Poznan-Atlanta MBA Program. The analysis of the outcome embraced key innovation dimensions pinpointing similarities and differences across markets and industries at the same time identifying innovation agents at work to arrive at corporate innovation DNA critical components. This paper provides some selected findings of the study concerned with:

- types of innovation pursued and sources employed,
- compelling events and factors impacting the innovation decision making,

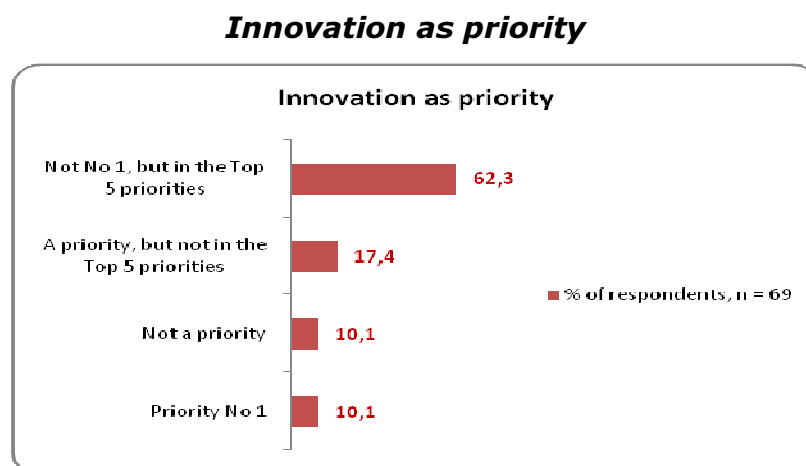
- innovation process structures and management models,
- reasons for innovation failures.

The results and conclusions are juxtaposed with the findings of the recent innovation studies conducted by McKinsey and the Conference Board.

### **3.1. Innovation as priority and how it is defined**

The McKinsey's global survey "How Companies approach innovation" conducted in October 2007 suggests that 70% of corporate leaders and C-level executives perceive innovation as one of the top three priorities for driving growth. But surprisingly only 36% of top managers report that innovation accompanies all the business activities their companies pursue.<sup>2</sup>

#### **Exhibit 1**



\* respondents could select one answer; respondents who didn't answered are not shown.

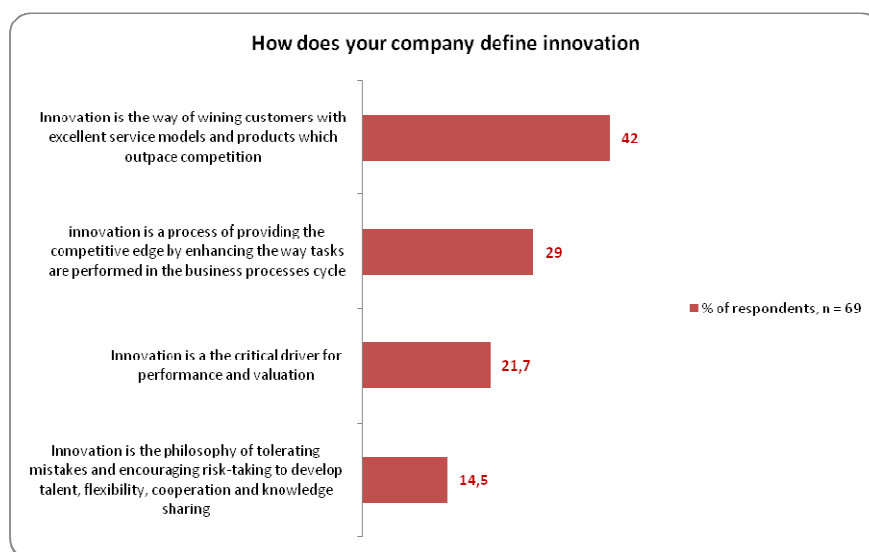
The MBA students' survey displays similar results. 72,5% of respondents see innovation as one of their companies' top five priorities, 10,1% of which report innovation as priority number one. As many as 17,4% of the surveyed do not rank innovation in the top five priorities but still claim it is perceived as such. 10,1%, however, view innovation as "not a priority"

which is quite interesting taking into account that the same percent say innovation is priority number one (Exhibit 1).

It is interesting that innovation as priority number one gets the highest scores from both globally operating companies (9,1% of the global enterprises sample) and Polish market organizations (16,7% of the Polish operating companies sample), but at the same time, it is not prioritized at all by over 18% of global and 5,6% Polish market players. For all EU businesses (24,3% of all respondents) innovation constitutes a priority, but for 23,5% it is not considered in the top five priorities.

## Exhibit 2

### ***Innovation definition***



\* respondents could select one answer; respondents who didn't answered are not shown.

If the "company size/revenue" indicator is considered, it seems that companies with the annual revenue figure of 50 million and less, put the most emphasis on innovation. While they comprise 30% of the survey sample, they account for 43% of the total respondent "innovation priority number one" choices. An assumption can be made that the lust for quick growth

and development as well as the desire to catch up with the competition push small businesses to innovate at a faster rate with the highest innovative edge. Furthermore, it is not surprising that the IT & Technology & Telecom industries assign the greatest innovative focus, with 28,6% of all industries respondents choosing innovation as priority number one and over 9% placing it in the top five priorities.

As far as the definition of innovation is concerned, the service and product oriented innovation defined as "*the way of winning customers with excellent services and products that outpace competition,*" gets the highest rank, with 42% of the surveyed responses (Exhibit 2). It's the most valid innovation definition for 42,4% of the global enterprises and 52,9% of the EU market surveyed companies (Exhibit 3). The operational innovation, that is, "*the business processes oriented approach, which provides organizations with competitive edge by enhancing the way tasks are performed via business processes,*" was second in frequency, getting 29% of total respondent scores.

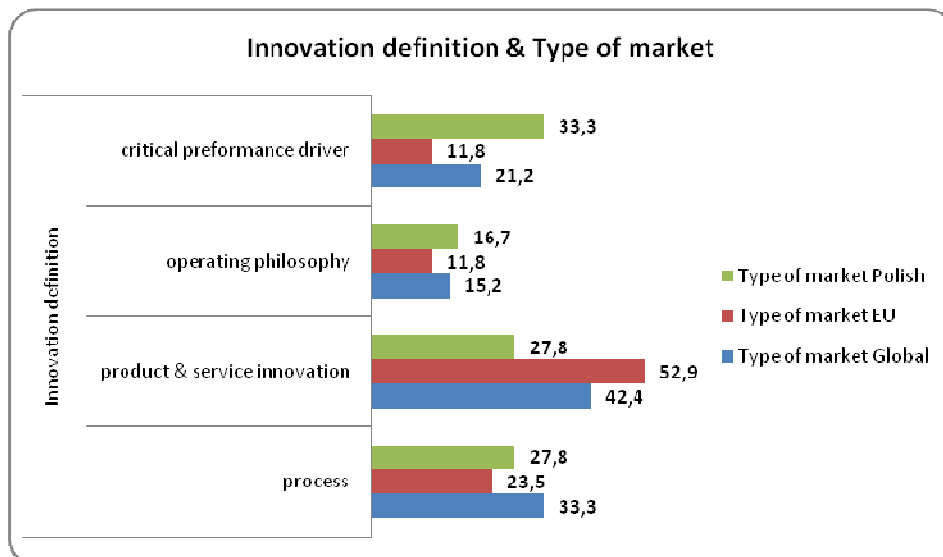
Furthermore, innovation perceived as "*the critical performance driver and valuation, the accelerator of a company growth,*" is third in frequency, with 21,7% of total responses while the philosophy - the one that stems from the innovative culture - defined as "*the philosophy on which successful companies rest on tolerating mistakes and encouraging risk-taking to develop talent, enhance change and flexibility,*" gets the lowest frequency, 14,5%.

It's important to notice that Polish companies perceive their corporate innovation in a different way. It means that they see innovation as the critical performance driver, selecting it more frequently than any other definition. This signifies a predominant market value focus. Further, they as-

sign the same rank to the process innovation as to the product and service innovation, with equal score of 27,8% each (Exhibit 3).

### Exhibit 3

#### *Innovation definition & type of market*



% of respondents coming from particular markets

\* respondents could select one answer; respondents who didn't answered are not shown.

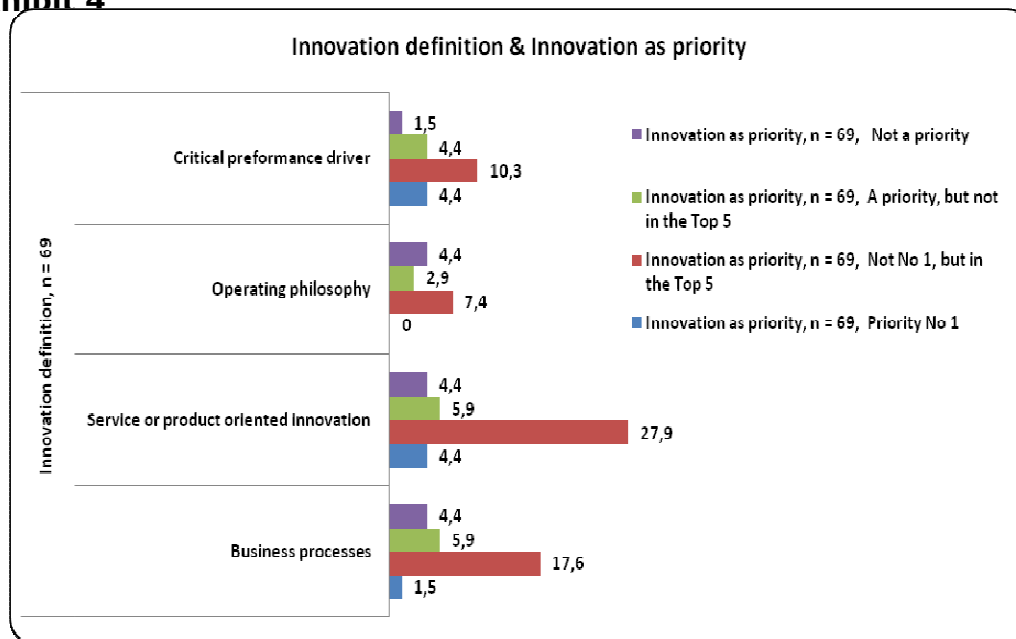
The different market representatives tend to be very little involved in the innovations defined as *the philosophy*, which is the least applicable in all the markets represented. Since this innovation definition reflects the engagement in building and sustaining an innovative culture characterized by *flexibility, openness to new ideas while facing the risk and accepting possible mistakes*, it may signify that this field of innovation build-up is a bit unsupported and constitutes an area for green-field development and a priority task for companies to complete.

Unexpectedly, organizations tend to emphasize service and product oriented innovations rather than innovating business processes. Business processes, such as production, chain management, logistics or sales & marketing are those which make all innovation processes efficient, value



creative and successful. They enable companies to proficiently manage the product development cycle and shorten the time-to-market thus enhancing the transformation of innovation projects at work into profit creating engines. As Deloitte's research "Mastering Innovation" (Deloitte Touche Tohmatsu, 2004) concludes, more than 86% of new product ideas never make it to market and of those that do see the light of day, 50% to 70% fail to be profitable and are withdrawn from the market. Proficient and innovation triggered business process management could reduce the failure rate to a great extent.

#### Exhibit 4



*% of respondents who selected both responses, n = 68*

*\* respondents could select multiple answers; respondents who didn't answered are not shown.*

The survey analysis confirms (Exhibit 4) that while business process innovation surely fuels growth, it is offset by other factors. Only 1,5% of respondents choose both the "business process" and "priority no 1" respons-

es. The business processes figure is higher for 'Top 5 priorities' (17,6%) but still lower than the one for "service or product oriented innovation" and "not No 1, but in the Top 5 priorities."

A McKinsey on IT survey<sup>5</sup> clearly states that technology executives are more bullish about innovation than their business colleagues, and as many as 79% of CIOs and CTOs report that innovation is their companies' profit driver (Marwaha, Seth, Tanner, 2005, p. 18). Not surprisingly, this trend is still valid for the MBA students, confirming that the high technology industries (IT & technology & telecom) put the greatest emphasis on the business process innovation: over 36% see the process definition as reflecting their companies innovation emphasis which altogether makes 20% of total respondents picking the business process innovation as their most important choice. This may account for the fact that technologically advanced products and services need to be carefully and flexibly managed via the whole innovation product or service life cycle. It is not enough to innovate a product or service but the core task is to make a value out of it, that is, to commercialize and monetize innovative ideas. This, however, is not possible without the support of innovative and coherently managed business processes. It's also noteworthy that the high technology industries put the same innovation focus on the service and product oriented innovation assigning these two innovation types the same importance. Furthermore, the technology industries accompanied by consulting sector with 33,3% of all industries representatives each, perceive innovation as a driver of performance and valuation. It suggests that these are the industries which are most likely to apply innovation performance metrics or any performance metrics in general.

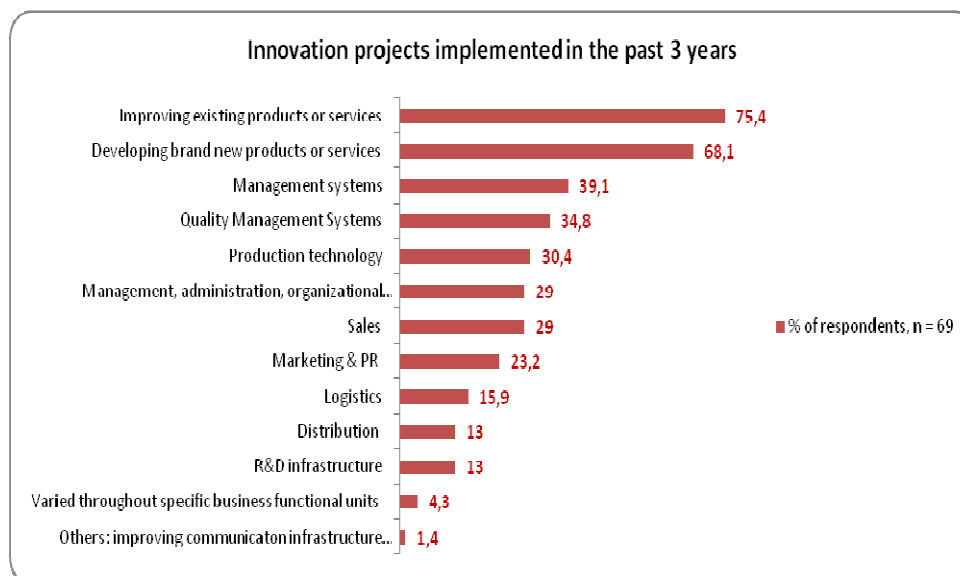
### **3.2. *Innovation projects carried out: types, decision making, past & future innovations***

#### ***Types of innovation projects run in the past three years***

The above findings concerning the service & product innovation focus are confirmed by the type of innovation projects the respondents' companies have engaged so far (Exhibit 5). When asked what innovation projects were implemented in the past 3 years, over three-fourths the majority of respondents point to improving existing products and services, which imply that they follow the path of the sustaining innovation trajectory in the first place. Over 68% of respondents declare developing brand new products or services in the past 3 years, which signals that disruption might be at work as well.

The top three business processes that were the focus of innovation projects include management systems (39,1%), quality management systems (34,8%), and production technology (30,4%). At the same time, almost one-third of respondents indicate that their past projects focused on innovation of general organizational capabilities, sales, marketing & PR processes. Predictably, innovation of the R&D infrastructure is reported by only 13% of the surveyed, considering the low level of R&D investment in general and the struggle that Poland-based companies will have if Poland is to meet the Lisbon Strategy and Barcelona target of 3% of R&D investment of national GDP<sup>4</sup>.

Not surprisingly, the results of the survey are similar to the ranking of innovation projects revealed in the 2005 Conference Board study<sup>5</sup> of the leading 500 companies in Poland and the 700 largest enterprises from the Polish ITC sector, titled "Corporate innovation: sources and strategies" (the Corporate Board Europe, 2005, p. 18).

**Exhibit 5*****Innovation projects implemented in the past 3 years***

\* respondents could select multiple answers; respondents who didn't answered are not shown.

The top five positions in this research project were occupied by product innovations (74% of respondents), sales and sales methods innovations (34%), production technology innovations (32%), management and administration processes innovations (29%), and finally, marketing and PR operations (23%). The R&D infrastructure innovation projects also got one of the lowest results, with 10% of respondents selecting that item. Therefore, the types of innovation projects at work haven't changed much since 2005, with product innovation ranking first, some business processes ranking second, and R&D infrastructure ranking very low.

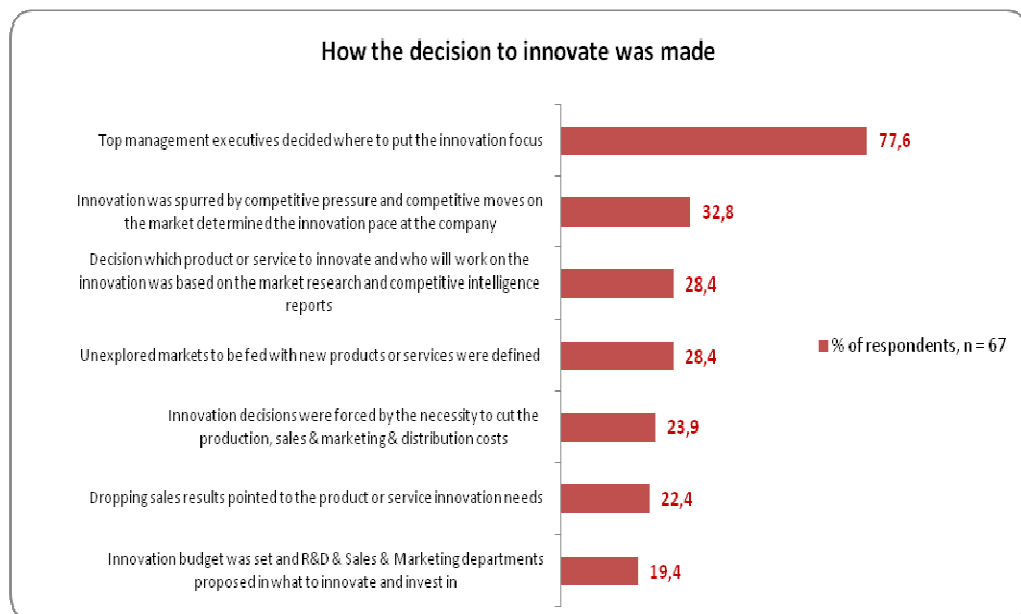
***How the decision to innovate was made***

The decision to innovate in the past innovation initiatives was mostly triggered by two significant innovation agents: the executives and the competition. Over three-fourths of respondents report that the innovation decision

was initiated by top management executives and those executives also decided where to place the innovation focus. Further, almost one-third say that competitive pressures spurred the decision. It signifies that top management, in the role of an internal innovation agent, plays the most important part in the innovation process and sets direction of innovation projects for the organization. Competitive moves, on the other hand, determined the pace of innovation at the company.).

### Exhibit 6

#### *How the decision to innovate was made*

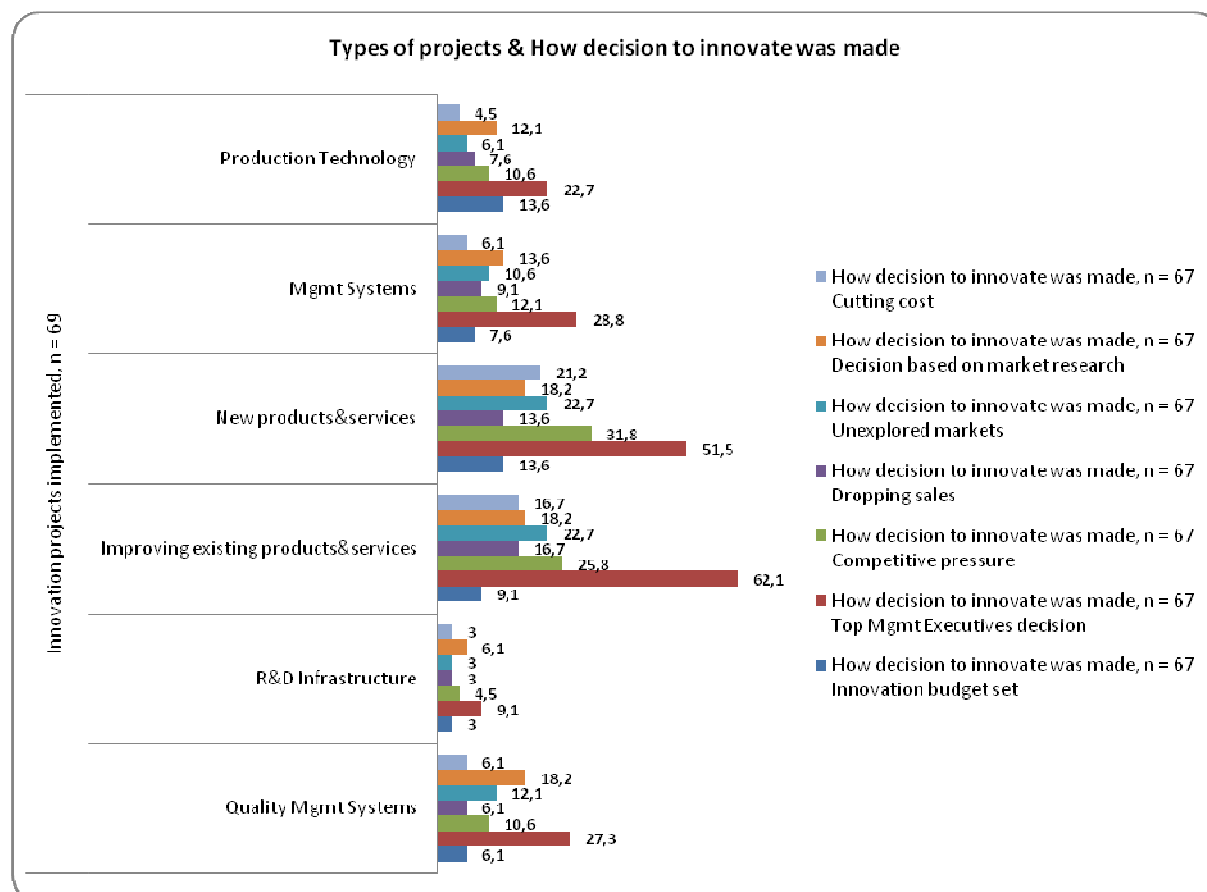


\* respondents could select multiple answers; respondents who didn't answered are not shown.

Moreover, 28,4% view the results of market research and competitive intelligence as the major factors that induced the innovation decision, and the same percent claim that the opportunity to attract unexplored markets with new products or services was the decision imperative. Cutting cost of business processes as well as dropping sales as the innovation decision triggers were reported by 23,9% and 22,4% respectively. It is interesting that

19,4% of respondents' companies employed a kind of backward innovation process, starting first with innovation budget and then deciding what to innovate and invest in (Exhibit 6).

**Exhibit 7**  
**Types of projects & how decision to innovate was made**



% of respondents who selected both responses, n = 66  
 \* respondents could select multiple answers; respondents who didn't answered are not shown.

As the correlation analysis of the selected items reveals, the top management is the innovation decision agent for all the types of innovation projects, including the business processes and product and service innovations. 62,1% of respondents highlight the role of top executives in the past decisions to improve products and services, and a similar pattern is present for the innovation of new products and services since more than half of the

panel identify top management as the decision agent. Moreover, 28,8% emphasize the role of top management for management systems and 22,7% for production technology. The other major innovation agent, that is, the competition ("competitive pressure") is associated mostly with past innovation projects devoted to new products and services as well as product and service improvements (31,8% and 25,8% chose both respectively).

### ***Past and future innovation projects***

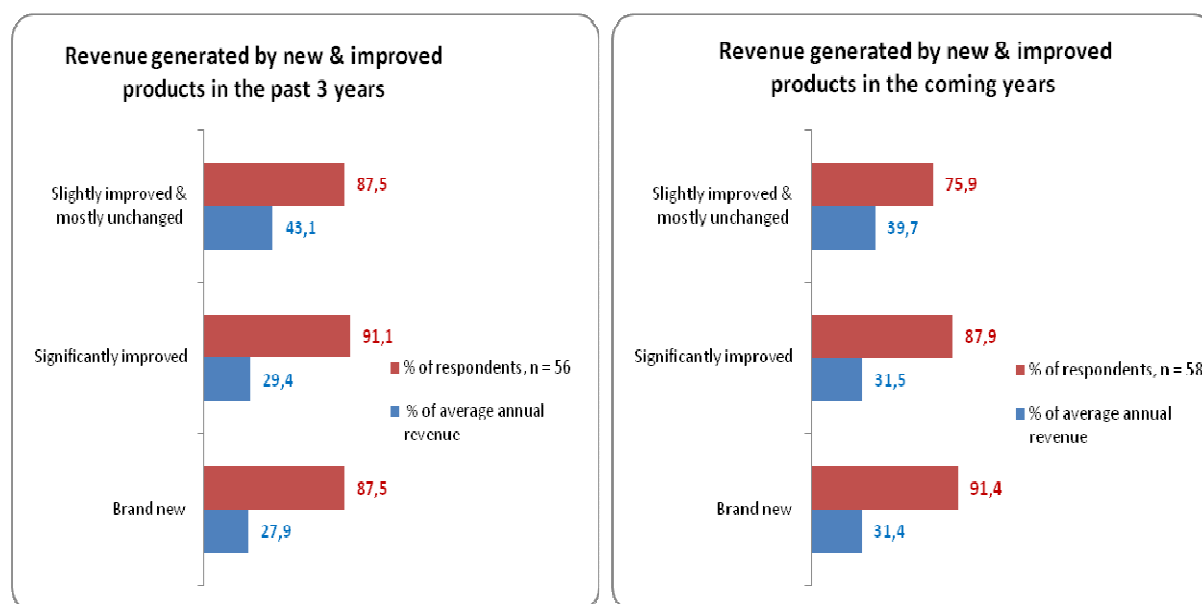
The product and service innovation projects that companies tended to be involved in the past 3 years were primarily focused on significant improvements as opposed to brand new product and service developments. Over 90% of respondents opt for such a response distributing their "brand new products" and "slight improvements" responses equally with 87,5% score each. The average revenue percentage figures that were generated by particular product groups are the following:

- Slight improvements: 43,1%
- Significant improvements: 29,4%
- Brand new product and services developments: 27,9%

Surprisingly, though significant improvements are opted for by over 90%, slight product improvements or mature market offerings are assigned higher scores resulting in the higher level of average annual revenue generated by this product group in the past (Exhibit 8).

**Exhibit 8**

**Revenue generated by new and improved products  
in the past 3 years & revenue generated by new  
and improved products in the coming years**



\* respondents could select multiple answers and assign %age of annual revenue generated by product groups; respondents who didn't answered are not shown.

Taking into consideration the coming years, we see a different innovation landscape (Exhibit 8). A slight shift to brand new products and services development can be observed. Of 58 respondents to the question, 91,4% decide on the "brand new product" development response, 87,9% on significant improvements one, and 75,9% on slight improvements, assigning the following average revenue percentage figures that will be generated by these product groups in the years to follow:

- Slight improvements: 39,7%
- Significant improvements: 31,5%
- Brand new product and services developments: 31,4%

As the survey reveals again the "slightly improved and mostly unchanged" product group – the mature offering - is predicted to generate highest revenue levels while the brand new products, though selected by



majority of respondents, is said to produce the lowest revenue percentage figure in the future.

The interesting fact is that, in the past three years, enterprises operating in the global market focused both on brand new product development and slight improvements (87,5% of the global market respondents). The EU market organizations, on the other hand, put an equal emphasis on both significant improvements and new product development, with 93,3% of the EU companies' respondents ticking these product groups. The situation differed slightly for the Polish market. Here 87,5% representatives engaged in both significant and slight product or service improvement initiatives following the sustaining innovation path with less engagement in new product development. As far as the most active industries in product and services development over the past three years are concerned, the helm was taken by the IT & Technology & Telecom industries with 90% reporting the focus on brand new product developments.

The up-market shift to new product development is revealed, however, for all the markets in years to follow. 95,8% of global companies representatives highlight the new service and product focus, with the average revenue of 32,8% generated by this group. The same judgment is shared by 88,2% of the Polish market companies with the average revenue percentage figure of 28,7%. Finally, 87,5% of the UE enterprises respondents report an equal emphasis on new products and significant improvements with the revenue percentage figure of 33,6% and 32,5% respectively. Again the most striking fact is that the average annual revenue produced by the slightly improved product group is the highest for all the markets. It is nearly 38% for the global market, 37% for the Polish market, and 44%

for the EU market. In terms of the most innovative industries the trend will remain mostly the same, with the high technology industries, financial services, and production industries roughly equal and stressing a 100% focus on all the three product groups.

This new product and service development shift is most likely triggered by the EU's ongoing enlargement, intensifying competitiveness, the shift from local to global operations, and the related need to satisfy the sophisticated tastes of new global customers. Moreover, the cooperation with new business partners setting higher cooperation requirements and the adjustment of products and business operations to their advanced standards also contribute to this trend.

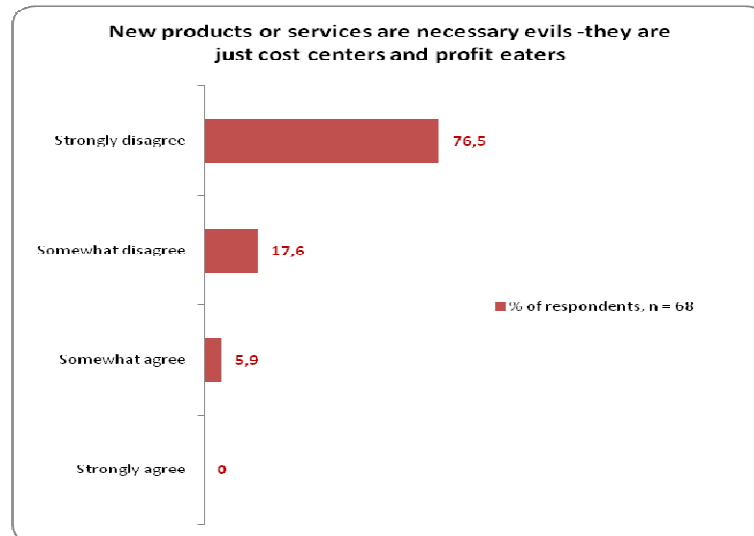
The up-market swing to a new product focus is further confirmed by the "agree/disagree" set of the survey. When asked to agree or disagree on the statement: "New products or services are necessary evils – they are just cost centers and profit eaters," 94,1% disagree out of which 81,2% strongly disagree. There are no "strongly agree" answers but still 5,9% of the surveyed favored the "somewhat agree" response (Exhibit 9).

Unexpectedly, when correlation analysis comes into play, it turns out that the respondents who opt for the "somewhat agree" answer, when asked about innovation priority, clearly go for the "not No 1 but in the Top 5" innovation priority and the same percent of those who somewhat agree, favor the "a priority, but not in the Top 5 priorities". This signifies that although innovation is a priority for the "somewhat agree" choosers, they tend to be reluctant to innovation projects which possibly reflects a concern about the upfront investments and cost incurred. Further, it may indicate that innovation is not a firm ingredient of their corporate culture and a part

everything they do. Moreover, these are mostly the EU market companies' representatives and the Polish market companies. No global companies representation can be traced though.

### Exhibit 9

#### ***New products or services are necessary evils – they are just cost centers and profit eaters***



\* respondents could select multiple answers; respondents who didn't answered are not shown.

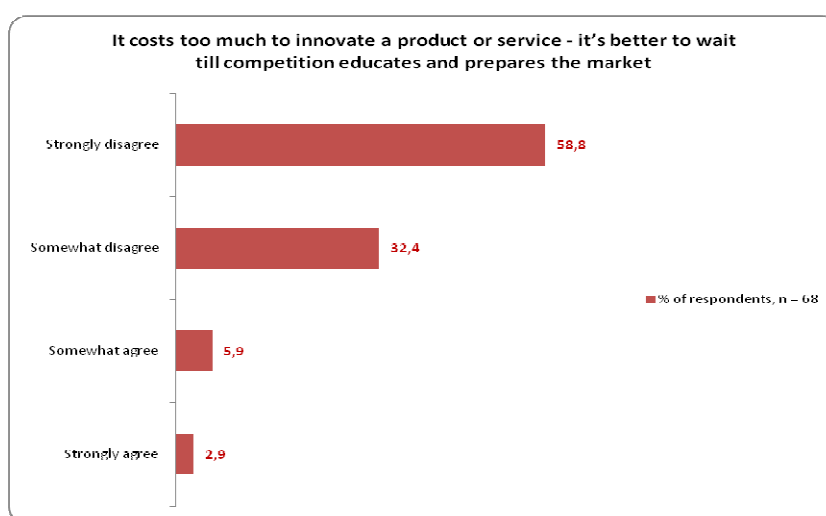
A similar picture of companies being eager to engage in innovation can be drawn from the feedback obtained on the subsequent statement: "It costs too much to innovate a product or service – it's better to wait till competition educates and prepares the market." The survey reveals that 91,2% of respondents disagree with this statement, 64,5%, "strongly disagree" while 8,8% of the surveyed still agree on the statement (Exhibit 10).

Again surprisingly, both the "strongly agree" and "somewhat agree" responses are delivered by the respondents whose companies perceive innovation as a priority, that is, "a priority, but not in the Top 5 priorities": 3% say they "strongly agree" and 4,5% "somewhat agree". It's quite interesting that all the "strongly agree" responses come from the global compa-

nies (2,9% of respondents), the "somewhat agree" feedback is delivered by 1,5% of the surveyed coming from the EU market and 4,4% from the Polish market. The industries represented in the "strongly agree" group are education and production: capital equipment & furniture (1,5% of representatives each).

### Exhibit 10

#### ***It costs too much to innovate a product or service - it's better to wait till competition educates and prepares the market***



\* respondents could select multiple answers; respondents who didn't answered are not shown.

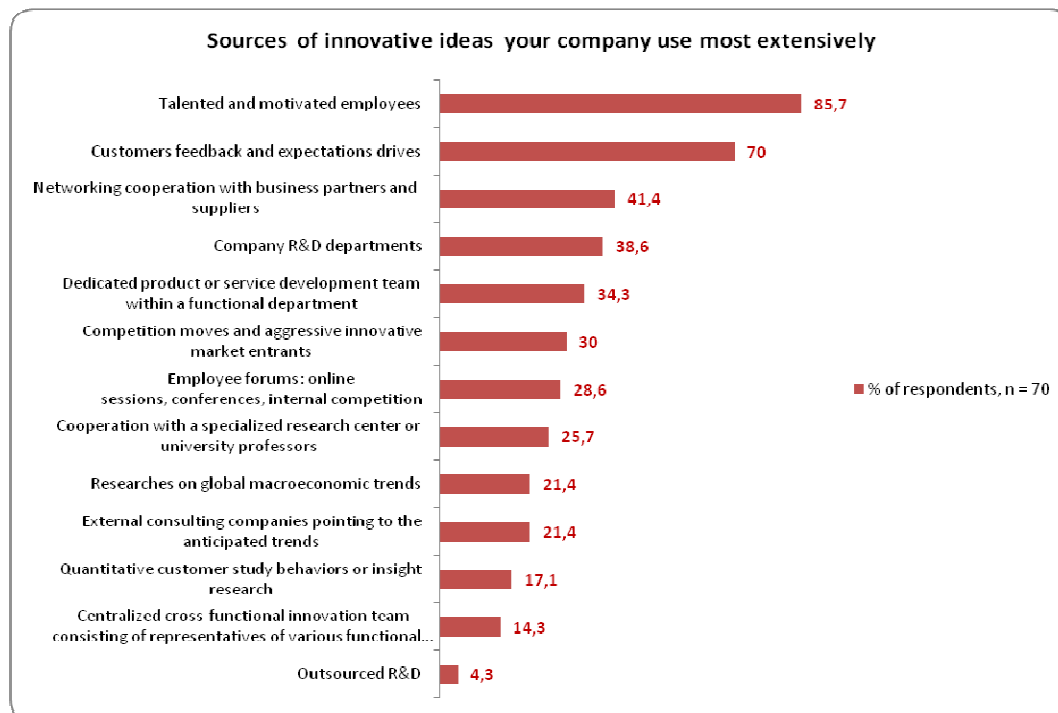
Summing up, the above findings suggest that that none of the companies assigning innovation priority number one are afraid of investments in innovations and few of them wait to innovate until competition makes its innovation moves. Reluctance to innovate is visible, however, even among companies that rank innovation in the top five priorities, probably because of high upfront investments cost incurred in innovation initiatives. Global companies tend more often to let their competitors probe the market with new products, and then based on the outcomes, they enter the market themselves. As a result, competition looms up as a powerful innovation

agent triggering and probing innovative product development and forcing their peers to follow the path in an effort to avoid disruption and losing market share.

### ***3.3. Sources of innovative ideas***

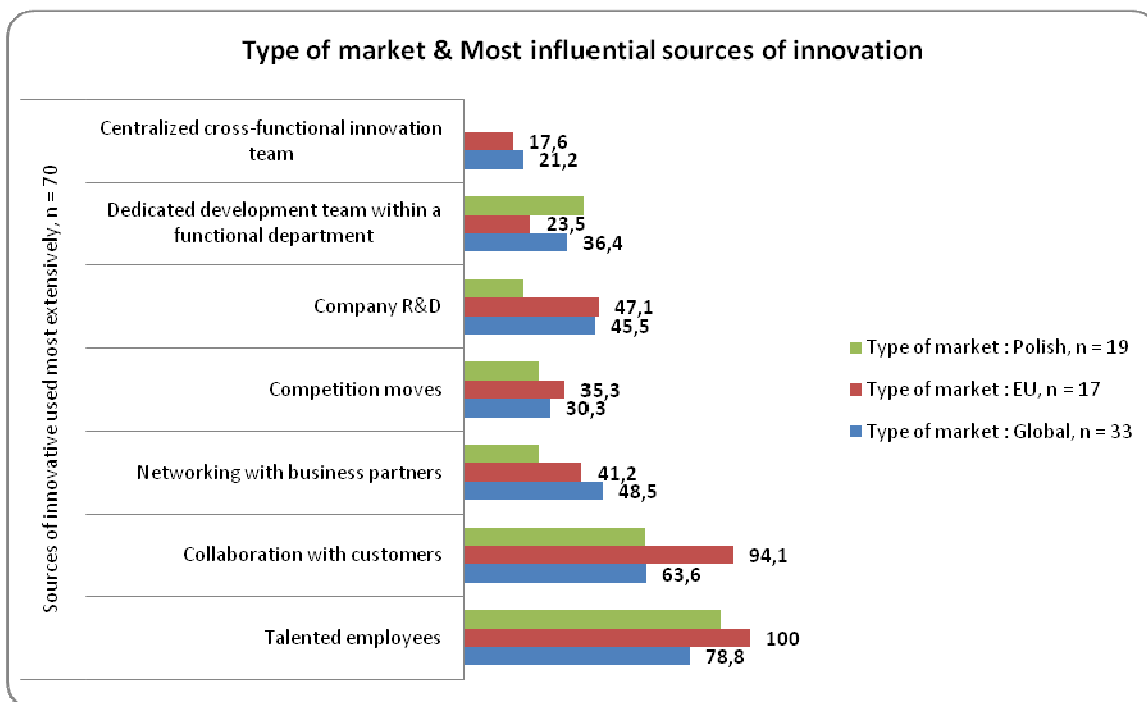
The respondents to the survey share different views on sources of innovative ideas than the participants of the Conference Board Survey (2005, p. 18) who pointed to customer expectation analyses (57%), internal R&D departments (47%), and competitive moves on the market (32%) as the top three innovation sources. The respondents rank talented and motivated employees as the top one source (85,7%) and customers' feedback as the top two one (70%). The collaboration with business partners is the 3<sup>rd</sup> source of importance (41,4%) and the company's R&D department constitutes the 4<sup>th</sup> most significant innovation mine (38,6%). The top five innovation silo ends up with a dedicated product or service development team within a functional department (34,3%). Surprisingly, competition takes the 6<sup>th</sup> slot, an insignificant position and centralized cross-functional teams are favored as low as the 12<sup>th</sup> source (Exhibit 11).

The results point to the employees, the customers, the business partners and the competition, as the most significant and influential innovation agents. They are joined by the internal R&D and cross-functional innovation teams. This finding is valid across all markets surveyed including the global, EU, and Polish markets (Exhibit 12).

**Exhibit 11*****Sources of innovative ideas your company use most extensively***

*\* respondents could select multiple answers; respondents who didn't answered are not shown.*

Moreover, as the survey suggests, companies use both internal and external innovation sources. Few of them, however, cooperate with research centers or university professors (25,7%) and still fewer rely on an outsourced R&D department (4,3%). Surprisingly the companies' representatives report that a dedicated product or service development team within a functional department constitutes a more valuable innovation source (34,3%) than a centralized cross-functional innovation team consisting of representatives of various functional teams (14,3%). This may suggest that innovation is regarded as a departmental initiative, and it is carried out with little cross-functional cooperation, being perceived via the department not the company perspective.

**Exhibit 12*****Type of market & most influential sources of innovation***

% of respondents coming from particular markets

\* respondents could select multiple answers; respondents who didn't answered are not shown.

### ***3.4. Compelling events to innovate & criteria applied to the decision making process***

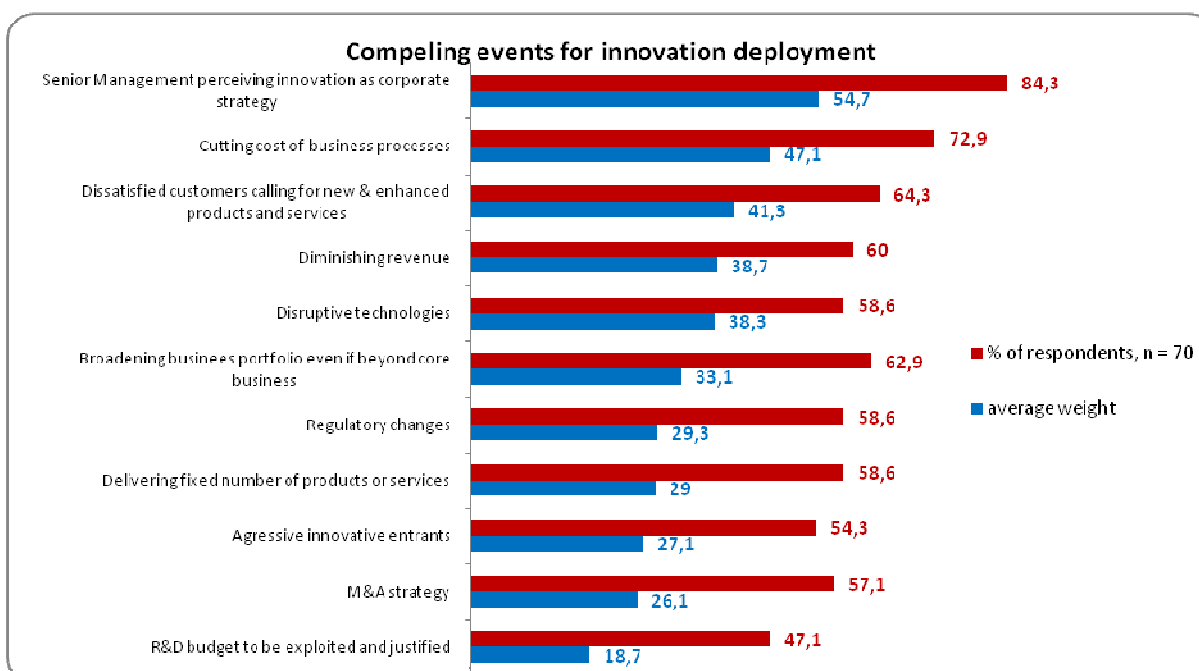
#### ***Compelling events for innovation***

Three years ago, when asked about the reasons for implementing innovations, 56% of the Polish executives reported that management strategy constituted the most compelling factor and 52% said that their customers' expectations induced innovative project launches. New technologies and the urgency to increase profits were each named as innovation triggers by 26% while cutting costs and competitive moves were regarded as innovation spurs by 22% each (the Corporate Board Europe, 2005, p. 18). The respondents to the survey share a similar opinion, with the top five compelling events following a similar pattern suggesting that the trend has remained mostly unchanged. 84% of respondents report that the top one

compelling event is the senior management perceiving innovation as a corporate strategy, and 72,9% point to the necessity for cost cutting of business processes. Dissatisfied customers calling for new and enhanced products and services constitute the compelling need for 64,3% and diminishing revenue for 60% of the panel. The survey respondents' top five ends up with "disruptive technologies", reported by 58,6% (Exhibit 13).

### Exhibit 13

#### *Compelling events for innovation deployment*



\* respondents could select multiple answers and were asked to assign weights to the responses selected; the total respondent sample has been taken into the count since not selecting particular responses means not perceiving them as compelling events.

Not surprisingly, innovation agents, that is, senior management, customers and competition are most visible on the compelling events stage. The senior management is the first choice for all the markets surveyed and dissatisfied customers are ranked in the top five responses across all the markets surveyed. Interestingly, aggressive entrants as a direct way of pointing to the role of competition, is ranked as the 9<sup>th</sup> compelling event of importance



which may suggest that most companies monitor the market outcome of competitive activities rather than predicting the competitive moves. Notably, the same findings are also presented by a McKinsey Global Survey on competition<sup>6</sup> which suggests that 34% of those facing innovation confirm learning about the competitor's move either when it was announced or when it actually hit the market.

Moreover, over 60% of respondents study the dynamics of their companies' product and services ecosystems, discover fruitful opportunities beyond their core portfolio and broaden it beyond the core business. This is true especially for the global and Polish market companies, which rank this compelling necessity as 3<sup>rd</sup> in terms of significance. What is more, almost 60% of the surveyed view regulatory changes as compelling events to innovate, with the Polish market businesses ranking this factor as the top one and the EU market companies as the top three, pointing to the EU enlargement and the new sets of policies that companies have to adjust their operations to. Strikingly, almost 60% of respondents report that their strategy is to deliver fixed number of innovative products or services over a certain span of time and almost half of the surveyed employ a kind of backward innovation process, that is, defining the R&D budget first, and then deciding what to innovate.

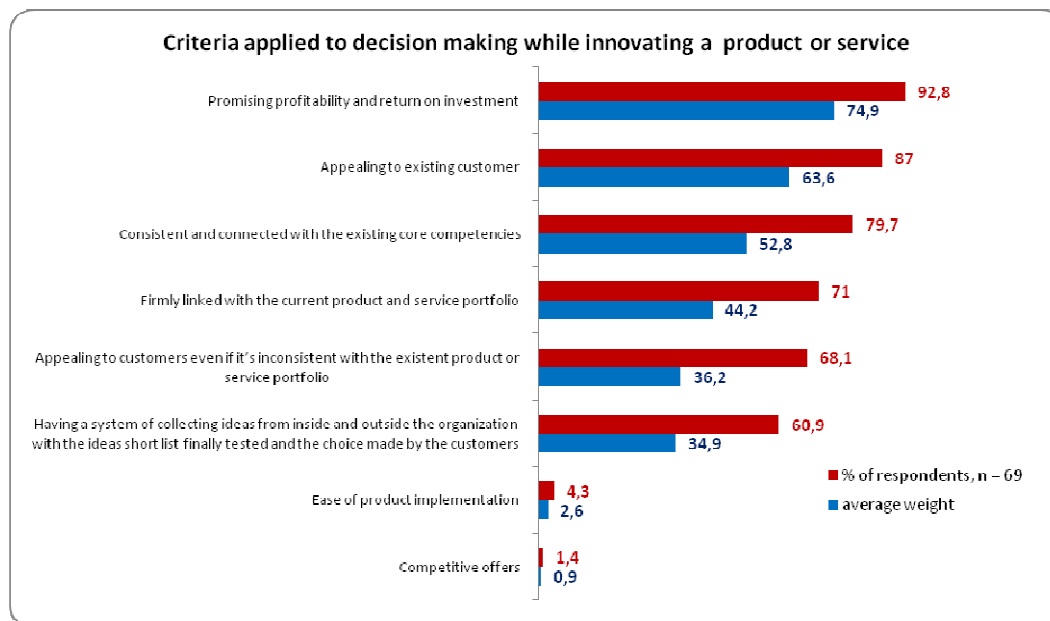
### ***Criteria applied to innovation decision making processes***

The availability of new powerful tools for management, the increasing demand for businesses to be adaptable and innovative combined with a revolution in customers' expectation, induce a new decision-making model and

a new set of criteria applied to the innovation decision making process (Hamel, 2008).

#### Exhibit 14

##### ***Criteria applied to decision while innovating a product or service***



\* respondents could select multiple answers and were asked to assign weights to the responses selected; the total respondent sample has been taken into the count since not selecting particular responses means not perceiving them as important decision making criteria.

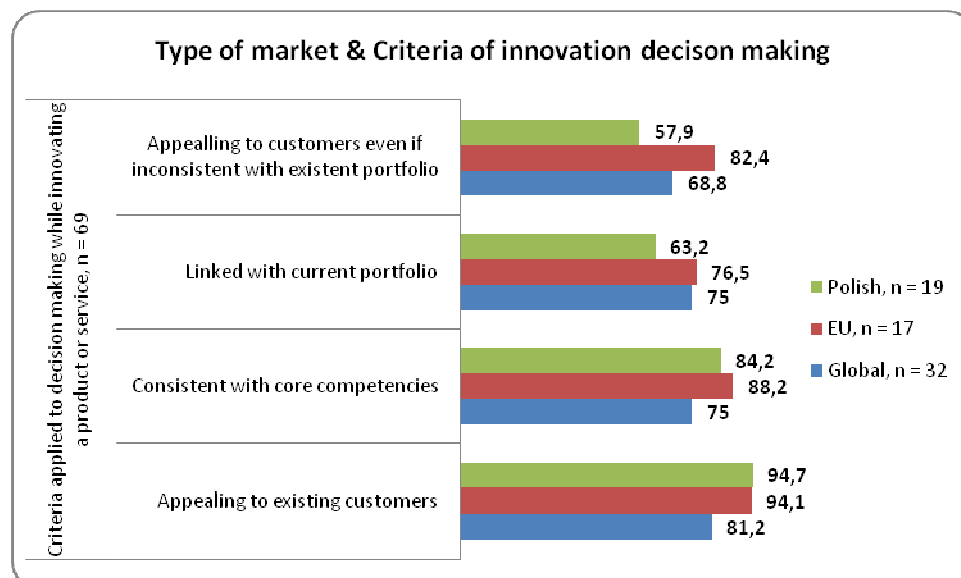
The respondents to the survey view promising profitability and ROI as the most influential determinant in the innovation decision-making process with 92,8% of the panel ranking it as the number one criterion. 87% go for innovation projects when they are appealing to existing customers, meaning they are not eager to expand their customer base, relying only on current customers as their profits source. 79,7% engage in innovations only if the innovation outcome is consistent with their core competencies thus rely mainly on their internal know-how and savvy already at hand. Furthermore, over 70% seek innovation on the condition that it is linked with the current products and services portfolio as contrast to 68,1% of respondents whose

companies engage in innovation launches even if innovation outcomes are inconsistent with the existing portfolio (Exhibit 14).

As a result, consistency with the current portfolio, dependence on core competencies and addressing the existing customer base are the major innovation decision criteria applied. When the responses distribution by market type comes into play, the results suggest that the businesses operating on the EU market are, on the one hand, most eager to invest in innovation projects, the scope of which goes beyond their current product or services portfolio, but they are most likely to stick to their core competencies on the other hand (Exhibit 15).

### Exhibit 15

#### *Type of market & criteria of innovation decision making*



*% of respondents coming from particular markets*

*\* respondents could select multiple answers; respondents who didn't answered are not shown.*

### ***3.5. Innovation governance, process models, and critical components while managing innovation***

#### ***Governing innovation***

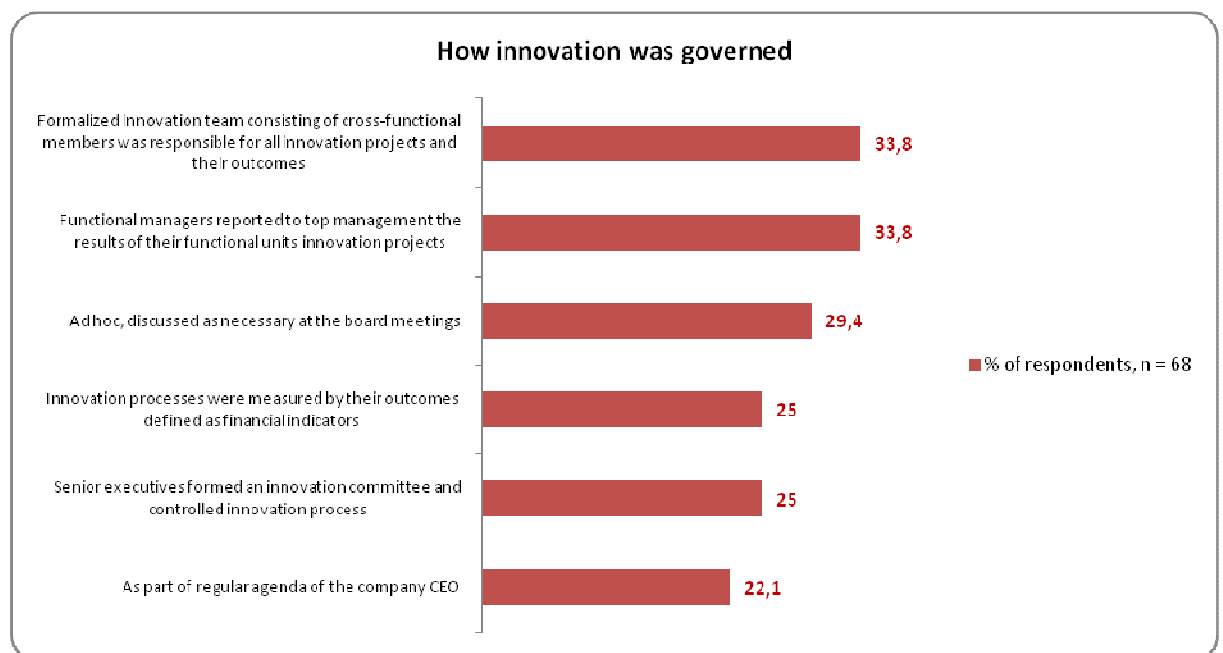
According to both Christensen (2003) and Ulwick (2005) innovation is a systematic process which has to be planned and executed predictably to addresses unmet, underserved or overserved customer needs which constitute the opportunities for value creation. In Lowell Bryan's view (2008, p. 4) businesses need a model that uses hierarchical decision making only for activities requiring authority (allocating resources, appointments, holding accountability), but which simultaneously, enables professionals to collaborate uninterrupted with their peers on the day-to-day basis and allows organizations to work both horizontally and vertically. As a result, predictability and decentralized decision making become the keys to efficient innovation processes governance.

The results of the survey present the governance responses scattered among various categories. Over one-third of respondents report that innovation projects, during their recent innovation efforts, were run by a formalized cross-functional innovation team which was responsible for the outcomes. The same number claim that the functional managers were responsible for innovations within the boundaries of their functional units which may signify again that innovation is primarily a departmental initiative in their companies. As many as 29,4% state that innovation ventures were governed on an "ad hoc" basis and only critical issues were discussed at the board meetings - a finding similar to a McKinsey global survey on innovation revealing that 36% of top managers declare governing innovation "ad hoc", discussed only if necessary with the senior leadership team

(The McKinsey Quarterly, 2007, p. 6). Further, 25% say that innovation processes were measured by financial indicators, and the same percent report that innovation processes were controlled by senior executives with the innovation committee they formed – an innovation governance scheme in which a direct engagement of companies' execs can be traced. Finally, as few as 22,1% state that innovation was perceived as part of regular agenda of the company CEO (Exhibit 16).

### Exhibit 16

#### *How innovation was governed*



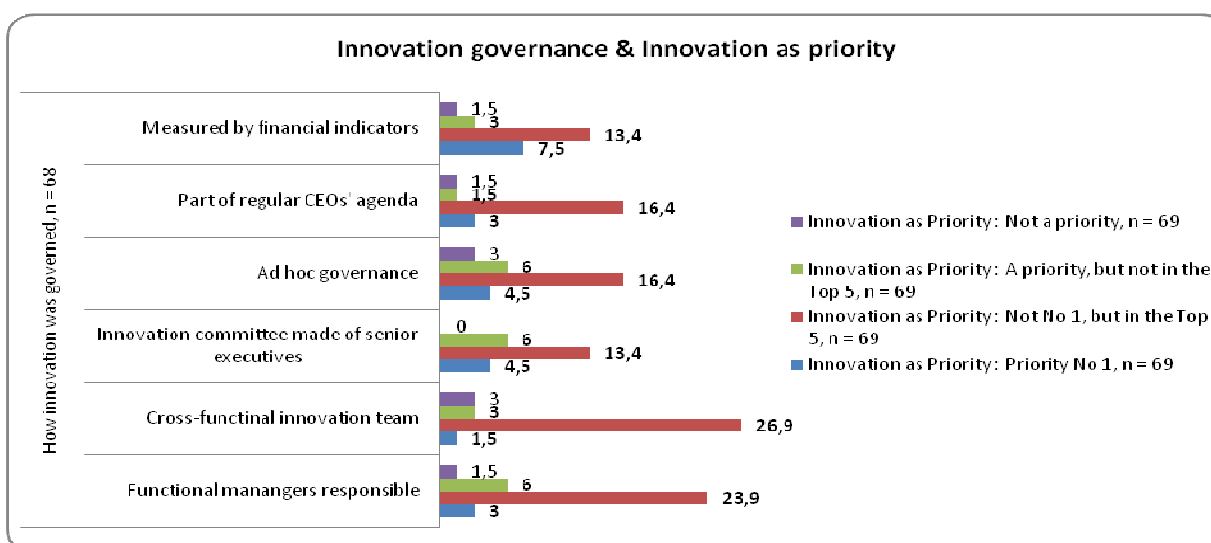
\* respondents could select multiple answers; respondents who didn't answered are not shown.

Surprisingly, as the results of the survey show, 16,4% of respondents who report that innovations in their companies were run "ad hoc" claim that innovation is ranked among the top five priorities and it was part of regular agenda of their companies' CEOs. Companies that rank innovation as number one priority, in most cases, see the financial indicators as the most ob-

vious innovation governance measure and those for which innovation is not a priority, an "ad hoc" governance is the norm. The cross-functional governance gets the highest scores with respondents who rank innovation among the top five priorities (Exhibit 17).

### Exhibit 17

#### *Innovation governance & innovation as priority*



% of respondents who selected both responses, n = 67

\* respondents could select multiple answers; respondents who didn't answer are not shown.

### ***Innovation best model***

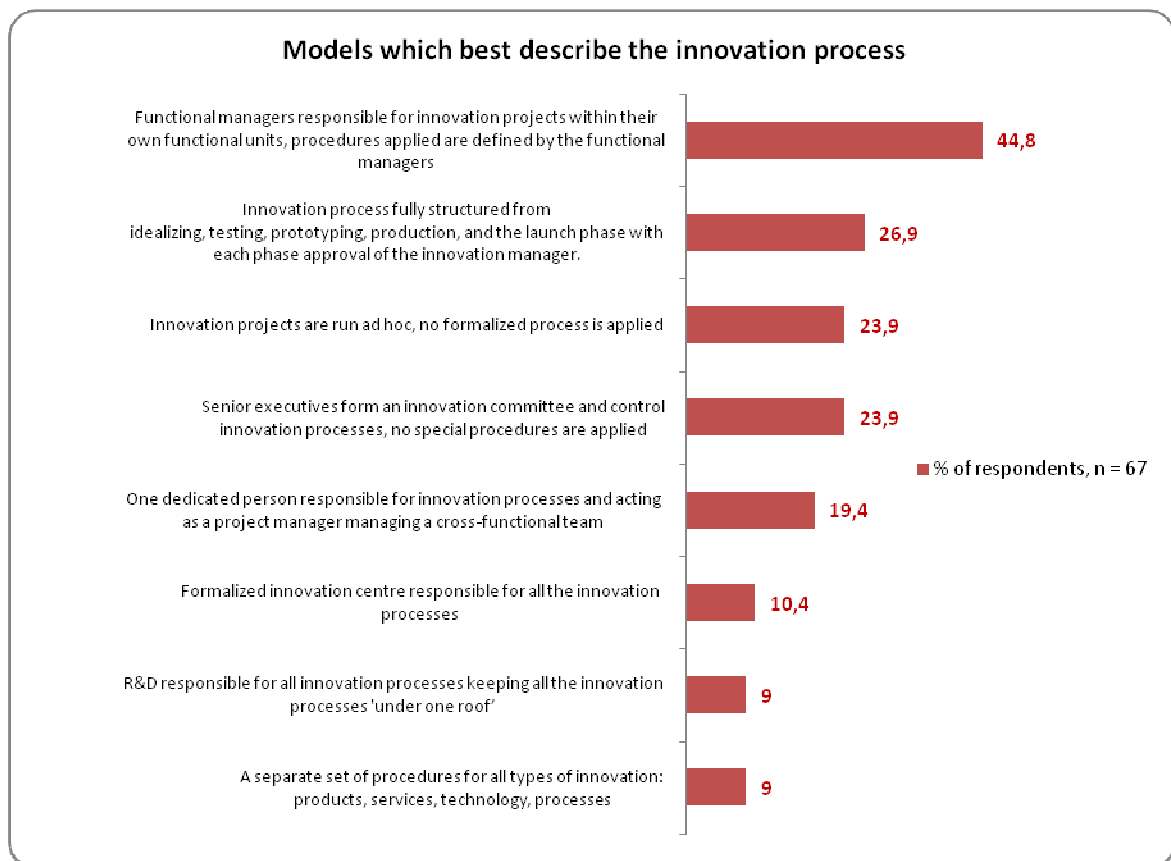
As the above findings suggest, nearly 30% of the panel report that their companies exercise "ad hoc" innovation governance and merely 22,1% say that it is a part of their CEOs' regular agenda. Both groups rank innovation as one of the top five priorities. Immediately a question arises whether innovation can really be classified among the top five priorities if it is governed on the "ad hoc" basis and is not the CEO's strategic focus.

The respondents' feedback reveals some interesting findings concerning the models that best describe the innovation process while under-

taking specific projects the process is intended to generate. Almost 45% of respondents believe that functional managers being responsible for innovation projects within their own functional units constitute the best model, clearly pointing to innovation as a departmental rather than cross-functional initiative. Interestingly, with this model innovation is most likely to be isolated to just a few department functions or units, and there is a high probability that the isolated units focus on innovation projects without communicating and coordinating their work with others in the organization.

### Exhibit 18

#### *Models which best describe the innovation process*



\* respondents could select multiple answers; respondents who didn't answered are not shown.

Furthermore, nearly 27% think that the best choice is structuring the innovation process from idealizing, testing, prototyping, production, and the launch phases, with each phase approved by the innovation manager. 9% of the surveyed go even further and think that there should be a separate set of procedures for all types of innovation: products, services, technology, processes.

These two models allow for carrying innovation ventures in the planned, predictable and systematic way similar to the one advocated by Anthony Ulwick and his ODI approach. Moreover, an innovation committee formed by the senior executives with no special procedures applied is favored by 23,7%, and this model, with the direct executive engagement, gets the 4<sup>th</sup> score. An innovation project manager leading a cross-functional team is perceived as the best option by only 19,4%, and merely 10,4% believe that a formalized innovation center responsible for the innovation processes does the most efficient job. But still almost one-fourth of the panel believe that innovation should be run "ad hoc" with no formalized process applied (Exhibit 18).

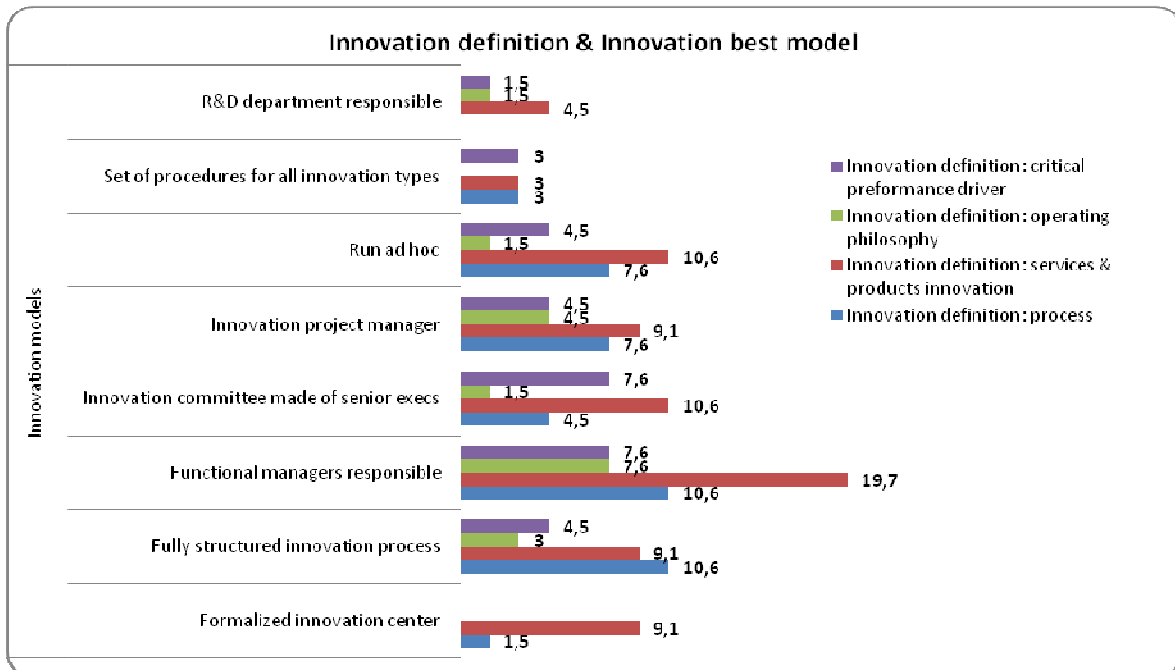
Furthermore, considering the definitions of innovation types in relationship to innovation models (Exhibit 19), it turns out that the "functional unit managers responsible for innovation projects" model is the most widely used across all innovation types, with the highest scores for service and product innovations. What is more, this type of innovation is run "ad hoc" most frequently while the "fully structured innovation" model is viewed as most efficient by the process innovation choosers. The "innovation committee made of senior executives" is favored by the service and product innovations as well as the "innovation as a critical performance driver", with the



later stressing the executives' direct engagement when performance metrics come into play.

### Exhibit 19

#### ***Innovation definition & innovation best model***



% of respondents who selected both responses,  $n = 66$

\* respondents could select multiple answers; respondents who didn't answered are not shown.

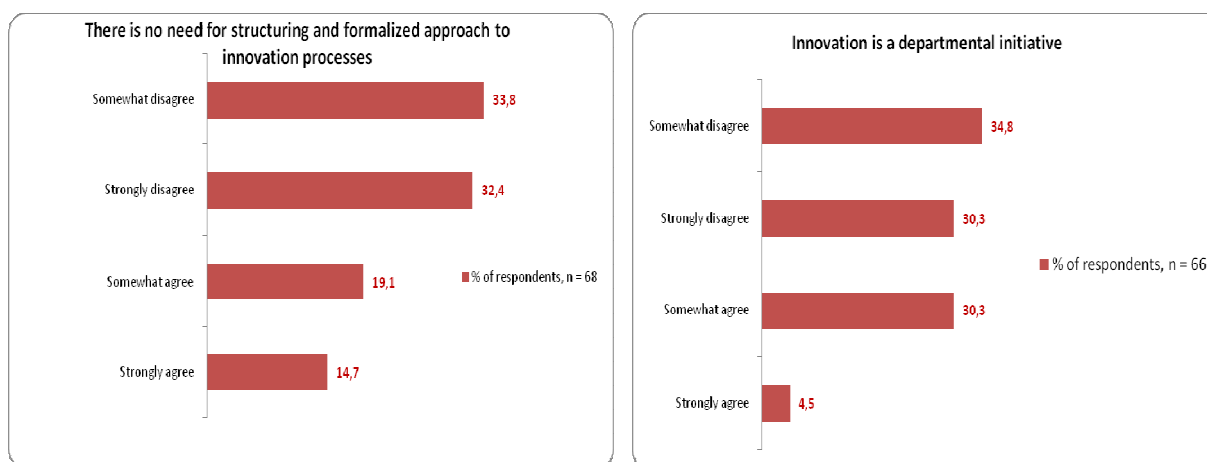
#### ***Innovation a departmental initiative or formalized innovation structures and formalized approach***

When asked about the way innovation projects were governed in their companies during the recent innovation ventures, 33,8% of respondents report that it was the cross-functional innovation team that ran projects and was responsible for their outcomes. The same percentage (33,8%), however, state that the responsibility was held by the functional managers who carried out innovation projects within their functional units, as a result, pointing out the departmental character of innovation activities. Moreover, while selecting the best innovation process model, 44,8% say that the func-

tional units managers (the highest ranked model) are responsible for innovations and “do the greatest job”. But when asked to agree or disagree on the statement: “Innovation is a departmental initiative,” surprisingly over 65% disagree (Exhibit 20). It suggests that the respondents’ opinions on innovation governance and models are in contrast to how innovation is actually governed and carried out in their companies. In fact, as the business practices at many companies show, having the functional managers responsible for innovations is easier since both projects and accountability are kept “under one roof.”

### Exhibit 20

#### ***Innovation is a departmental initiative & there is no need for structuring and formalized approach to innovation processes***



\* respondents could select multiple answers; respondents who didn't answered are not shown.

Not surprisingly, when asked to provide their opinion on the “There is no need for structuring and formalized approach to innovation processes” statement, almost 67% of respondents to the survey disagree and the “agree” replies are given by as many as nearly 34% of the panel. In a way, the responses mirror the results of the innovation governance and model

choices (Exhibit 16 & Exhibit 18) which reveal that most respondents value some kind of structure, either in the form of functional managers, innovation committees, cross-functional teams or project managers held accountable for innovation initiatives. In contrast, the "agree" responses favoring no formal structures confirm the previous findings connected with the "ad hoc" governance and the "ad hoc" executed innovation model.

### ***Managing innovation: critical components & inhibitors***

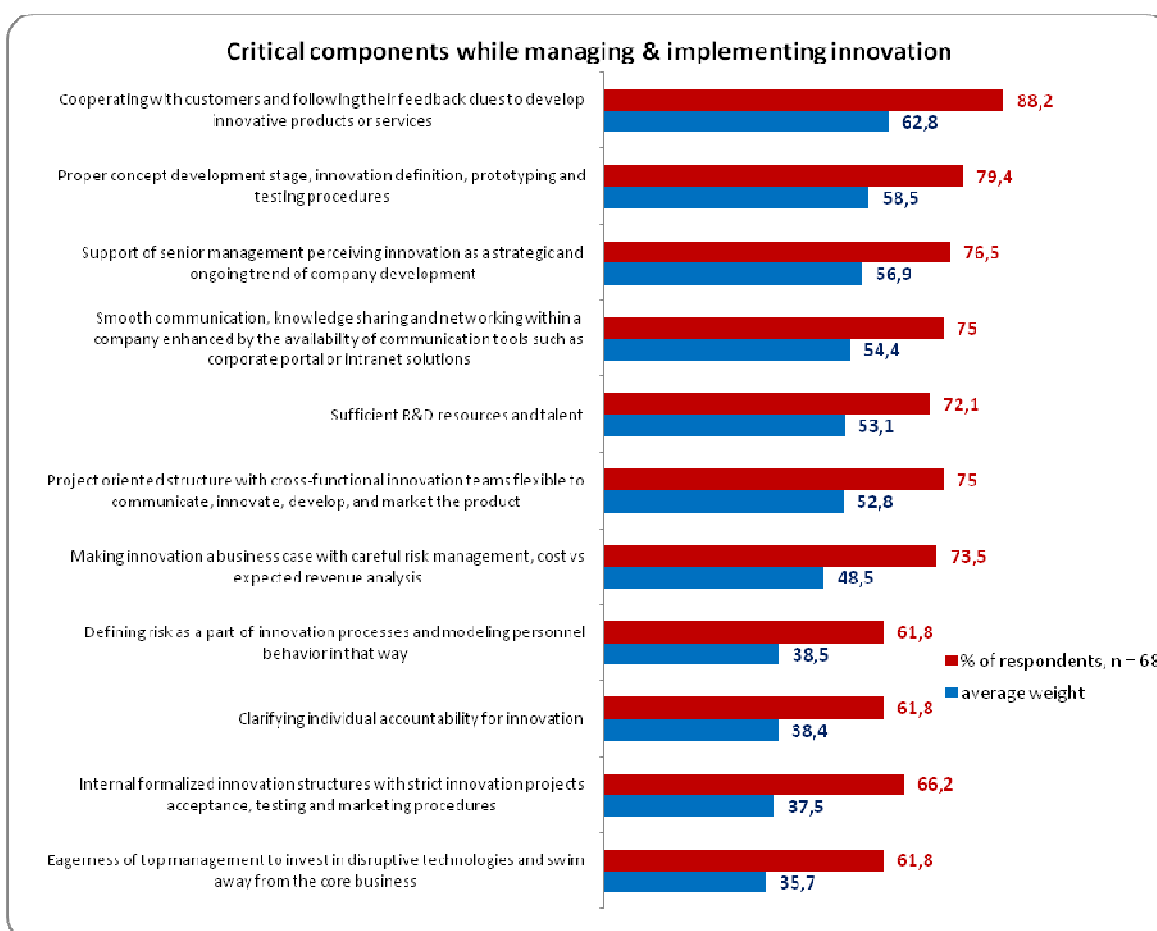
The 2005 Conference Board research paper respondents viewed properly trained and motivated employees as the most important factor of effective innovation. A McKinsey Global study on innovation reveals that making innovation a core part of the leadership agenda constitutes the top one critical component while managing innovation and modeling behavior that encourages innovation, that is, risk taking is the top two imperative.

The respondents to the survey, on the other hand, view cooperation with customers as the most critical factor while implementing innovation, with over 88% valuing it the most. This Voice of Customers paradigm (VoC) has been in the market for many years but as Ulwick suggests (2005) it should be carefully managed by obtaining the proper structure and content of customers' feedback that yields a real view what job customers need to get done. The innovation cycle via the development stages is perceived as the most significant by almost 80%, pointing to the importance of the pre-launch stages an innovative idea goes through before it is commercialized. Further, the support of senior management is viewed as crucial by more than three-fourths. In addition, smooth communication, sufficient talent resources, and cross-functional cooperation are reported by 75%, 72,1%,

and 75% respectively, suggesting that innovation projects need networking, knowledge sharing as well as talented employees to be carried out effectively. It is interesting that though the cross-functional cooperation is voted by a greater percentage, it is rated with a lower weight score (52,8) than the talented employees (53,1).

## Exhibit 21

### *Critical components while managing & implementing innovation*



\* respondents could select multiple answers and were asked to assign weights to the responses selected; the total respondent sample has been taken into the count since not selecting particular responses means not perceiving them as critical components.

Managing risk both from the point of view of innovation as a business case and modeling employees' behavior are ranked low in spite of quite high voter percentage, and interestingly, accountability assignment, formalized

innovation structures, and finally, the top management eager to invest in disruptive technologies, though having a profound impact on innovation performance, are the bottom 3 components (Exhibit 21).

### ***3.7. Customers as innovation agents: role and stages of involvement***

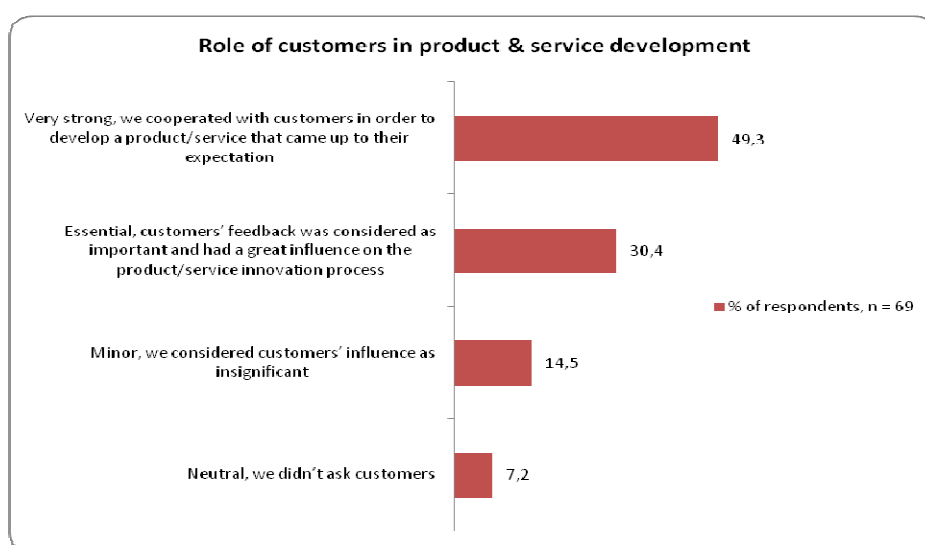
It's becoming obvious that businesses regardless of size, product or service offerings have to understand customer emotions, needs, desires and buying behavior to put "the empathy economy" into practice, or in other words, learn to innovate and swim against the competitive currents. For some companies customers are design partners deeply involved in the innovation process and add value to new product design (Schrage, 2006). This is especially true for the open-source innovation in which external customers' talents are tapped, making this type of innovation a model for participatory collaboration. This is well illustrated by what Mozilla Corporation does with its Firefox browser and the way Linux is developed (Mendonca, Sutton, 2008, p. 1). For others, the price and the cost pressures from customers have become the top challenges of product innovation for the present and the near future (AberdeenGroup, 2007).

The respondent to the survey appear to perceive customers as a powerful innovation agent as well. As the survey reveals, they point to customer dissatisfaction as the third most important innovation compelling agent (Exhibit 13), the third most important criteria applied to innovation decision (Exhibit 14), and top critical component while managing and implementing innovation (Exhibit 21). Moreover, when asked about the role of customers in their recent product and service developments, almost half of

the respondents declare that the cooperation was very strong, over 30% say their customers' role was essential and had a great influence on the outcome of the innovation process. But as few as 14,5% report that the role was minor. Finally, 7,2% say that they didn't ask customers and, as a result, their role was neutral (Exhibit 22).

### Exhibit 22

#### ***Role of customers in product & service development***



\* respondents could select multiple answers; respondents who didn't answered are not shown.

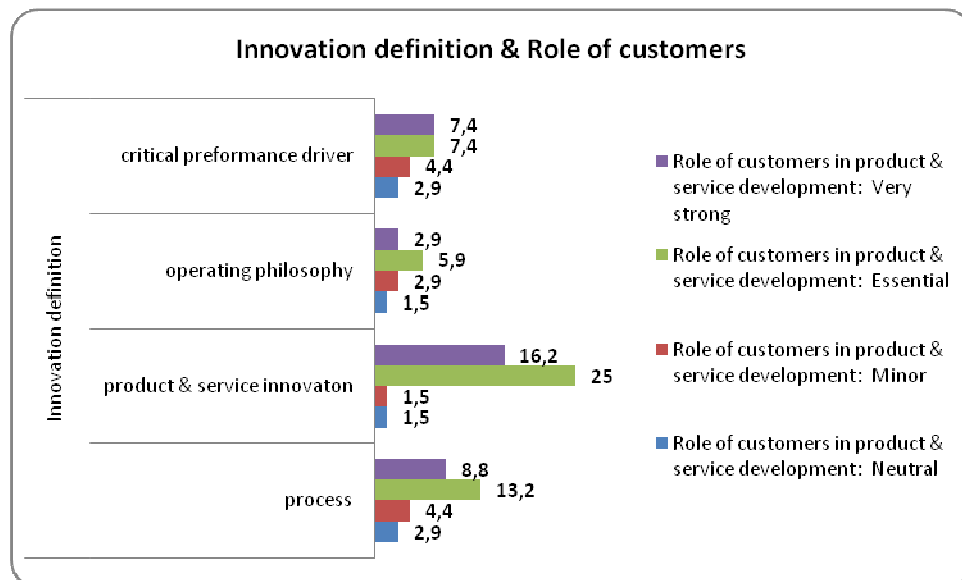
Not surprisingly, the role of customers is most vivid for product and services innovations in which the customer's feedback can mould the final innovation outcome. At the same time, it is the least significant for the operating philosophy – the innovation type which defines the corporate innovation culture, seemingly not influencing the final product, but important for the way, method and cooperation mode it is developed (Exhibit 23).

Moreover, the UE and the global operating companies declare valuing customer input to the greatest extent. Almost 65% of the EU market companies say that the role of customers is essential and as many as 34,4% of

global companies declare very strong cooperation with customers. The Polish market companies seem to lag behind with the highest number of the “minor and neutral” responses (21,1% and 10,5% respectively). The conclusion may be drawn that in the globalization era, with sophisticated customer tastes modeled by the rapid technological pace, the global and the EU organizations have to rely to a wider extent on their customers’ feedback innovating their products and services.

### Exhibit 23

#### *Innovation definition & role of customers*



% of respondents who selected both responses,  $n = 68$

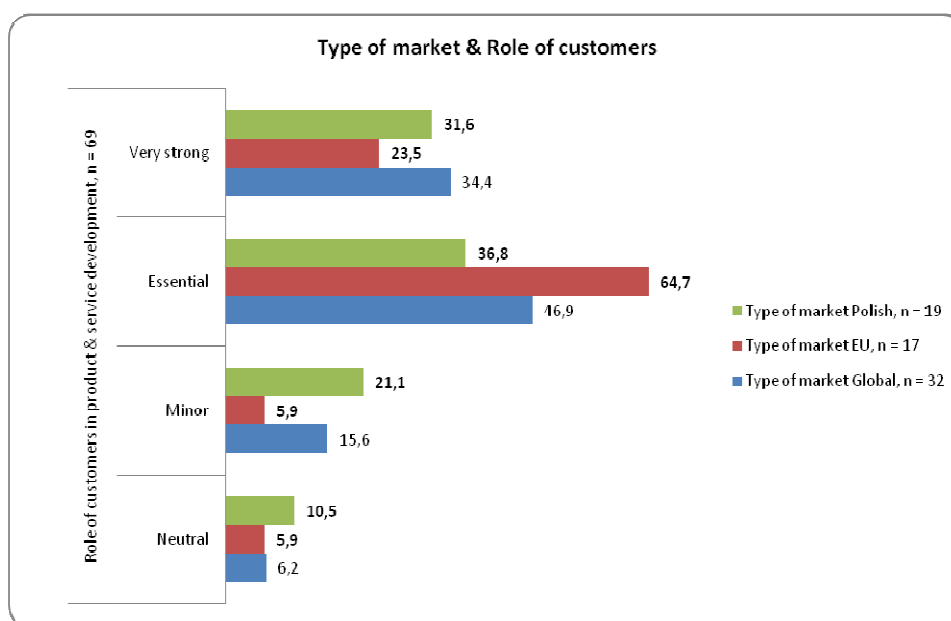
\* respondents could select multiple answers; respondents who didn't answered are not shown.

This may be the consequence of the depth and width of their operation markets as well as the fact that they have to react more rapidly to global innovation trends, both in their global headquarters and the local operations. If they miss a major innovation or technology wave and leave it unnoticed, they risk losing substantial customer base and the potential profits at the same time (Exhibit 24).

What is more, 20,6% of respondents' companies appear to collaborate with their customers at every stage, which suggests they put an emphasis on fine-tuning market offerings and delivering what the market actually asks for. Additionally, the higher the level of cooperation with customers, the lower the degree of risk to which these companies expose themselves. But the majority of the respondents' businesses involve customers only in one or two stages of the development process. Notably, over 35% involve their customers in the concept stage.

## Exhibit 24

### *Type of market & role of customers*



*% of respondents coming from particular markets*

*\* respondents could select multiple answers; respondents who didn't answered are not shown.*

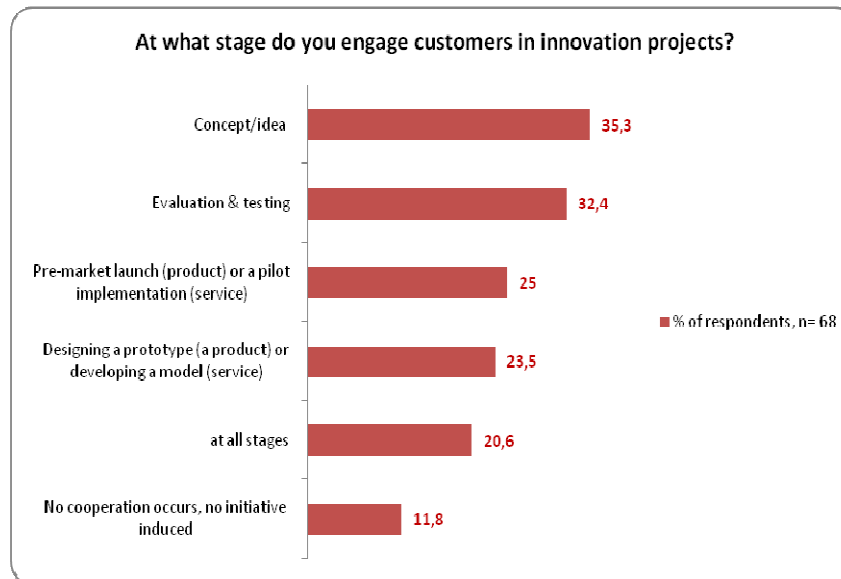
Further, 32,4% engage their customers in the evaluation and testing stage, 25% in the pre-launch or pilot implementations, and 23,5% in the prototyping phase – all the three being a kind of backward innovation process - products are developed first and then companies check to see if the customers really want the new offering. Finally, 11,8% of the surveyed declare



that no cooperation across the product or service development stages occur, in spite of the fact that the success of products or services innovation is more predictable with all-embracing customer collaboration (Exhibit 25).

### Exhibit 25

#### *Stages of customer involvement in innovation projects*



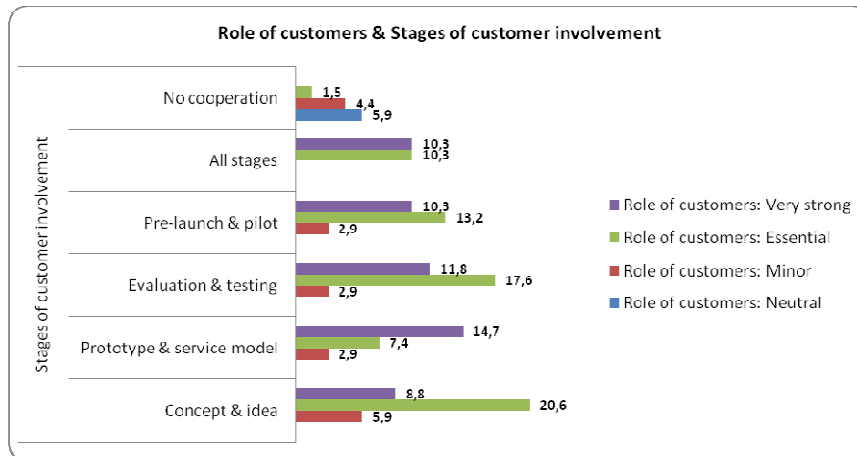
\* respondents could select multiple answers; respondents who didn't answered are not shown.

Finally, as the correlation analysis reveals (Exhibit 26), companies that declare "essential or strong cooperation with customers" are likely to involve their customers across all the product or service development stages. Interestingly, the ones reporting the involvement of customers as being essential are most likely to engage customers in the concept phase, while the ones defining the engagement of customers as very strong further to the prototyping stage. The "all stages" involvement gets the same, surprisingly low, score of 10,3% from the "essential" and the "very strong" groups suggesting that the real customer involvement occurs only at some of the

stages, missing the full opportunity to provide what the customers really want and minimize the risk to market.

## Exhibit 26

### *Role of customers & stages of customer involvement*



% of respondents who selected both responses,  $n = 68$

\* respondents could select multiple answers; respondents who didn't answered are not shown.

### **3.8. Innovation failures: approaches & reasons**

According to Bill Campbell, a consultant to such Silicon giants as Apple and Google, businesses have to accept innovation failures. If they are unwilling to acknowledge that out of five or six things they will try, two or three are going to fail, then they better not do them at all: they have to make sure that they have some freedom to fail (2007, p. 74). And indeed the necessity to leave room for innovation failures is a frequently cited imperative by innovation thinkers. Discarding failures means discarding risk-taking and experimentation, both crucial for sustaining corporate innovative culture.

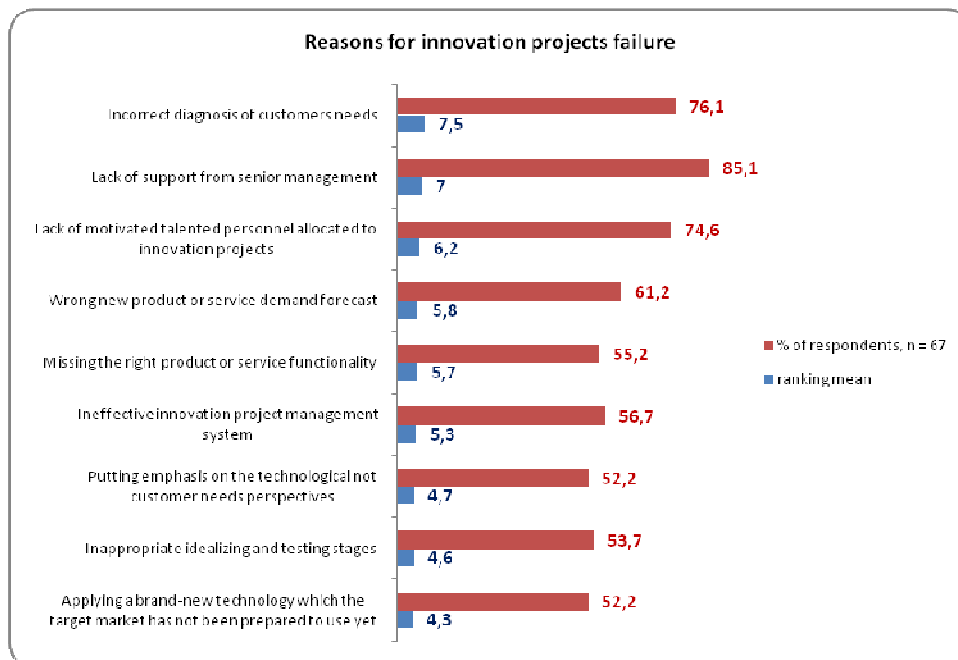
#### **Reasons for innovation project failures**

The respondents to the survey ranked cooperating with customers, as well as the senior management support in the form of "perceiving innovation as

a strategic and ongoing trend of company development”, among the top three most critical components contributing to innovation success. Not surprisingly, the incorrect diagnosis of customer needs and the lack of support from senior management are ranked among the top two reasons for innovation project failures. These two receive the highest scores both in terms of the percentage and the ranking results the respondents were asked to do.

It is important to note though that, in spite of the higher percentage of respondents selecting this item (85,1%), the lack of support of senior management received a lower – by 9% - ranking mean (7) than the incorrect diagnosis of customer needs (76,1% of voters, 7,5 ranking mean). This signifies that more respondents see the lack of senior management support as a potential reason for innovation failure but assign it lower importance. The top three set of reasons for innovation failure ends up with “the lack of motivated and talented personnel allocated to innovation projects” (74,6% of voters, 6,2 ranking mean). Therefore, the top three innovation agents are defined as crucial both to innovation success and failure.

Further, a wrong demand forecast and missed functionality are reported as innovation failure causes by over 61% and over 55% of respondents respectively, with a similar ranking mean (5,8 and 5,7 correspondingly). What is more, 56,7% of the panel report that an ineffective innovation project management system is responsible for innovation failures, assigning it, however, only 5,3 ranking mean (Exhibit 27).

**Exhibit 27****Reasons for innovation failures**

\* respondents could select multiple answers and were asked to rank the responses by importance from 1 to 9; the mean – for the visualization purposes – was calculating by assigning to the 1<sup>st</sup> ranks 9 points, the 2<sup>nd</sup> ranks 8 points, 3<sup>rd</sup> ranks 7 points, etc.; respondents who didn't answered are not shown.

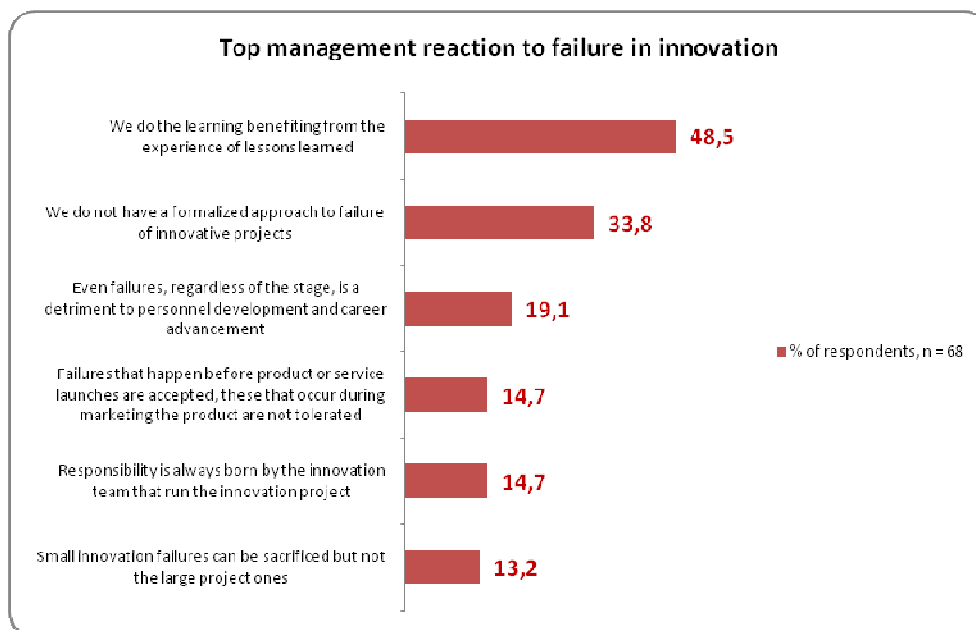
It is worth noting that the Conference Board respondents defined a different “top reasons for failure” set. The topmost failure cause was the same, that is, the incorrect diagnosis of customer needs, but the remaining four were different and included: too much focus on technological not market perspective, inappropriate assumptions and missed functionality, and finally, insufficient market research (The Corporate Board Europe, 2005, p. 13). As a result, the MBA students put more emphasis on the innovation agents’ role in the innovation success or failure and the human factor impact such as management support, employee motivation and talent, customer needs and feedback, and are less focused on the technical side of innovation connected with technology, functionality or market research.

### ***Top management reaction to failure***

As it was already mentioned, failures and risk taking are indispensable parts of the innovation culture, which is supposed to be pumped up by top management in the first place. But when asked about the top management approach to failure, nearly 34% of respondents to the survey report that their companies do not have a formalized approach to innovation failures. 48,5% say that they learn from failures, and over 19% declare that all failures, regardless of an innovation project stage, are vital to personnel development.

### **Exhibit 28**

#### ***Top management reaction to innovation failure***



\* respondents could select multiple answers; respondents who didn't answered are not shown.

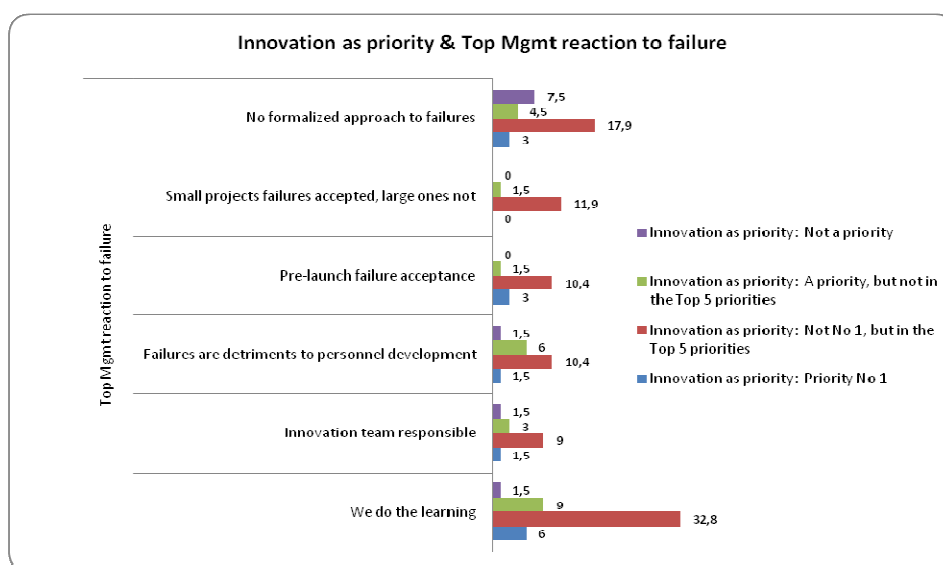
Furthermore, only failures that occur before product launches are tolerated by 14% of respondents' companies and 13,2% say that the failures of large projects are not. Finally, failures being the responsibility of the innovation

team are reported by 14,7% of the surveyed. Therefore, on the one hand, the respondents' companies learn from failures and see them as their employees' development trigger. On the other hand, they do not tolerate pre-launch and large project failures (Exhibit 28).

Furthermore, it is not surprising that businesses, which consider innovation as number one priority and among the top five priorities, do the most learning from failures. On the other hand, businesses seeing innovation as not a priority report the highest percentage of the "no formalized failure approach" responses (Exhibit 29).

### Exhibit 29

#### ***Innovation as priority & Top Management reaction to failure***



*% of respondents who selected both responses, n = 67*

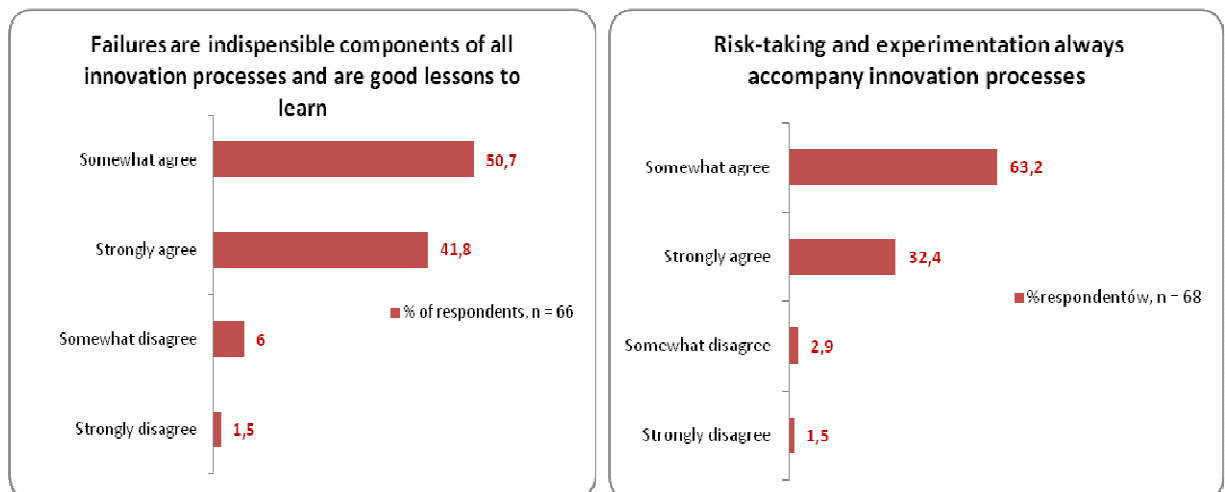
*\* respondents could select multiple answers; respondents who didn't answered are not shown.*

Moreover, when asked if failures are indispensable components of all innovation processes and good lessons to learn, 92,5% of respondents to the survey agree with this statement. Interestingly, these figures show a wider acceptance of failures than the previous findings do (Exhibit 28) with only

7,5% of the “disagree responses”. No matter how the responses vary, however, most companies accept failure or some degree of it, and as a result, perceive failure as an inherent part of innovation (Exhibit 30). A similar conclusion may be drawn in relation to risk-taking. When asked to agree or disagree on the following statement: “Risk-taking and experimentation always accompany innovation processes,” 95,6% of respondents agree, of which 33,8% strongly agree, with only 4,4% of respondents who disagree (both “somewhat disagree” and “strongly disagree”: Exhibit 30). The factors that frequently inhibit innovation and top management are failure and risk-taking aversions. The majority of respondents to the survey, however, perceive tolerating failures, encouraging risk-taking and experimentation as crucial to the innovative culture and innovation itself.

### Exhibit 30

#### ***Failures as indispensable components and good lessons to learn & Risk-taking and experimentation***



\* respondents could select multiple answers; respondents who didn't answered are not shown.

#### **4. CONCLUSION**

Beating competition in a price war may be far from easy but feasible. Beating competition in an innovation battle, however, is more than hard. Innovation is not only about generating and evaluating ideas, but also about turning them into growth and profits. The findings reveal that the majority of the respondents' organizations view innovation as a priority but only slightly over 10% report that it is their number one priority. At the same time, there are companies for which innovation is not a priority at all. Interestingly the smaller businesses - with the annual revenue figure of 50 million and less - tend to prioritize innovation higher on their way to catch up with the competition.

Nevertheless, few businesses view innovation as the critical driver of performance and even fewer as the philosophy on which innovative culture rests tolerating mistakes and encouraging risk taking to develop talent. The existing product and service innovations have prevailed so far, meaning that organizations have been mainly following the sustaining innovation trajectory. But an up-market shift towards developing brand new products and services can be observed signifying possible disruptions on the horizon. Interestingly, it turns out that the highest revenue margin has been generated by mature market offerings, that is, slightly improved products and services, questioning the real value creation of brand new product and service innovations.

Innovating business processes, the innovation type that really fuels growth, lags behind a bit and is valued most by the high technology industries. In the past years, organizations focused mainly on innovating management systems, quality systems, and production technology bringing on-



to play talented employees, customers, and business partners as innovation sources. The decision making process identified two critical innovation agents: top management executives and competitive pressures which determined the pace of innovation in the past innovation initiatives. When it comes to decision-making criteria, however, it turns out that profitability and ROI constitute the most decisive factors which combined with consistency with the core business and competencies signify that the sustaining innovation trajectory prevails.

As the survey shows, the respondents agree on the compelling events but disagree on the way innovation is governed. The responses are scattered among various innovation governance categories, implying that variety of governing modes are used ranging from formalized innovation team consisting of cross-functional members to functional managers responsible for innovation within the boundaries of their functional units. Notably, few respondents admit that their companies govern innovation as part of regular CEO's agenda. Moreover, almost one-fourth tend to run innovation projects in an "ad hoc" way declaring, at the same time, that they rank innovation among the top five priorities.

Furthermore, when it comes to an innovation "best model", the model that prevails relies on functional managers held responsible for innovation projects. It points to innovation as a departmental rather than cross-functional initiative, increasing the likelihood that isolated units focus on innovation projects without cooperating with others in the organization. Nevertheless, regardless of the model chosen, the majority agree that its successful application tends to be mostly dependent on customers, proper

innovation development cycles, senior management support, smooth communication, and sufficient talent resources.

Customers loom up as powerful innovation agents, taking an active part in innovation ventures. They are perceived as the top three compelling event, innovation decision criteria and the topmost critical component while implementing innovation. The majority of organizations define customers' role as very strong or essential. But the majority of the respondents' businesses involve customers only in one or two stages of the development process. What is more, not even one-third appear to collaborate with their customers at every stage which might suggest not putting enough emphasis on fine-tuning market offerings and delivering what the market actually asks for. Therefore, it is not astonishing that the incorrect diagnosis of customer needs is the most frequently reported reason for innovation failure. Furthermore, the majority of those surveyed agree that the lack of support from senior management and the lack of talented personnel allocated to innovation projects make innovations fail as well.

In fact, failures accompanied by risk taking are indispensable parts of the innovation culture that should be driven by top management in the first place. Over 90% of respondents' companies recognize failures just in that way, but not even half of them perceive failures as lessons learned. Risk-taking and experimentation, however, are accepted as innovation companions by over 90% and the majority agree that the ongoing communication of a clear vision to the employees, organizations' flexibility to changes, and senior management support spur innovative culture most.

As Gary Hamel says there is no a ready-made recipe to plant innovativeness and reap fruitful results. Organizations have to make their own

way to create innovation and exploit it. The significance of the innovation agents, that is, the top management, employees, customers, business partners and competition with each playing different role and impacting different domains is profound. The point is to make the innovation both a top-to-bottom and a bottom-to-top venture with top management inspiration and support on the one hand, and employee talents and motivation unleashed on the other. Only then innovation will energize organizations and the innovative capabilities will be successfully built as inseparable building blocks of organizations' innovation DNA.

## NOTES

- <sup>1</sup> For survey methodology and respondent profile see Appendix 1
- <sup>2</sup> The McKinsey Quarterly conducted the survey "How companies approach innovation: A McKinsey Global Survey" in September 2007 and received responses from 722 executives at the level of senior vice president and above and 736 lower-level executives from around the world and representing a broad range of industries. The data were weighted to reflect a proportional representation of segments in the total population.
- <sup>3</sup> The McKinsey Quarterly conducted the survey "What global executives think about technology and innovation" in March 2005 and received responses from 9,345 global executives representing a broad range of industries. The data were weighted by GDP of constituent countries to adjust for differences in response rates from various regions.
- <sup>4</sup> The Lisbon strategy incorporates a policy goal that R&D expenditure in the EU economies should reach 3% of national GDPs by 2010. Poland as a catching-up country and lagging behind the EU - with its average innovation performance of 0,24 against the EU average of 0,45 - will

- need 18 years to close the gap with innovation leaders with the urgent task of increasing its R&D investments in the first place.
- <sup>5</sup> The research project "Corporate Innovation: Sources and Strategies" was conducted between March 15, and May 15, 2005 in cooperation with Accenture. Its aim was to depict one of the key business challenges that was brought up by the top CEOs in "The CEO Challenge" research. The research concentrated on illustrating key innovative activities, major challenges and CEO's expectations towards innovation. The research was based on a standardized questionnaire sent to the CEOs and executives in charge of innovation management from leading 500 companies in Poland according to "Rzeczpospolita" daily's Top-500 list and 700 largest organizations representing the ITC sector. 111 responses were received and 19 interviews held.
- <sup>6</sup> The McKinsey Quarterly conducted the survey "How companies respond to competitors: A McKinsey Global Survey" in April 2008 and received 1,825 responses from a worldwide representative sample of business executives. Half (914) responded to questions about major innovations by a competitor, and the other half (911) to questions about pricing changes. All data are weighted by GDP of the constituent countries to adjust for differences in response rates from various regions.

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## **APPENDIX 1: Survey methodology and respondent profile**

The study takes advantage of two complementary methodologies: a quantitative analysis of survey data and qualitative insights from face-to-face interviews. The survey involved both currently enrolled students and alumni of the Poznan-Atlanta MBA Program. The survey forms were distributed between February and March 2008 with 70 responses received: 61 from the current student and 9 from graduates of the program. Two other qualitative sources of information added value to the survey results: first, an interview with INNOVATIKA – Thinkdom of Business Innovators, an exclusive Polish partner of Strategyn implementing Outcome-Driven Innovation approach; second, participation and observation within the context of class activities related to innovative problem solving, creative approaches to decision-making, teamwork, and leadership.

Respondents were asked to respond to a set of questions that included a combination of multiple choice questions, ranking question indicating the order of their priorities, weight questions assigning subjective values to various choices, and "degree of agreement" questions based on a 4-level scale where level 1=strongly disagree and level 4=strongly agree. The results were measured and correlated using statistical method via SPSS statistical platform facilitated by SQL relational database queries.

On the basis of the recent the Poznan-Atlanta MBA working paper titled "Stakeholder expectations and benefits: an assessment of the Poznan-Atlanta MBA Program" (Smits, Kowalski, Matysek-Jedrych, Jaromin, 2007, pp. 14-21), respondents to the survey can be characterized as individuals with a predominant need to master organizational-performance analysis and diagnostic expertise as well as creative decision making skills embracing multi-dimensional aspects of management. The major triggers for their enrollment in the program is a strong commitment to pursuing a track of self-development, career-goal achievement and interest enhancement as well as the desire to be ready and prepared for the business environment changes and challenges they currently face and will face in the future. They exhibit a high degree of engagement in their present job, are eager to seek new ideas and enjoy the challenge of finding solution to problems. As a result, they are already pursuing or are just about to pursue the track of innovation.

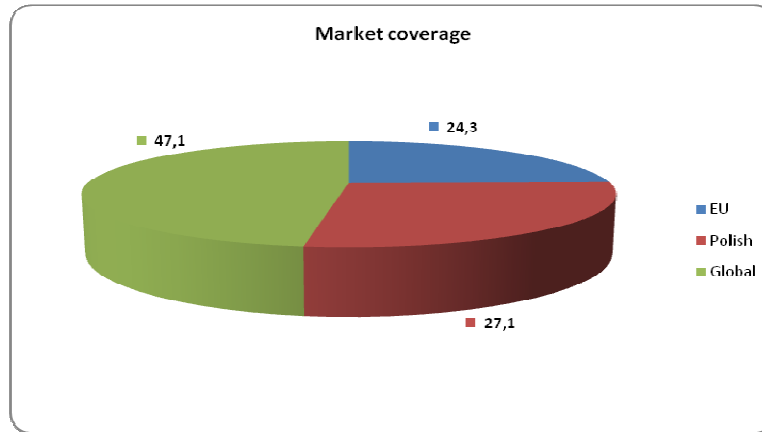
The workplace profile of the surveyed respondents included the following:

- **Market coverage:** the majority of respondents – 47,1% – represent enterprises operating in the global market, 27,1% come from Poland-based com-

panies, and 24,3% represent businesses carrying out business activities in the UE market.

**Exhibit 1**

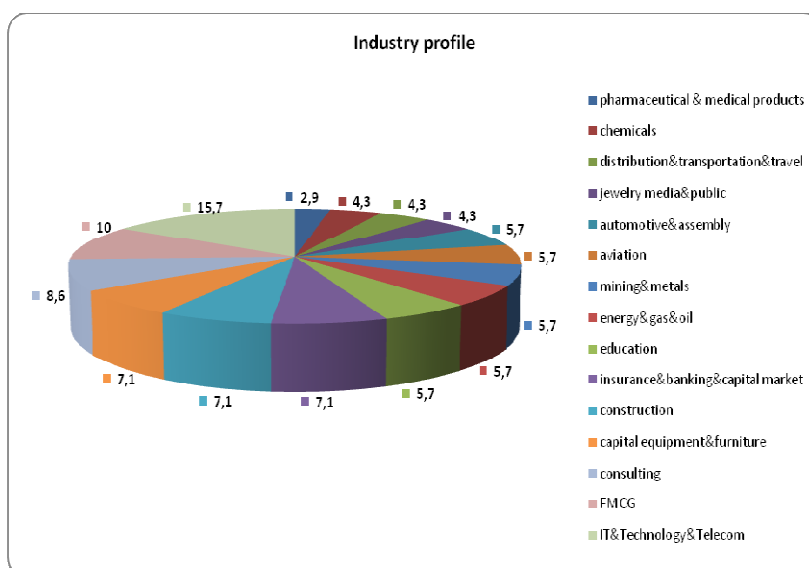
**Respondent organizations' market coverage**



- Industry profile:** the respondents come from a broad range of industries. The high technology sectors, IT & Technology & Telecom, represent 15,7% of the sample, followed by FMCG sector at 10%, and consulting at 8,6%. Capital equipment & furniture, construction, insurance & banking and capital market each represent 7,1%. Education, energy & gas & oil, mining & metals, aviation, automotive & assembly each represent 5,7%. Other sectors include jewelry, media, public, distribution, transportation, travel, chemicals, pharmaceuticals, and medical industries.

**Exhibit 2**

**Respondent industry profile**

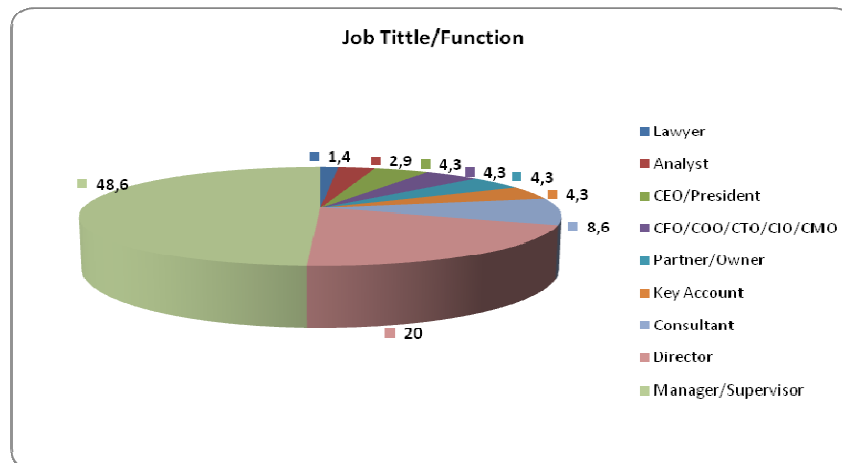




- **Job title/function:** 68,6% of respondents hold the position of a director, manager or supervisor while 12,9% are C-level executives that includes the status of an owner or partner. Other job functions represented are: consultant at 8,6%, key account at 4,3%, analyst at 2,9%, and lawyer at 1,4%.

### Exhibit 3

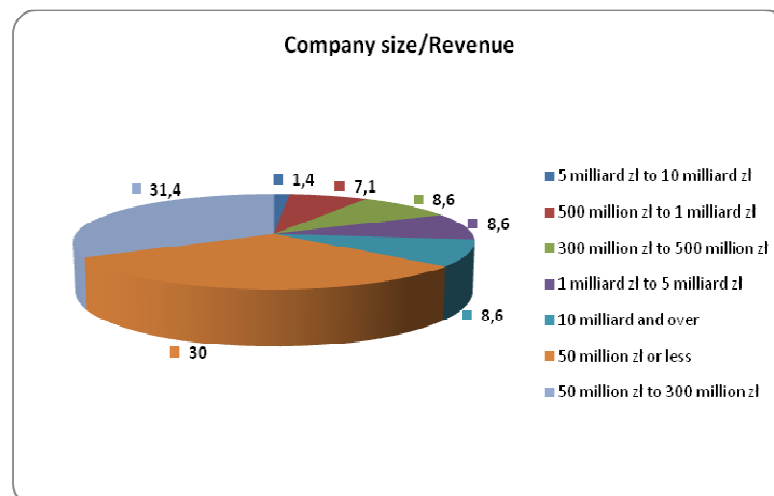
**Respondent job title/function distribution**



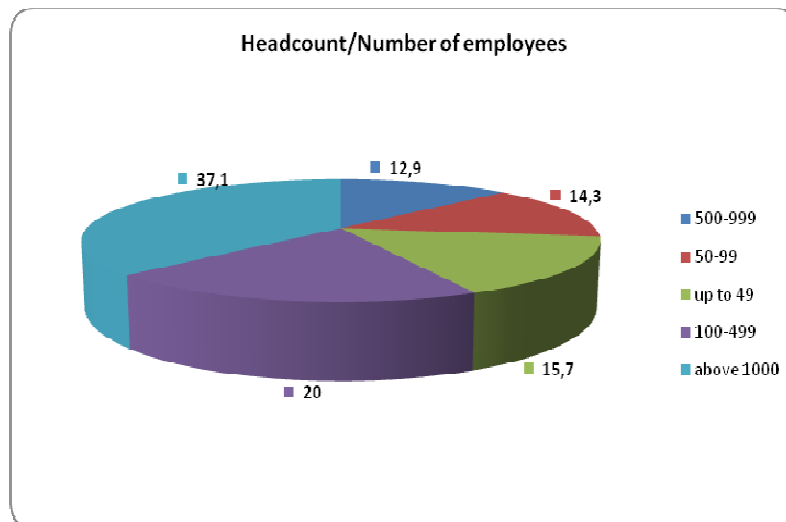
- **Company size/Revenue:** only 30% of respondents represent small companies generating 50 million zlotych or less. The rest of them come from large enterprises generating an annual revenue from 50 to 300 million zlotych (31,4%), 10 billion zlotych and over (8,6%), 1 to 5 billion zlotych (8,6%), 300 million to 500 million zlotych (8,6%), 500 million to 1 billion zlotych (7,1), 5 to 10 billion zlotys (1,4%).

### Exhibit 4

**Company size/Revenue**



- **Headcount/Number of employees:** 30% of respondents are from small enterprises (headcount between 1 and 99 employees), 32,9% work for midsize enterprises (headcount between 100 and 999 employees), and 37,1% represent large businesses (headcount greater than 1000 employees).

**Exhibit 5**

### **Notes for Contributors**

1. Articles should contain original unpublished work, not submitted for publication elsewhere.
2. Manuscripts intended for publication in the MBA Poznań-Atlanta Working Papers in Management, Finance and Economics should be written in English and submitted in Word on a diskette and in two hard copies to the Editorial Board.
3. The manuscripts should be typewritten on one side of A4 paper with double-spaced type and only left-band justified. Pages should be numbered (Verdana 11).
4. The manuscripts should be accompanied by a summary of the article of not more than 100 words, keywords and the Journal of Economic Literature classification.
5. Acknowledgements and references to grants, etc. should appear as footnotes to the author's name\* and should not be included in the main list of footnotes.
6. Footnotes should be listed consecutively throughout the text with superscript Arabic numerals.
7. Quoted passages of more than 40 words should be set off from the text by indenting the left-band margins four spaces, as a block quotation.
9. In the text a reference should be indicated by the author's name and date of publication and the page number where appropriate, e.g. Blinder (1998, p. 40), Hicks (1965a), Hicks (1965b), Krugman and Obstfeld (2000). References should be listed at the end of the article according to the style in the following examples:  

Blinder, A.S. (1998). *Central Banking in Theory and Practice*, Cambridge, The MIT Press.

Kalecki, M. (1943). "Political Aspects of Full Employment", *The Political Quarterly*, Vol. XIV, No. 4, pp. 322-331.

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