

**An investigation of key factors
determining innovation delivery in a
South African FMCG company**

by

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PREFACE

This study was carried out under the supervision of Mr. Marc Salence. This investigation represents original work by the author and has not been submitted in any form to another University. Where use was made of the work of others, it has been duly acknowledged in the text.

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ABSTRACT

Organisational theorists and managers have long shown interest in the role of innovation in organisations as innovation plays a crucial role in sustaining competitive advantage. A recent study revealed a gap between what leading corporations say about innovation and what they do. The gap is large: while 80 percent of companies acknowledged the importance of innovation in their business, only four percent were confident that they were good at it.

The present study assessed innovation in a local FMCG organisation. An attempt to ascertain the factors determining innovation delivery in the company was made.

The current investigation demonstrated that the overall perception on the company's innovation was high, notably the emphasis on the importance of innovation. Positive strong innovation capabilities have been demonstrated: high innovation commitment, a strategy that promotes innovation and that is clearly communicated and understood by all levels, adequate resources and facilities that keep the company competitive and, very important, an effective process. However, to sustain growth through innovation, the organisation needs to address a number of key issues such as unfavourable employee attitudes towards innovation, risk management, management creativity and the company structure.

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CHAPTER 1. INTRODUCTION

1.1 Innovation in business - background

In a market economy, the development and the launch of new products/services are essential for company's survival. Facing increased competition, new technologies and dynamic market needs, South African companies must succeed at introducing new products/services through the process of innovation or risk failing as businesses. The current trend of markets, globalisation, could result in a substantial increase in foreign competition, making it difficult for companies to differentiate their products on the basis of cost or quality. Product life cycles have also been compressed as the introduction of new offerings makes existing products obsolete. A German study revealed that over the last 50 years product life cycles have been shortened by 400 percent average (Cooper, 2000). In addition, markets have also been fragmented into smaller niches (Schiling Hill, 1998). In order to address these issues, over the last few decades, companies have placed increased importance on innovation which is now the dominant driver of competition in many industries (e.g. computer software, pharmaceuticals, automobiles, consumer electronics etc.). It is known that companies often depend on innovation introduced within the last five years for more than 50 percent of their annual sales (Cooper, 2000).

Innovation is one of the most important endeavours of modern corporations. In the 1980s, new products accounted on average for a staggering 40 percent of company sales, and this figure has been going up steadily: 33

percent between 1976 to 1981, 40 percent up to 1986 and 42 percent between 1985 and 1990. By 1995, new products accounted for 52 percent of company sales (Cooper, 1993).

In addition, new products also have a significant impact on corporate profits. Profits from new products, accounted for approximately half of the bottom line of corporations in 1995. Until 1981, new products represented only 22 percent of corporate profits (Cooper, 1993). By 2000, manufacturing companies have anticipated 32 percent of their revenue to be derived from their new products (Sheridan, 1998). The highly innovative companies that won the Design Council Millennium Product awards performed exceptionally, their share prices increasing by 137 percent above the FTSE All Share Index over four years to 2000 (Bradshaw, 2003).

In 2001, companies introduced 35 000 new consumer products, up 15 000 ten years ago. The trend in both R&D spending and new product development is toward continued growth (Meyer and Ruggles, 2002). To ensure that companies continuously innovate Research & Development Departments not only have to invent new products but also must design the new technological and organisational architectures that foster innovation (Seely Brown, 2002).

To support stretching innovation targets, successful organisations employed more than five percent of their staff in Research and Development while

struggling businesses dedicated less than five percent and often relied on their MD to consider the process of product development (Cunningham, 1998; Ulwick 2002). There is a clear, positive correlation between Research and Development intensity (R&D expenditure as a proportion of sales) and sales growth: sectors with the highest R&D intensity (more than 4.4 percent) also recorded the highest compound annual growth rates of more than nine percent (Bradshaw, 2003). A survey of the world's top 300 international companies, conducted for the Department of Trade and Industry (DTI) in Britain found the aggregate investment in R&D for all companies averaged 4.6% of sales, but there were wide variations around this figure, with Japanese companies averaging 4.8%, America 4.9% and Germany 4.3%. In contrast, Denmark averaged 16.3%, Canada 10.8% and Finland 10.4%. Italy demonstrated the lower average with 2% while Britain scored 2.5% (Economist, 1999).

As the economy boomed in the late 1990s, corporations concentrated their attention on innovation. However, annual surveys conducted by the Industrial Research Institute highlight the cyclicity of corporate innovation: in the early 1980s, executives confirmed that innovation was their foremost priority, while by late 1980s, most executives reported little interest in innovation. Similarly, during early 1990s, innovation didn't rate amongst the top priorities but it was back at the top of the list by the late 1990s (Wolpert, 2002). In 1998, the promotion of innovation was the top priority for leading technological firms in America and Canada. In contrast, the South Koreans

rated it third while Japanese placed it fifth, after a string of measures aimed at getting more out of R&D (Economist, 1999).

Irrespective of their priorities, corporations are searching for a more predictable way of coming up with innovations. Over the past decades, regardless of size, years of operation, industry conditions and country of origin, a number of companies sustained high growth and profits by delivering innovation. Only exceptional organisations manage to sustain growth when their core businesses mature. One out of ten companies that exceed the growth of their industry in any year is able to repeat that performance every year for a decade (Baghai, Coley and White, 2000). What distinguishes the corporations that carry on growing is their ability to innovate. Despite the current economic downturn, these companies are moving ahead of their competition by exploiting the opportunity to re-asses business performance and organisational strategy, by out-thinking and out-learning their competitors and by emerging stronger and more competitive as the next economic cycle takes off (Harrison, 2003).

1.2 Management of innovation

As innovation is widely acknowledged to be one of the most important competencies of any organisation, a large number of articles and books have been dedicated towards understanding this topic. Although significant space has been allocated to debate the meaning of innovation, no single answer can be given: it can be defined as an outcome, process, an act, a discipline and a source of value for any organisation (Padrao, 2003). While the definitions differ, there is a single important communality between them all: innovation needs to result in business value.

In analysing the financial results of companies based in seven countries, a study found a growth chasm between the most and least innovative companies. Most innovative were those organisations that generated well above average total shareholder returns (greater than 37 percent total shareholder returns annually) and also had more than 75 percent turnover from products and services introduced within the last five years (Tucker, 2002).

To achieve high rates of growth, highly innovative companies manage innovation in three critical areas: product, process and strategy. Product/service innovation is the result of introducing unique solutions to solve the customer's problems/needs that benefit both the customer and the sponsoring company. While product/service innovation is directly received

by the consumer/customer, process innovation is often out of view of the customer/consumer. Process innovation generally increases bottom-line profitability, reduces costs and raises productivity. The result of process innovation is a stronger, more consistent product or service value delivery. Process innovation is significant to the organisation's growth as without process excellence, product and/or strategy innovation are difficult to implement. In order to meet newly emerging consumer/customer needs, to add additional value and create new markets, strategy innovation challenges existing industry methods of creating value. While process innovation is unseen by the consumers, strategy innovation directly touches them: unique approaches to customer services, new sales methods, new approaches to marketing or advertising of the product/services (Tucker, 2002).

1.2.1 Sources of innovation

Successful innovation begins with analysis of the sources of new opportunities. According to Drucker (2002), within a company or industry, opportunities can be found in unexpected occurrences, process needs, incongruities of various types, demographic changes or changes in an industry or market. There is possible overlap amongst these sources and innovation may well come from more than one area at the time.

SAP, a business – application – software company that was started in the early 1970s by ex IBM employees, became the worldwide industry leader by exploiting an unexpected success. In early 1980s, as a result of high demand, business – application – software makers became successful as they met consumer's functional needs such as production management, human resources, logistics and payroll. All these software companies were focusing on offering improved product application performance. SAP identified that for most consumers, the performance advantages of customised, individual software modules had been overestimated. These offerings forfeited the efficiency and information superiority of an integrated system that allows real-time data exchange across a company. SAP launched R/2, a line of real-time integrated business-application software for mainframe computers. Through this innovation, the company's growth and profits have exceeded that of the industry (Chan and Mauborgne, 1997).

Today's media had its origin in two innovations that have been developed in the late 1800s in response to process needs. The first innovation was the Linotype that made production of newspapers very fast and in high volumes. The second was modern advertising, a social innovation that was invented by three newspaper publishers. Advertising made it possible to disperse news almost free of charge, with the profit coming from marketing (Drucker, 2002).

Innovation can be a result of investigating opportunities in incongruities of various types. Take for example medical technology: the cataract operation is the third or fourth most common surgical operation in the world. Up to the 1960s, eye surgeons had learned to successfully operate the cataract. The procedure was regarded as “technologically advanced”, but it contained an “old-fashioned” step, cutting of a certain ligament. This was such a different procedure from the rest of the “high-tech” operation and so incompatible with it, that the surgeons would often dread it. Although doctors had known about an enzyme that could dissolve the ligament without cutting, only Alcon Laboratories introduced the enzyme on the market in 1960s. As the product had a few months of shelf life and also offered a unique solution, the eye surgeons immediately accepted it and Alcon found itself with a word-wide monopoly (Drucker, 2002).

Organisations have known that demographics are important, but historically, they have always believed that population statistics change slowly. However, in this century, more careful attention is being given to demographics as innovation opportunities could arise from changes in the number of people, their age, education, occupation, and geographic location.

The structure of industry and markets can and do often change overnight. These changes have the potential to create opportunity for innovation. When usage of the Internet became popular in the late 1990s, the banking

industry used the opportunity and launched Internet banking that today is being used by private and corporate customers.

1.2.2 Organisation types

Successful companies are those that consistently create knowledge, disseminate it widely throughout the organisation and include it in new products (Roffe, 1999).

Two distinctive organisational types have emerged from investigations into the management of innovation: mechanistic and organic. These two types represent the extreme points of a continuum along which most companies can be placed (Roffe, 1999).

The mechanistic type of organisation has a clear hierarchy of control with overall knowledge and control being placed at the top. A mechanistic company is adapted to relatively stable conditions and fosters vertical communication. In addition, the tasks of management are divided into departments where individuals carry out assigned and defined tasks (Roffe, 1999). The structures of this type of organisation are likely to promote control, especially at activity levels. When a problem is highlighted, it is very likely that it is divided and addressed by appropriate departments. This is unlikely to promote innovation as little or no effort is given to the problem as an integrated whole. If innovation occurs in a mechanistic/bureaucratic

organisation, it is very likely to be an administrative innovation, that includes changes affecting policies, allocation of resources and other factors associated with the social structure of the organisation and originate with professional managers (Daft, 1978).

In contrast, an organic company is adopted to generally unstable market conditions and cannot be split up and delegated to different management departments. Communication is horizontal, occurring at any level. The organic company fosters continual adaptation and refining of individual tasks, taking an integrative approach to problem solving (Roffe, 1999). An organic company often stimulates technological innovations that represent adoption of ideas that directly influence the basic output processes of the company. The ideas generally originate with technical specialists (Cooper, 1998).

1.2.3 Successful innovative organisations

The proposition that innovation is the centrepiece of competitiveness is being recognised by many organisations (Denton, 1999). However, managing innovation in a large corporation has proven to be a challenging task for many companies.

At 3M, innovation has been built into the company culture. For example, technical staff is encouraged to spend 15% of their time working on pet

ideas that they hope will one day become new products for the company. Not only do staff get time off to investigate these ideas but they can also obtain money to purchase equipment or even hire extra help. Even if the idea does not succeed, no one is penalised. At 3M, the corporate hero is the one that persevered against all odds to create a successful innovation from something everyone thought frivolous (Cook, 1998; Economist, 1999; Birkinshaw, 2001).

In 1998, Procter and Gamble (P&G) wanted to add \$35 billion in sales over the next ten years. This represented double the 1998 volume. P&G has recognised the need to encourage champions of new ideas that are more than incremental innovations. To help address this, the company initiated a program called Innovation Leadership Team providing funding for ad-hoc teams wanting to pursue a product idea or technology (Harper Collins Business, 1998). Procter and Gamble is now shifting its entire business focus from countries to brands with the main goal to get innovations accepted across the company (Economist, 1999; Harvard Business Review, 2002). The task force called Corporate New Ventures (CNV) is an autonomous idea lab whose mission is to encourage new product ideas from P&G's 110 000 workforce. The team has the authority to tap any resources in the company to bring new product to market, including the brainpower of the company engineers placed in 23 sites around the world. In short period of time, the CNV team introduced 58 products into the

market, one of them the cleaning product Swiffer, which went from concept to in-store in a record ten months (Tucker, 2002).

Xerox has been successful in leveraging its innovation legacy to transform itself from the “Copier” to the “Document” company. To capture the value of its unique technologies and manage the front end of the innovation process, the company created the Corporate Innovation Council and in 1999, the Xerox Technology Enterprise. These forums manage the incubation and the creation of new enterprises as well as the licensing of Xerox intellectual property (Loutfy *et al.*, 2001).

Deloitte & Touche, the South African member firm of Deloitte Touche Tohmatsu, the global audit, accounting and tax consultancy became very successful (between 1996 – 2000 made R 300m in revenues, in an economy that grew by only 2 percent per annum) by re-inventing itself and being passionate about generating ideas. The Innovation Zone was the key to this success. This website, accessible to anybody in the business allowed free participation in the generation of new business ideas (Gulke and Silber, 2001).

Companies often innovate by simply finding new market space and change the functional-emotional orientation of the industry. One such example is Starbucks. In the late 1980, Nestle, P&G and General Foods dominated the US coffee market. Coffee was considered a commodity industry with

consumers being taught to shop based on price and brand names. The result was marked by price-cutting, a continuous battle for market share, low margins and low growth. The big three sold a functional commodity by the can. In contrast to this, Starbucks set out to make coffee an emotional experience, offering a new concept, the coffee bar, the "caffeine-induced oasis". With minimal advertising, Starbucks turned coffee into an emotional experience, becoming a national brand with margins five times higher than the industry average (Chan and Mauborgne, 1999a).

What Starbucks did for coffee, Swatch did for budget watches. Swatch transformed the wristwatch from a functional item used to indicate time (Citizen and Seiko being the leaders in budget watches) to a mass-market fashion accessory. The company innovated the concept of a budget watch by combining mechanical punctuality with creative designs that conveyed a powerful emotional message. Before Swatch, people usually owned only one watch. Through its innovative approach, Swatch made repeat purchases the standard. In Italy, the average consumer owns six Swatches that are made to fit their different need and looks (Chan and Mauborgne, 1999b). Swatch no longer sold time, but costume jewellery and a fun and youthful lifestyle (Kandampully and Duddy, 1999, von Stamm, 2003).

Virgin is one of few companies that have been a consistent value innovator. In 1984, Virgin Atlantic Airways challenged the industry assumptions by deliberately eliminating first-class service and offering value to its business-

class passengers. In addition, the company was the first to offer comfortable, reclining sleeper seats that were superior to the industry standard. They were also the first airline company to introduce transportation to and from the airport in chauffeured limousines and LimoBikes to speed business class passengers through city traffic. By observing its consumers, Virgin designed lounges where passengers can take showers, have their clothes pressed, enjoy massages and have access to office equipment. These lounges offered busy executives excellent use of their time. With those innovations, on the product and service level, Virgin attracted not only a significant share of the industry's business-class but also the full-economy fare and first-class passengers away from its competitors (Chan and Mauborgne, 1997).

The Body Shop innovated by shifting the market from an emotional appeal to a functional one. The cosmetic industry is one of the most emotionally oriented industry, selling beauty and glamour, hopes and dreams (on average, advertising and packaging represent 85% of the cosmetic companies' costs). In contrast to the norm, The Body Shop offers products that contain natural ingredients and that are packed into simple refillable plastic bottles. The company simply appealed to consumers that received no practical value from high cost packed products that were also expensively advertised (Chan and Mauborgne, 1997; Cook, 1998).

A 1998 survey of 3000 companies across the world concluded that the most successful innovative organisations were those that had:

1. high management trust
2. active flow of ideas
3. fewer organisational levels
4. effective idea management process
5. managers who challenge
6. managers who delegate
7. managers who involve others
8. routine future envisioning
9. sources of ideas other than the board
10. balanced view of the risk takers (von Stamm, 2003).

1.2.4 Innovation culture

One of the primary management challenges faced by every organisation, from a long-term perspective, is how to create the environment that successfully nurtures and maintains innovation.

Culture is the sum total of a way of life, including things such as expected behaviour, beliefs, values, language and living practices shared by members of society; it is the pattern of values shared by people within a region (Herbig and Dunphy, 1998). The function of culture is to establish modes of conduct, standards of performance and ways of dealing with

interpersonal relations that will possibly reduce uncertainty and increase predictability.

Culture is the ground on which innovation does or does not grow (von Stamm, 2003). Establishing the most appropriate culture is one of the biggest concerns of most organisations. The main aspect is how to create or maintain one culture of innovation that is shared by all parts of the organisation.

According to Goffee and Jones (in von Stamm, 2003) the model of culture has two basic ingredients namely sociability and solidarity. Sociability (friendliness) reflects the fact that people enjoy working together and when they have fun they tend to be more creative. It works, as friendships are not based upon careful analysis of who has done what for whom. Solidarity is a measure of how one gets things done. High solidarity companies have a real shared interest in what has to be done, focus and efficiency. Combining these two dimensions results in four possible cultures: networked (high sociability, low solidarity - Unilever), fragmented (low sociability and low solidarity - Harvard), mercenary culture (low sociability and high solidarity - Mars) and communal culture (high sociability and high solidarity – Hewlett-Packard, Johnson & Johnson). Innovation could be initiated by a variety of things in each of the four cultures. In the communal culture it is triggered by teamwork and participation while in the fragmented culture is it a result of a

cognitive conflict. In the mercenary culture, innovation is generated by market pressure and in the networked organisation by informality and fun.

In order to nurture an innovative and flexible workforce that facilitates product and process changes, a corporate culture should be created to eliminate cautious and protective attitudes and to encourage risk-taking (Smith, 1998). Studies have demonstrated that creating a blame-free culture is essential for innovation but the freedom to disagree and have constructive conflict are equally important. In addition, the innovation culture should also ensure that people understand that it is acceptable to ask for help, which leads to another important characteristic of an innovation culture namely trust. Generally, employees are happy to experiment and to suggest new ideas only if they don't fear being ridiculed. New idea generation through collaboration and exchange of knowledge will not happen unless employees trust each other and feel free to ask for help without fear of being accused of incompetence (von Stamm, 2003). To entrench trust, innovative companies should promote face-to-face contact. Good communication is a key building block for developing a strong company culture. Knowledge and insights that are passed between members of organisation help develop a mutually shared language and heritage. The ability and willingness to listen is also critical. The lack of attention to ideas (people may listen but do nothing) had been identified as one of the three reasons for failing to achieve creativity (von Stamm, 2003).

Over recent years, increasing attention has been paid to the physical work environment and its potential contribution to organisational culture and innovation. While it would be extreme to suggest that the work environment can create a culture, it can play a significant role in supporting the kind of culture an organisation thrives to achieve. A report recently published by International Survey Research showed that only 50% of British, Hungarian, French and Italian workers were satisfied with their workplace whilst the Scandinavians were even more satisfied with all aspects of their work (von Stamm, 2003). Businesses are thinking beyond desks and furniture to create spaces for different types of work. Organisations today are converting office space into areas that are likely to drive creativity and hence innovation (Bernacki, 2001; Ario, 2002).

Innovation is a motivator of people as it creates a source of challenge and excitement for employees. Successful innovative companies have demonstrated that a strong culture of innovation unleashes creativity in the organisation and most importantly, in its people (Brullo, 2003).

1.2.5 Corporate Creativity

An innovative corporate culture creates a climate in which creativity is both encouraged and rewarded (Fahden, 1993; Kilroy, 1999). Leading creative organisations such as Hewlett Packard, The Body Shop, Psion and 3M have creativity at the heart of structural flexibility and innovative power

(Cook, 1998). These companies foster the ability to think and act differently in ways that current and future customers understand and accept. Organisational creativity is about being different and appropriate to the target market.

Corporate creativity is generally viewed as a process where creativity is the input to the processes that lead to innovation, competitive advantage and financial benefit.

The time spent in placing creative ideas in the innovation pipeline can vary for different industries, from a few months for mobile telecommunication to decades in the aerospace industry. Improvements in the number of ideas converted to innovation offer high returns on investment. To speed progress through the pipeline, organisations must have strategies for converting creativity into innovation.

These strategies are generally built on a flexible but firm context that incorporates strong creative culture with well-defined leadership style and values. An innovation strategy is supported by appropriate organisational structures (both formal and informal – networking, information structures) and systems that include rewards, recognition and career systems. All creative organisations attract, develop and retain creative talent that is supported by information, finance and a climate that leads to creativity (Cook, 1998).

An Industry Week Journal survey of the top 50 innovations in America suggested that creative ideas are as likely to come from big companies as from small ones (Economist, 1999). Large corporations have important attributes that actually facilitate innovation as they distribute risk, making it safer for employees to break new ground. In addition, largeness and group decision making function as stabilisers, and stability encourages individuals to risk presenting ideas that could challenge the system (Levitt, 2002).

Both, large and small innovative organisations maintain a dynamic of creativity connected to an effective method of innovation through creating a climate for creative thinking, implementing an effective system of communicating ideas and supporting procedures for managing innovation (Roffe, 1999).

- **Creative climate that leads to innovation**

To create a creative climate, one of the most difficult development areas to change, companies need total commitment and involvement from top management. Managers must manage innovatively, by doing their own job in new ways and must manage innovation by creating an environment in which creativity and innovative behaviour by others are encouraged and rewarded (Nolan, 1987). These two aspects are interlinked, managers who

want to innovate should provide leadership by modelling the behaviour they want to encourage.

When dealing with creativity, generally, managers have two responses. Some managers dislike conflict, or value only their own approach/solutions and actively avoid the clash of ideas. This type of manager will usually hire and reward people like themselves. The result is an organisation where everyone thinks alike and hence only familiar ideas are accepted and supported by the company. Other managers value the variety of thinking styles of the employees. By understanding that different people have different thinking styles (analytical or intuitive, conceptual or experiential, social or independent, logical or value driven) (Leonard and Straus, 1997), the successful innovation manager creates a productive creative process even if sometimes people think and act in potentially conflicting ways.

Organisations need people with a variety of skills to succeed in the innovation process. These are: idea generators, people that create new insights; information gatekeepers that are knowledgeable; product champions who advocate early adoption of ideas/concepts; project managers that undertake the technological aspects necessary to implement innovation and leaders who encourage and support innovation (Roberts, 1988).

Managers that are successful at promoting innovation view creativity as a resource to be managed, not an accidental phenomenon. Generally, it is believed that most companies accommodate a creative minority while the rest of the employees are non-creative. The best innovative organisations do not classify employees in terms of “creative” and “non-creative”, they see every person as a potential creative source (Nolan, 1987).

These innovative companies support risk taking and change and tolerate mistakes (Simons, 1999). According to IBM's Thomas Watson “the fastest way to succeed is to double your failure rate” (Farson and Keys, 2002). Failure is a prerequisite to innovation. Although many organisations are beginning to understand and support the value of making mistakes at the level of corporate practices, their employees have a harder time accepting the idea at the personal level. Few companies have failure-tolerant leaders. These are executives that through their management skills help their employees overcome their anxiety about making mistakes. These leaders create a corporate climate of intelligent risk-taking that results in sustained innovation (Farson and Keys, 2002).

Management in innovative companies not only harnesses creative individuals but also provides an organisational structure that ensures appropriate reward systems for innovative ideas. Kimberly-Clark introduced hard incentives such as increasing the rewards for those who suggested

successful new ideas and it did not punish those whose experiments failed (Economist, 1999).

- **Effective communications that support innovation**

An effective system of communication is necessary in an innovative organisation to ensure that a systematic channel captures and examines all new possible ideas. This is a prerequisite especially in an organic company where communicating all ideas occurs at all levels.

Communication and collaboration are two essential factors in stimulating ideas between employees. Cross-functional communication represented by internal communication and/or cross-functional teams enables employees to become involved in all levels of the organisation, making innovations possible (Roffe, 1999).

By increasing the quality and quantity of information and helping people to obtain different business perspectives, possible ideas are translated into valuable innovations.

- **Effective procedures that maintain innovation**

Most organisations have effective processes that convert the new idea into a product or service that offers solutions to consumers need. According to

Roberts (1988), the innovation process comprises four elements: idea generation, initial application, feasibility determination and final application, the launch of the new product/service.

Successful innovation companies have effective rational and repeatable procedures of converting ideas into innovations. These organisations possess effective means of monitoring idea sources and best conventional managerial practices to transform the ideas into viable launches (Cooper and Edgett, 2002).

1.3 Problem statement

Despite having appropriate systems that will deliver innovation, eight out of ten new products eventually fail in the marketplace resulting in substantial financial losses (Appelbaum *et al.*, 1990; Wittink, 1993; Schmidt, 1995; Taninecz, 1996; Apte, 1998).

Studies have estimated that 46 percent of the resources that are allocated to new product management go to ventures that end up being unsuccessful and that only one product development project in four becomes a winner (Cooper, 2000).

In one study, 63 percent of managers felt that their new product success rate was “disappointing” or “unacceptably low” (Cooper, 1990). The number of products that are introduced each year is around 41 percent, of which, 54 percent deliver less than one million dollars in profit (Pollack, 1996).

“Succeeding at Innovation” (research of innovation in major businesses in USA and UK), revealed a gap between what leading corporations say about innovation and what they do. The gap is large: while 80 percent of companies acknowledged the importance of innovation in their business, only 4 percent were confident that they were good at it (Ceserati and Greatwood, 1995). In addition, a recent study revealed that 84 percent of business leaders of 700 worldwide organisations agreed that innovation is a

more critical success factor than it was five years ago, but only 25 percent of them were pleased with their companies performance in innovation (Padrao, 2003).

This is a clear indication of a consistent connection between an organisation's commitment to innovation and its success in the market place.

The present study will assess the innovation in a local FCMG organisation. An attempt to ascertain the factors determining innovation delivery in this company will be made.

Definition: the Fast Moving Consumer Goods (FMCG) organisation analysed by this research is a leading South African Food and Personal Care company.

CHAPTER 2. RESEARCH DESIGN AND METHODOLOGY

2.1 The research objectives

The objectives of this investigation may be defined as being:

- a) Identification of the critical driving factors that underlie successful innovation in the company.
- b) Review the overall perception of innovation in the analysed company
- c) Assessment of the innovation capability of the organisation.

2.2 The research design

Due to the nature of the information required, the study was divided into two parts:

- Firstly, it was necessary to identify which factors play a role in innovation delivery
- Secondly, an assessment of innovation (overall perception and organisational capability) was conducted.

Using a cross-sectional design (Cooper and Schindler, 1998), the first part of the study represented the causal area of the research, the second part being the descriptive side of the study.

2.3 The sources and collection of data

2.3.1 Personal interviewing

In order to ascertain the factors that determine the innovation delivery in the researched company, a number of interviews were conducted with senior managers.

Personal interviews were chosen for this particular qualitative part of the study as it offered valuable and in-depth information supplied by experienced managers. All respondents (five) provided numerous insights into the innovation process of the company.

The interviews were unstructured, respondents having full liberty to discuss innovation issues in the company. However, following prompted questions were used:

- a) Is the company's strategy clearly articulated and geared towards innovation?
- b) Is your company committed to innovation?
- c) Does your company have processes that support innovation?
- d) Do the leaders of this company promote innovation?
- e) Do employees in this company have the appropriate attitudes and skills to support innovation?

All respondents concluded that the most important factors that could determine innovation delivery in the company were:

- Company's strategy
- Leadership
- Organisational commitment
- Core processes
- Company's structure
- Resources
- Attitudes towards innovation
- Innovation skills
- Innovation process

2.3.2 Survey/Innovation questionnaire

An Innovation questionnaire was constructed using the data from management interviews and learnings from literature (Cooper, 1998, 2000). Once the questionnaire was designed, using a small sample of respondents, a pilot study was conducted to test and detect possible weaknesses in design:

- The length of the questionnaire
- The average time necessary to complete the questionnaire
- Whether all questions can be answered
- Whether respondents are comfortable answering all questions

- The flow of the questions and their order (have to be easy to follow)

The pilot study was successfully conducted, respondents understood the wording and revealed no errors in the design. However, to ensure that consistency was achieved, few changes have been made to the questionnaire after a final assessment conducted by Research International. Validity testing and Cronbach's Alpha internal testing were also conducted by Research International to ensure that the research design fully addressed the research objectives and that items were homogenous and reflected the same underlying construct. They concluded that there was a high degree of internal consistency and reliability amongst the Likert scale items.

The primary data necessary for the second part of the investigation were collected using this innovation questionnaire. The construction of the questionnaire was based on guidelines of Ghauri *et al.* (1998). The questionnaire was structured in three segments:

- a) Respondents profile
- b) Overall perception of innovation in the company
- c) Innovation capability

2.3.2.a Respondent profile

Fifty respondents were randomly sampled from departments that play a significant role in innovation: Product Development, Marketing and Consumer understanding.

These respondents were managers and staff with various lengths of time in the job (from one to more than four years).

2.3.2.b Overall perception of innovation

The questionnaire related to the overall perception on innovation comprised of the following closed questions:

- 1) How do you perceive the importance of innovation in determining the future success of the company? (Importance of innovation)¹
- 2) How do you rank the company's effectiveness at innovation compared to other South African companies? (Innovation effectiveness)
- 3) How do you rank the company's sales growth over the last three years compared to other companies in the industry? (Sales growth)

2.3.2.c Innovation capability

Innovation capability was assessed based on the factors (variables) that have been identified by management as important in driving

¹ Shorter version of questions (reflected in figures 12-21)

innovation (first part of the study): Company's strategy, Leadership, Organisational commitment, Core processes, Company's structure, Resources, Attitudes towards innovation, Innovation skills, Innovation process.

Elements of the variables were further investigated through closed questions as follows (Appendix 1):

Commitment:

- 1) Does the company actively seek and develop new opportunities for improving and growing the existing business? (Seek and develop new opportunities)
- 2) Does the company challenge the existing way of doing business and actively seek ways to 'break the rules' and radically shake up the industry? (Challenge existing way of doing business)
- 3) Is the company truly committed to innovation in the sense that it is treated as a key element of the overall strategy, with significant time and energy devoted to it? (Committed to innovation as a key element of strategy)

Leadership:

- 1) Has the company set really stretching goals that can only be achieved through innovation? (Stretching goals that can only be achieved through innovation)
- 2) To what extent do people in the company feel they are working for a 'cause', rather than just for growth and profit? (Working for a cause)
- 3) Do top managers model the type of behaviour necessary for innovation, e.g. willingness to change the status quo and 'stick their necks out' by considering ideas that are truly unconventional? (Top managers to change *status quo*)

Strategy:

- 1) Is the company's strategy clearly articulated and understood, not only by the top management team but also by the majority of employees? (Strategy clearly articulated and understood)
- 2) How often does the company review the continued effectiveness of each segment of its strategy and consider new and different approaches that will outflank the competitors? (Constant strategy review and flexibility)
- 3) To what extent is the company's 'definition of business' flexible in allowing it to seek 'unconventional' opportunities based on its core competencies, even if these lie outside its current scope of products, services and markets? (Definition of business flexible)

Core processes:

- 1) Do the company's financial system foster and promote investment in promoting/implementing new ideas, even if the risk of failure is significant? (Financial systems foster and promote investment)
- 2) Do the company's IT systems truly support innovation, rather than blocking the development and implementation of new ideas? (IT systems truly support innovation)
- 3) How many of the core processes in the company have been reviewed with specific objective of enhancing their contributions to innovation? (Strategy review)

Structure:

- 1) How effective is the company in promoting meetings involving people from different functions for the purpose of exchanging ideas? (Exchanging ideas across functions)
- 2) To what extent is the company committed to consistently working towards breaking down barriers between different parts of the organisation? (Breaking down barriers)
- 3) How effectively do people from different functions and regions in the company work together? (Cross-functional co-operation)

Resources:

- 1) Does the company deliberately seek to identify individuals with talent for innovation to select teams with the right mix of experience,

- capability and thinking styles to enhance creativity? (Right mix of experience, capabilities and thinking)
- 2) Is the company willing to invest reasonable amount in risky but exciting ventures? (Investment in risky ventures)
 - 3) Are the company's development facilities and resources adequate to enable them to remain competitive? (Adequate resources)

Attitudes:

- 1) Is equal acceptance and recognition given to new ideas that originate from any sources within the organisation? (Acceptance and recognition of new ideas)
- 2) What proportion of employees regard looking for, and developing new ideas as being a vital part of their role, rather than being the responsibility of someone else? (New ideas are vital part of employees role)
- 3) Do people in your company regard the failure a risky venture as being a learning experience? (Failure as a risky experience)

Innovation skills:

- 1) How many managers and senior staff have been trained in creative problem solving processes? (Managers and senior staff – creative problem solving)
- 2) How many people truly understand the role and importance of innovation in the business? (Understanding innovation role)

- 3) How many managers and senior staff have sufficient knowledge of the elements of strategy to enable them to conceptualise new business concepts? (Sufficient manager knowledge of strategy to conceptualise new business concepts)

Innovation process:

- 1) How effective is the company at consistently maintaining a 'funnel' of ideas in various stages of development from conception through to implementation? (Managing a funnel of ideas)
- 2) How effective is the company in actively seeking new ideas from all possible sources, both internally and externally, including customers/consumers? (Seek new ideas across functions)
- 3) How effective is the company at managing risk? (Managing risk)

Each element question of the variables was rated using Likert scales (Cooper and Schindler, 1998). For more specific detail, please see Appendix 1.

2.4 Data analysis

The data was captured and tabulated using a statistical programme, Quantum (Quantime). Distribution and mean scores were generated and each level of the Likert scales was weighted from one to four. Standard deviation, standard error and error variance were also generated for each variable (See Appendix 2).

However, a basic descriptive analysis was then applied using only mean scores of the elements of each variable.

CHAPTER 3. RESULTS AND DISCUSSION

Organisational theorists and managers have long shown interest in the role of innovation in organisations as innovation plays a crucial role in sustaining competitive advantage (Cooper, 1998). The current study is an attempt to assess possible factors that are important in innovation delivery in a local organisation.

The results of both overall perception and innovation capability will be analysed together.

Generally, innovation was perceived as essential to the success of the company (overall perception scored the highest score). This finding is similar to the results of other surveys where managers in a broad range of industries were fully aware of the importance of innovation as a key driver of growth, profitability and competitive advantage. A PriceWaterhouse Coopers study of 399 global executives found innovation easily surpassing globalisation and even e-business as their top strategic challenge (Tucker, 2002). However, in the current investigation, the respondents demonstrated attitudes that were not supportive of innovation (Figure 1). A recent survey of 699 executives also highlighted the gap between what employees knew they should do to achieve growth and what they were often able to do in practice (Tucker, 2002).

Innovation process was regarded as important and adequate to innovation implementation (Figure 1). In addition, employees were committed to

innovation, as they understood the company's strategy that was clearly communicated to them (Figure 1). Clear and frequent strategy communication and engagement of employees have been established as key to achieving successful innovation (von Stamm, 2003).

Although the company structure was conducive to innovation, the general view was that the leadership and the company's resources did not fully promote innovation. In addition, the innovation skills and core processes were perceived as not adequate to stimulate innovation (Figure 1).

Across all functions, departments and irrespective of the length in job, employees perceived innovation as an important factor in delivering company's future growth and profitability (Figure 2). These results were similar to most innovation surveys that have been conducted in a variety of organisations (Kuczamarski, 1996).

While the employees in product development and in consumer understanding with one to two years experience were positive about the company's sales growth, the managers and the marketers with more than three years in the job had a more realistic/slightly pessimistic view (Figure 2). This was understandable as mostly managers and marketing employees are generally exposed to such information.

The company's innovation effectiveness was perceived differently across functions, departments and time in job: the non-managers with less than three years experience and the product development people considered that the company was effective at innovation. However, the company's innovation effectiveness was rated low by employees with more than three years job experience (all managers, marketing and consumer understanding function) (Figure 2).

When respondents assessed the innovation capability of the company from the commitment point of view (Figure 3), all employees considered that the organisation was truly committed to innovation and that the company also searched for opportunities to improve the existing business. However, most respondents, especially managers and those within the marketing function with two to three years' experience thought that the organisation did not challenge the rules of business and was conservative in shaking up the industry.

Regarding leadership, most employees, irrespective of function, department and time in job felt that the company had in place stretching goals that could only be achieved through innovation (Figure 4). With exception of the employees that had more than three years experience and consumer understanding department, it was generally believed that top management reflected an appropriate behaviour that was conducive to innovation. However, most respondents felt that they were working mainly towards

company's growth and profits, not for a cause (Figure 4). Having top management recognised for its behaviour towards innovation is an important attribute for an organisation that fosters innovation. The top managers of an innovative company should recognise the importance and the benefits of innovation and then become committed to it. It is apparent that the leaders of the investigated organisation succeeded in conveying inspiration, passion and belief in innovation to the rest of the organisation. The top managers of this company that demonstrated passion for innovation should then transfer this mindset to their innovation teams and to the rest of the organisation (Kuczmariski, 1996).

Top managers also had success in making the organisation strategy well known and understood by the majority of its employees (Figure 5). Although the company was continuously reviewing the effectiveness of its strategy, the management with more than two years experience believed that the company was not flexible in searching and possibly adopting unconventional opportunities based on its core competencies that could increase the innovation level of the company (Figure 5).

Some of the company's core processes have been reviewed to enhance their contribution to innovation. While IT systems truly supported innovation through stimulation of new ideas development and implementation, the financial systems were not as innovation supportive, they were risk adverse

(Figure 6). The degree of investment promotion in the company was probably directly proportional to the level of risk of each new idea.

This organisation had a structure that was effective in promoting exchange of ideas between employees from different functions. Using multifunctional teams appears to be a practice that is commonly used by successful innovative companies (von Stamm, 2003). However, managers and experienced employees regarded the company as not being committed to consistently working towards breaking down barriers between different parts of the organisation (Figure 7). Although the company encouraged free idea exchange, it was apparent that the structure of this organisation was slightly rigid, comprising of a variety of well-defined departments, perhaps not allowing innovative communication to be horizontal. It is known that this type of communication, in an organic structure, should foster continual adaptation and refining of new ideas, offering an integrative approach to problem solving (Roffe, 1999).

When respondents assessed the company's innovation capability from resources perspectives, it was evident that this organisation had appropriate development facilities and resources that contributed towards the maintenance of the company's competitive advantage. In contrast to this, only occasionally the organisation was deliberately seeking individuals with talent for innovation and creative people (Figure 8). This result is not surprising as many companies that want to innovate have to create and

maintain a culture that fosters creativity (Nolan, 1987). Organisations do not consciously and deliberately set out to be non-accommodating to creativity. Generally they do so by applying specific standards that are appropriate to established routine activities, to new activities and new ideas.

Literature demonstrated that innovation is best encouraged by stimulating creativity, supporting risk taking and change and tolerating mistakes (Roffe, 1999). The managers of leading successful innovative companies take active roles in eliminating risk-adverse climates and replace them with company cultures in which innovation and failure are expected. In the current investigation, it was evident that the company was only occasionally willing to invest in exciting but reasonably risky ventures (Figure 8) and that failure was only occasionally seen as a learning experience (Figure 9). Interestingly, although the innovation role was clearly understood by everybody (Figure 2, Overall perception), only some employees considered themselves responsible for continuously generating and developing new ideas. In addition, equal acceptance and recognition was only occasionally being given to ideas that have been generated from within the company (Figure 9). This could be perhaps explained by the fact that this organisation is a multinational company, where global projects including innovations have been given priority, more than the local projects. By having to regularly implement innovation that originated outside the country, the employees perhaps considered no need to search for new, innovative ideas that addressed the needs of the local consumers.

As mentioned before, most employees of the investigated company understood the role and importance of innovation in the business (Figures 2 and 10) and most thought that the management had sufficient strategy knowledge to conceptualise new business concepts. Although most respondents believed management were trained in creative problem solving, interestingly, the managers themselves concluded that only some were trained in creative thinking (Figure 10).

The innovation process of the company appeared to be effective, a funnel of new ideas being consistently maintained throughout stages of idea development, from conception to implementation (Figure 11). The innovation process was also effective in assisting the company in managing risk (Figure 11).

To obtain a further understanding of the innovation process and possibly highlight issues, further analysis has been carried out. Variables have been assessed for each respondent group, function, department and length in job to investigate which were the most positive and negative perceptions about the innovation process (Figures 12 – 21). Emphasis will be placed on the variables that exhibited the smallest mean scores as they represent possible organisational innovation issues.

Looking at the total sample (Figure 12), irrespective of department, function and experience, the most negative variables were those linked to innovation

culture and the way the company manages risk. It was apparent that searching and developing ideas was not considered an important aspect of the majority of employees' jobs. Perhaps as a consequence of this, it was generally acknowledged that there was no equal acceptance and recognition given to new ideas that originated from within the company and that most people felt that they were not working for a cause but for the company's growth and profits.

The majority of respondents were critical of the traditional/conservative way in which the company managed risk, by only occasionally investing in risky ventures and by implementing financial systems that inhibited investment in possibly risky ideas. Failure was only occasionally considered a learning experience by most respondents (Figure 12).

Although it is evident that there was a commitment for innovation and that the strategy was geared towards innovation and was clearly communicated and understood at all levels, the majority of respondents demonstrated negative attitudes towards the innovation process (Figure 12). This could be explained by the fact that most current innovation originated from outside the country, local teams only having to adapt and develop the new ideas.

While the company promoted ideas exchange across different departments with high cross-functional co-operation to manage new ideas, it was generally believed that there was no continuous effort towards breaking

down barriers between different parts of the organisation (Figure 12). This company demonstrated a vertical type of innovation management. However, according to Johannessen *et al.* (1999), in the current economic environment, there is a shift from vertical and functional organisational structure and management to horizontal and process structure and management styles. The vertical management is structured into different departments while process teams that use a "hands-on" approach during the entire innovation process complete the task of the horizontal management. The ability of cross-functional/departmental teams to conceptualise and manage innovation by increasing the learning capacity of the team members offers a significant competitive advantage to the companies that manage innovation horizontally. Teams that are formed of people from diverse backgrounds and different levels in the organisation tend to be more creative, hence more innovative by the ways they see problems, generate alternatives and determine solutions (Levesque, 2001; Stern, 2001).

The organisation had adequate development facilities and resources and some core processes that truly supported innovation. However, the general view was that the company did not identify individuals with talent for innovation and teams with the right mix of experience and thinking styles in order to enhance creativity that leads to innovation. This was supported by the opinion that even the management and senior staff members were not trained in creative problem solving (Figure 12). The fact that managers,

especially top managers are not being trained in creative thinking is interesting as creative problem has a critical application in the strategic areas of the business (Nolan, 1987).

Creativity is directly correlated to innovation and innovation is inherently uncertain and risky. In the current investigation, it was evident that this large organisation, with well-defined structures and core processes, consistently applied traditional values and norms when engaging in innovation. These established innovation routine activities (i.e. mostly developing new ideas that originated from outside and occasionally innovating from inside) appeared to be conducive to some inhibition of creative talent. Employees felt that they were not responsible for searching and creating new ideas as they acknowledged that internal idea origination was not a company priority. The organisation innovated using global experience and successes from around the world, and these ideas were then developed locally. This perhaps explains why the employees said that they worked for company profits and why the company managed risk very well (Figure 12); by innovating using learnings from other countries, the local company keeps the risk of failure to a minimum.

The managers who participated in the current study (Figure 13) believed that they were not working for a cause but just for growth and profit generation. They also expressed concerns that they were not trained sufficiently in creative thinking to be able to creatively solve problems. They

also had issues regarding the rigid structure of the organisation, as there was no consistency towards breaking down barriers between different parts of the company. In their opinion, the company was not active in challenging the existing way of doing business to shake up the industry. The management also confirmed that the organisation was risk-adverse despite the fact that it had in place adequate processes for investment in innovative and risky ventures. A 1991 survey of 100 UK-based best-practice companies showed that while two-thirds of participating organisations had spontaneously declared failure to be accepted as an intrinsic part of innovation, closer questioning revealed a gap between rhetoric and reality (von Stamm, 2003).

Similar to their managers, the non-managers felt that the company managed risk efficiently by paying careful considerations to its investments into new ideas (Figure 14). The non-managers considered that they were not responsible for new idea generation. This could be a consequence of the fact that not all employees were fully involved in the innovation process hence they were not expected to suggest and develop new ideas. These results were similar to a recent study where most ideas were generated internally by senior management, followed by research and development and sales/marketing (von Stamm, 2003). Interestingly, the non-managers also believed that their managers were conservative and not creatively trained, often not considering ideas that were unconventional. In their

opinion, the managers generally exhibited a behaviour that was not conducive to innovation.

Marketing (Figure 15) and Development (Figure 16) respondents, as well as non-management (Figure 14), believed that new idea generation was not a vital part of their role. This was surprising as both these functions should be most active in searching and new idea development. Marketing employees acknowledged that the company had established financial systems that were not generally promoting investments in risky new ideas. This was also supported by the respondents working in Consumer Understanding (Figure 17) and Product Development (Figure 16). All three functions also confirmed the effectiveness of the company to manage risk. Similar to non-manager respondents, both Development and Consumer Understanding believed that the management was not innovative and were also not creative enough.

The respondents with one-year experience (Figure 18) had similar responses as the non-managers (Figure 14). These employees had issues with innovation not being generated from inside the organisation. As a consequence, they considered that innovation and idea generation, were not their responsibility, with their role working towards company's growth and financial benefits.

Most respondents with more than two years experience (Figure 19) as well as the employees with three (Figure 20) and four years (Figure 21) were concerned with company resources, especially from the corporate creativity point of view. They believed that only occasionally the company promoted creative individuals and teams with the appropriate mix of experience and capability to enhance creativity and innovation. These respondents also highlighted that the company was conservative and was not active in challenging the industry. They concluded that by having a well-defined structure, core processes and an efficient innovation process, the company had a conventional strategy that only occasionally searched for unconventional opportunities, even if these were outside its current scope of products and markets. These respondents recognised that the organisation was very effective in managing risk. Interestingly, the employees with more than four years experience believed that the current management has no appropriate innovating skills; managers were not trained in creative problem solving and also they had no sufficient knowledge of strategy to conceptualise new business concepts (Figure 21).

3.1 Conclusions

The current investigation demonstrated that the overall perception on the company's innovation was high, notably the emphasis on the importance of innovation. The studied organisation exhibited positive strong innovation

capabilities: high innovation commitment, a strategy that promotes innovation which is clearly communicated and understood at levels, adequate resources and facilities that keep the company competitive, and, very important, an effective innovation process.

However, a number of key issues have emerged from this investigation:

- **Unfavourable attitudes towards innovation**

Although there was commitment for innovation, employees demonstrated unfavourable attitudes towards innovation. Majority considered that they were not responsible for new idea generation. In many organisation there is an ongoing discussion as to who has responsibility for innovation (von Stamm, 2003). In one researched company, the annual employee survey revealed that 90% of managers felt innovation had nothing to do with them (von Stamm, 2003). However, one characteristic of an innovation culture is that everyone in the organisation feels responsible for achieving the targeted innovation level. In order to achieve this, the investigated company could perhaps improve communication of the mission and objectives of innovation (even if ideas are generated from other countries) and implementation of its vision of innovation through the entire organisation, giving each employee a better purpose for their work. This continuous communication should become a central pillar in organisational innovation. The attitudes towards innovation should change as the purpose of linking

innovation vision with mission is to make the employees part of something that will motivate them to view their daily jobs in a larger context.

- **Risk management**

Most respondents concluded that the company was very risk adverse, only occasionally investing in risky new ideas. This strategy was supported by an effective financial system that only sometimes promoted investments in new ideas even if the risk of failure was high. As literature showed, failure is an intrinsic part of innovation. Even successful innovative organisations experience a 35% failure rate of their commercialised innovations (Kuczmarski, 1996). What is different about these companies, and what makes them succeeding at innovation is the fact that their top management and employees accept and understand that failure is necessary to innovate. Willingness to accept failures will instil confidence in employees and over time will generate higher financial results.

- **Managers are not innovative/creative enough**

Most employees also highlighted that the managers were not trained to think creatively. The most valuable place to start training should be at the top of the company. According to Nolan (1987), the experience of this type of training will reinforce a management shift in attitude towards creativity

and towards people. It will also be a demonstration from the top of the key elements of corporate creativity, open-mindedness and willingness to learn.

- **Towards a horizontal structure**

It appears that this company was committed to promote idea exchange between departments but was not consistent in working towards breaking down barriers between different parts of the organisation. Organic companies with horizontal structures are more innovative (Cooper, 1998). To become an organisation with a horizontal structure, barriers between different parts of the company should be broken down by encouraging process teams with members from different functions (with a range of job experience) and departments as they will have structural integrity. These teams will also benefit from idea generation reflected by their multi-functional composition. The process teams will have synergy potential capable of releasing the creative tension in the organisation and as a consequence they will innovate more.

3.2 Limitation of the study

The study was conducted using a representative respondent sample from three departments (Marketing, Product Development and Consumer Understanding). However, representatives of other departments such as Trade marketing, Buying should also have been included in the study.

Due to constant change of staff, this research would need to be repeated on a regular basis to obtain an update on innovation developments.

3.3 Further research

In order to obtain a more in-depth understanding of the factors that contribute to the success of the innovation process in the investigated organisation, further research would be required. Factors such as:

- ❑ Product superiority
- ❑ Quality of marketing activity
- ❑ Quality of pre-development activities
- ❑ Market attractiveness
- ❑ Sharp and early product definition
- ❑ Launch effectiveness
- ❑ Synergy
- ❑ Nature of purchase (adoption likelihood)
- ❑ Organisational design
- ❑ Familiarity
- ❑ Quality of technical activities
- ❑ Non-product advantage
- ❑ Nature of innovation

In accordance to Cooper (1994), the performance of each of these factors could be measured by means of several parameters:

- Profitability - profits exceeding company's hurdle rates (0-10 scale)
- Technical success rating (0-10 scale)
- Impact on the company – sales and profits (0-10 scale)
- Current market share (%)
- Current year sales (millions rands)
- Time efficiency (0-10 scale)
- Adherence to time schedule (0-10 scale)

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APPENDIX 1

INNOVATION QUESTIONNAIRE

RESPONDENT PROFILE

1	Department	Product Development Marketing Consumer Understanding
2	Function	Manager Non-Manager
3	Length in the job	Years 1 2 3 4

OVERALL PERCEPTION

1	How do you perceive the importance of innovation in determining the future success of your company?	Critical Very Slightly Not at all
2	How do you rank your company's effectiveness at innovation compared to other SA companies?	Top 25% Above average Below average Bottom 25%
3	How do you rank your company's sales growth over the last 3 years compared to other companies in the industry?	Top 25% Above average Below average Bottom 25%

INNOVATION CAPABILITY

COMMITMENT

1	Does your company actively seek and develop new opportunities for improving and growing the existing business?	All the time Often Occasionally Never
2	Does your company challenge the existing way of doing business and actively seek ways to 'break the rules' and radically shake up the industry?	All the time Often Occasionally Never
3	Is your company truly committed to innovation in the sense that it is treated as a key element of the overall strategy, with significant time and energy devoted to it?	Completely Largely Slightly Not at all

LEADERSHIP

1	Has your company set really stretching goals that can only be achieved through innovation?	Fully Largely Somewhat Not at all
2	To what extent do the people in your company feel they are working for a "cause", rather than just for growth and profit?	Fully Largely Somewhat Not at all
3	Do your top managers model the type of behaviour necessary for innovation, e.g. willingness to change the status quo and 'stick their necks out' by considering	Fully Largely Somewhat

	ideas that are truly unconventional?	Not at all
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STRATEGY

1	Is your company's strategy clearly articulated and understood, not only by the top management team but by the majority of employees?	Fully Largely Somewhat Not at all
2	How often does your company review the continued effectiveness of each segment of its strategy and consider new and different approaches that will outflank the competitors?	All the time Often Occasionally Never
3	To what extent is your company's "definition of business" flexible in allowing it to seek "unconventional" opportunities based on its core competencies, even if these lie outside its current scope of products, services and markets?	Fully Largely Somewhat Not at all

CORE PROCESSES

1	Do your company's financial systems foster and promote investment in promoting/implementing new ideas, even if the risk of failure is significant?	Fully Largely Somewhat Not at all
2	Do your company's IT systems truly support innovation, rather than blocking the development and implementation of new ideas?	Fully Largely Somewhat Not at all
3	How many of the core processes in your company have been reviewed with the specific objective of enhancing their contributions to innovation?	All Most Some None

STRUCTURE

1	How effective is your company in promoting meetings involving people from different functions for the purpose of exchanging ideas?	Extremely Largely Lightly Not at all
2	To what extent is your company committed to consistently working towards breaking down barriers between different parts of the organisation?	Fully Largely Somewhat Not at all
3	How effectively do people from different functions and regions in our company work together?	Extremely Largely Lightly Not at all

RESOURCES

1	Does your company deliberately seek to identify individuals with talent for innovation and to select teams with the right mix of experience, capabilities and thinking styles to enhance creativity?	All the time Often Occasionally Never
2	Is your company willing to invest reasonable amounts in risky but exciting ventures?	All the time Often Occasionally Never
3	Are your company's development facilities and resources adequate to enable them to remain competitive?	Fully Largely Somewhat Not at all

ATTITUDES

1	Is equal acceptance and recognition given to new ideas that originate from any source within the organisation?	All the time Often Occasionally Never
2	What proportion of employees regard looking for, and developing new ideas as being a vital part of their role, rather than being the responsibility of someone else?	All Most Some None
3	Do people in your company regard the failure a risky venture as being a learning experience?	All the time Often Occasionally Never

INNOVATION SKILLS

1	How many managers and senior staff have been trained in creative problem solving processes?	All Most Some None
2	How many of our people truly understand the role and importance of innovation in the business?	All Most Some None
3	How many of our managers and senior staff have sufficient knowledge of the elements of strategy to enable them to conceptualise new business concepts?	All Most Some None

INNOVATION PROCESS

1	How effective is your company at consistently maintaining a "funnel" of ideas in various stages of development from conception through to implementation?	Extremely Largely Slightly Not at all
2	How effective is your company in actively seeking new ideas from all possible sources, both internally and externally, including customers/consumers?	Extremely Largely Slightly Not at all
3	How effective is our company at managing risk?	Extremely Largely Slightly Not at all

APPENDIX 2

Fig. 1. General Overview

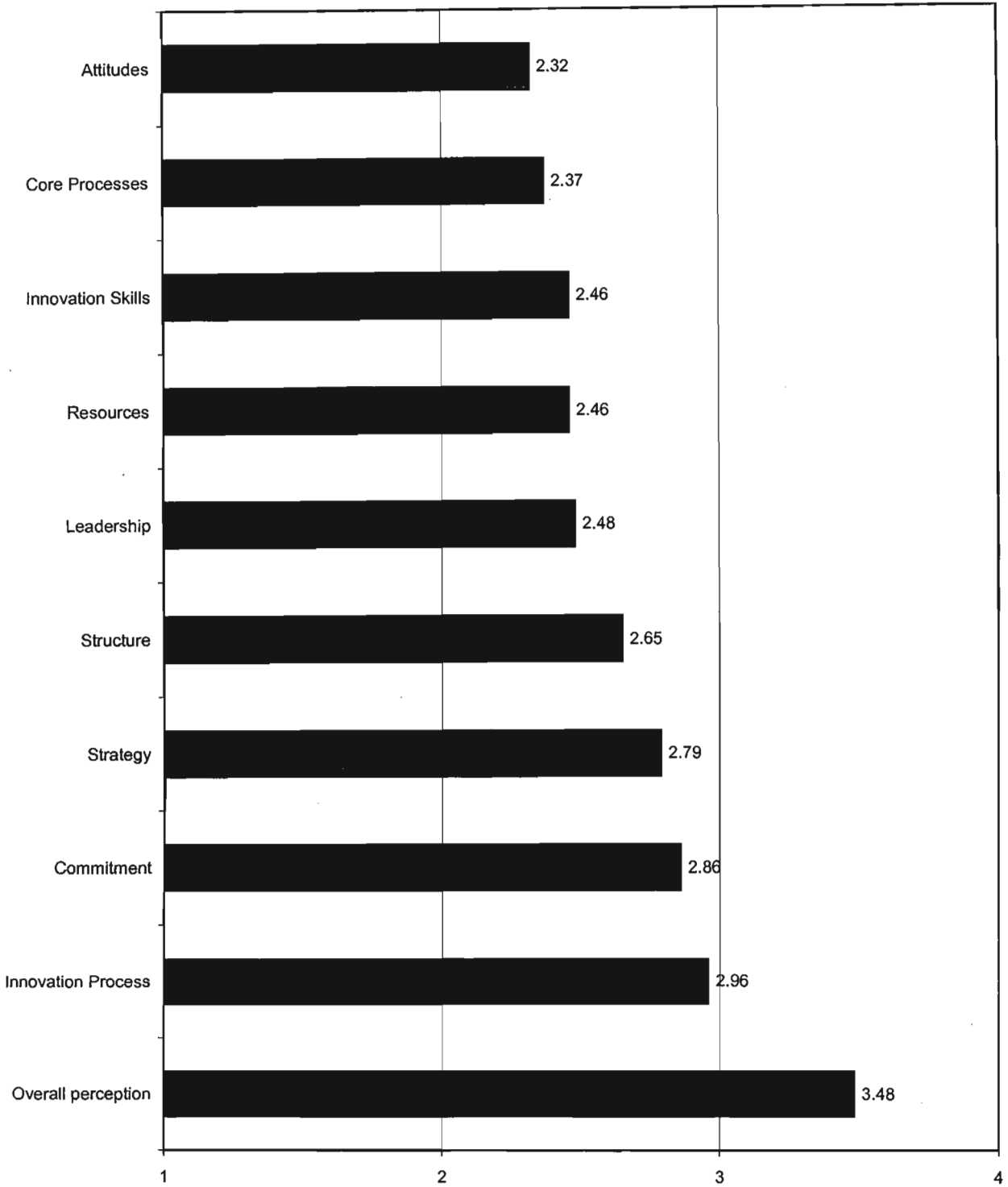
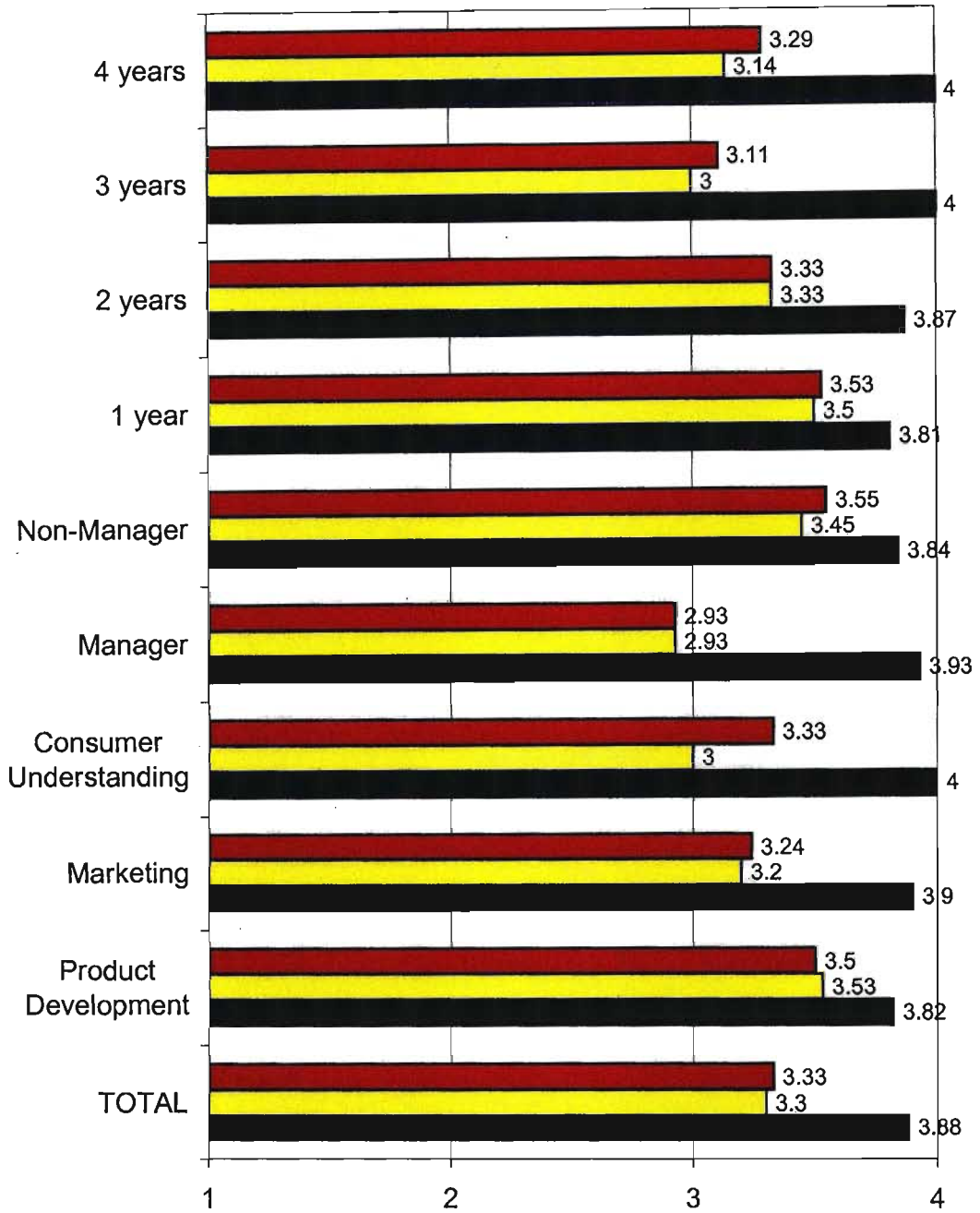
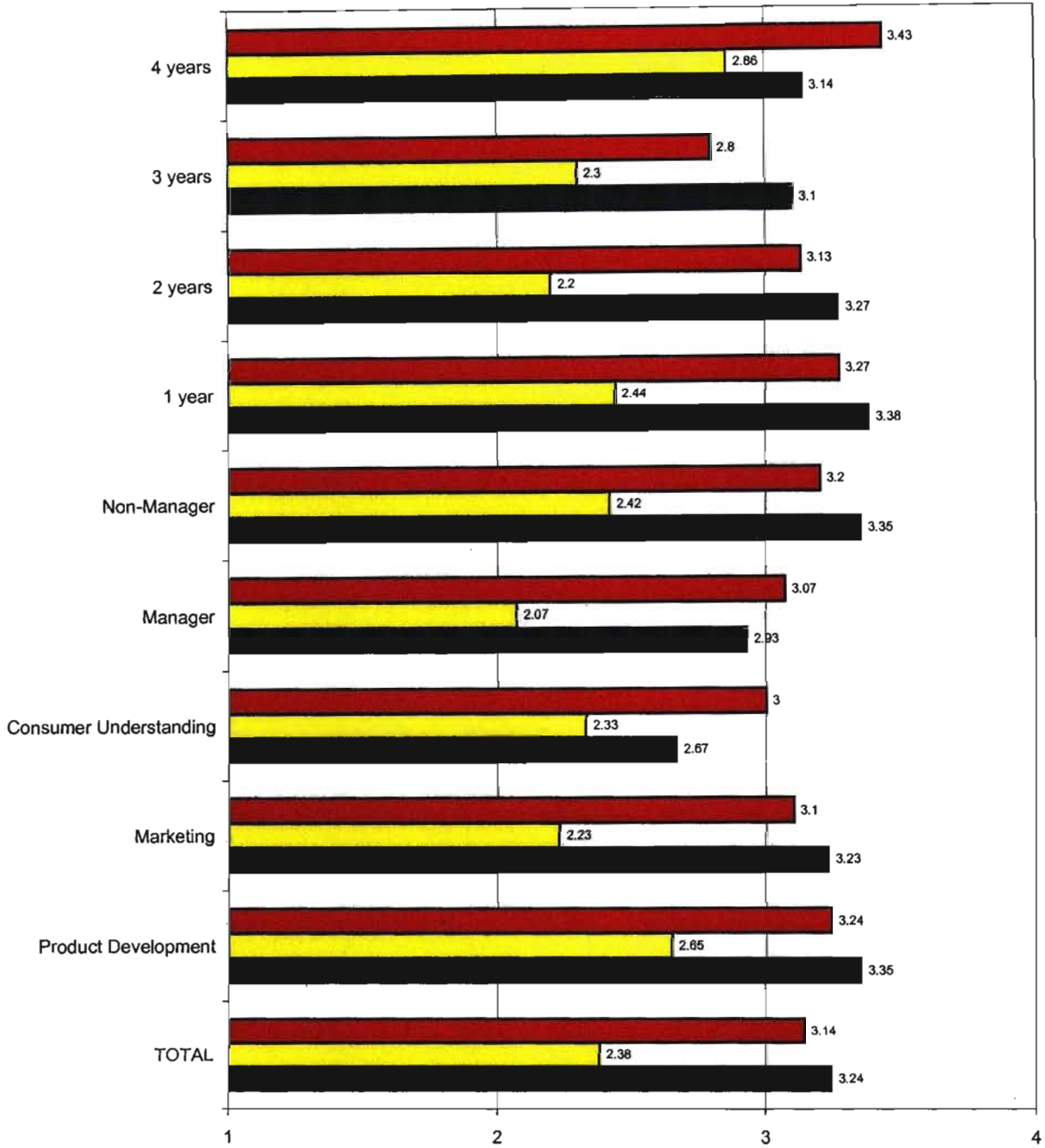


Fig. 2. Overall Perception



■ Overall Perception : How do you rank your company's sales growth over the last 3 years compared to other companies in the industry
■ Overall Perception : How do you rank your company's effectiveness at innovation compared to other SA companies?
■ Overall Perception : How do you perceive the importance of innovation in determining the future success of your company?

Fig. 3. Innovation Capability - Commitment



■ Innovation Capability - Commitment : Is your company truly committed to innovation in the sense that it is treated as a key element of the overall strategy, with significant time and energy devoted to it?
■ Innovation Capability - Commitment : Does your company challenge the existing way of doing business and actively seek ways to 'break the rules' and radically shake up the industry?
■ Innovation Capability - Commitment : Does your company actively seek and develop new opportunities for improving and growing the existing business?

Fig. 4. Innovation Capability - Leadership

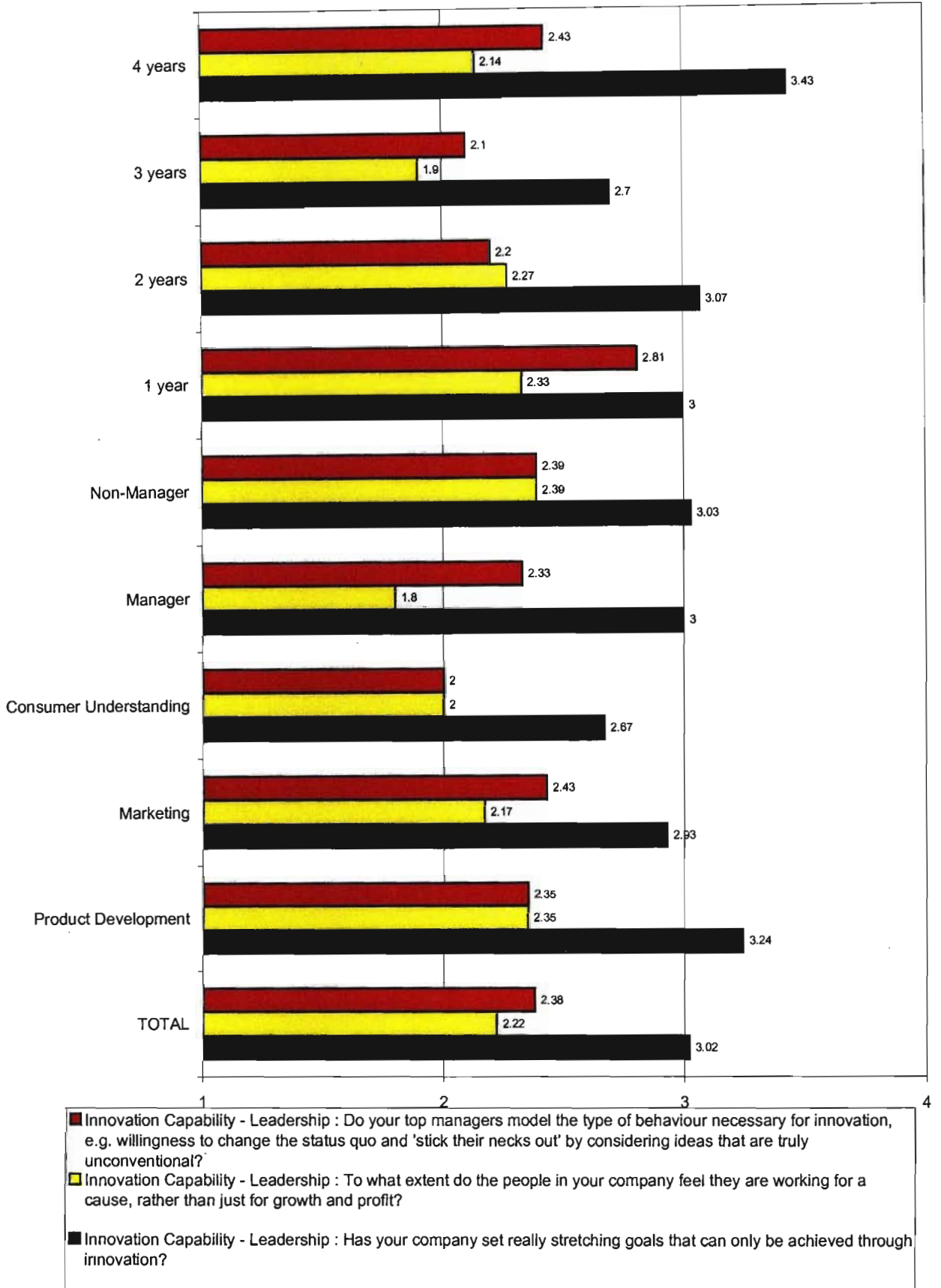
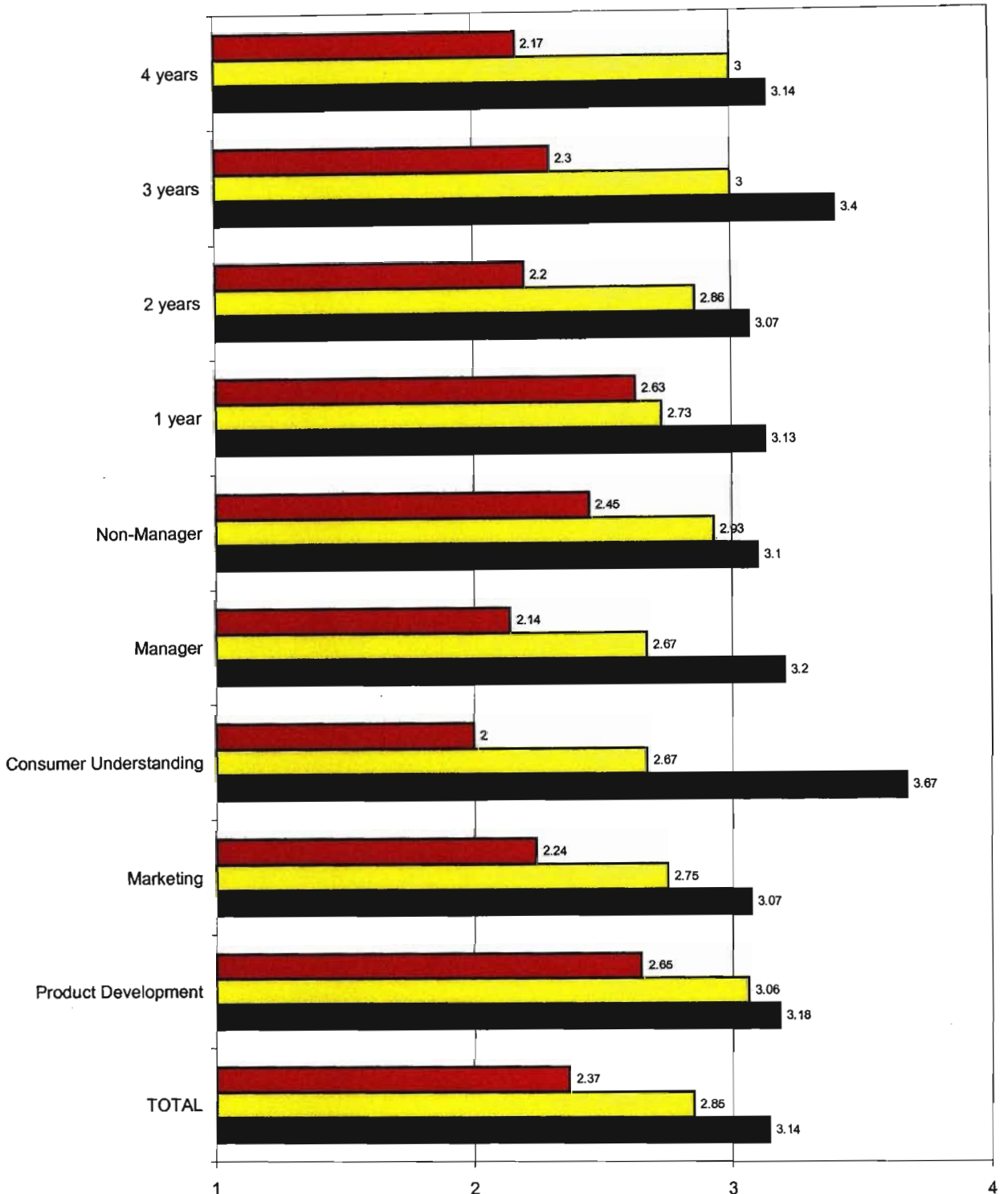
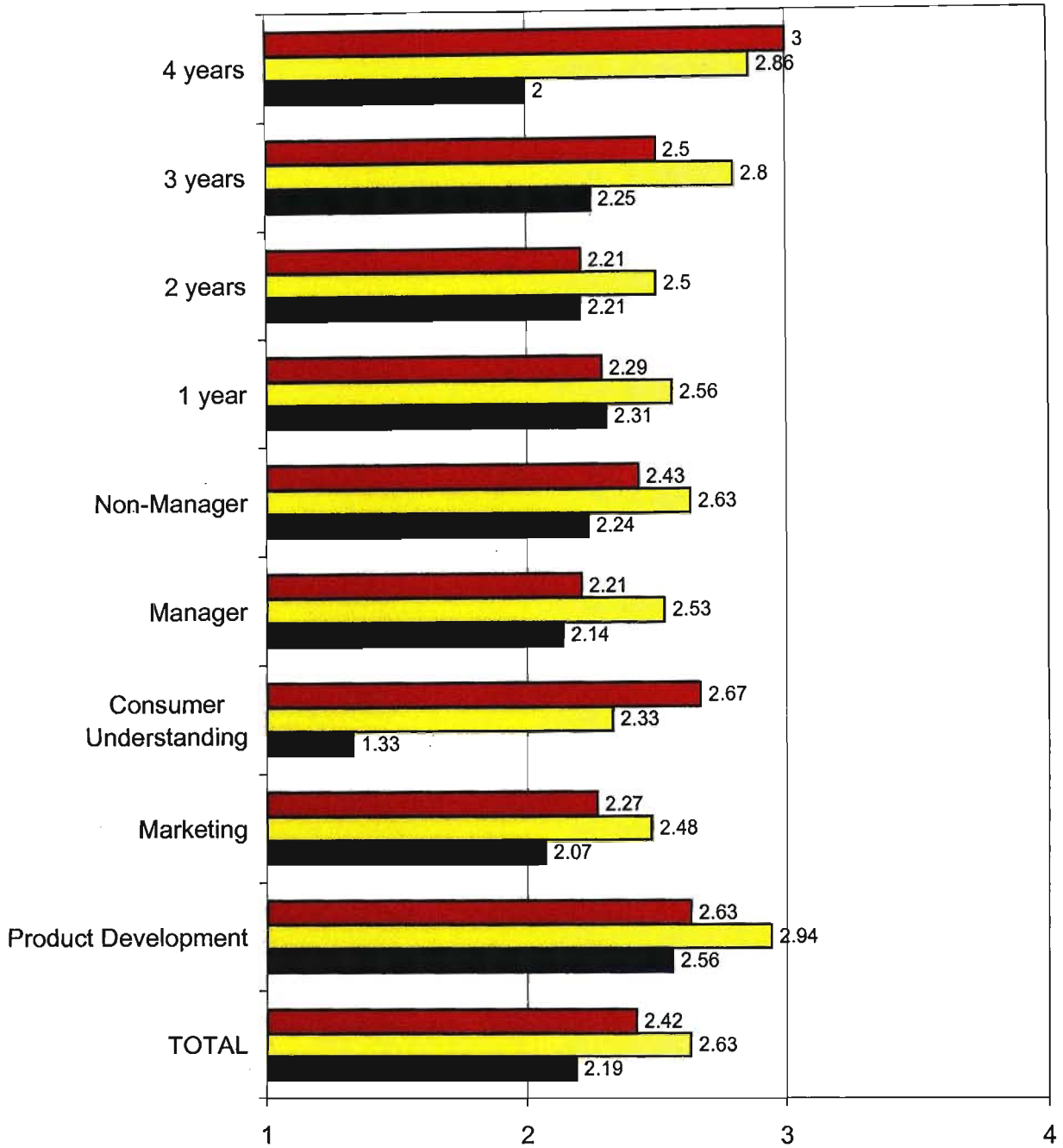


Fig. 5. Innovation Capability - Strategy



- Innovation Capability - Strategy : To what extent is your company's definition of business flexible in allowing it to seek unconventional opportunities based on its core competencies
- Innovation Capability - Strategy : How often does your company review the continued effectiveness of each segment of its strategy and consider new and different approaches that will outflank the competitors?
- Innovation Capability - Strategy : Is your company's strategy clearly articulated and understood, not only by the top management team but by the majority of employees?

Fig. 6. Innovation Capability - Core Processes

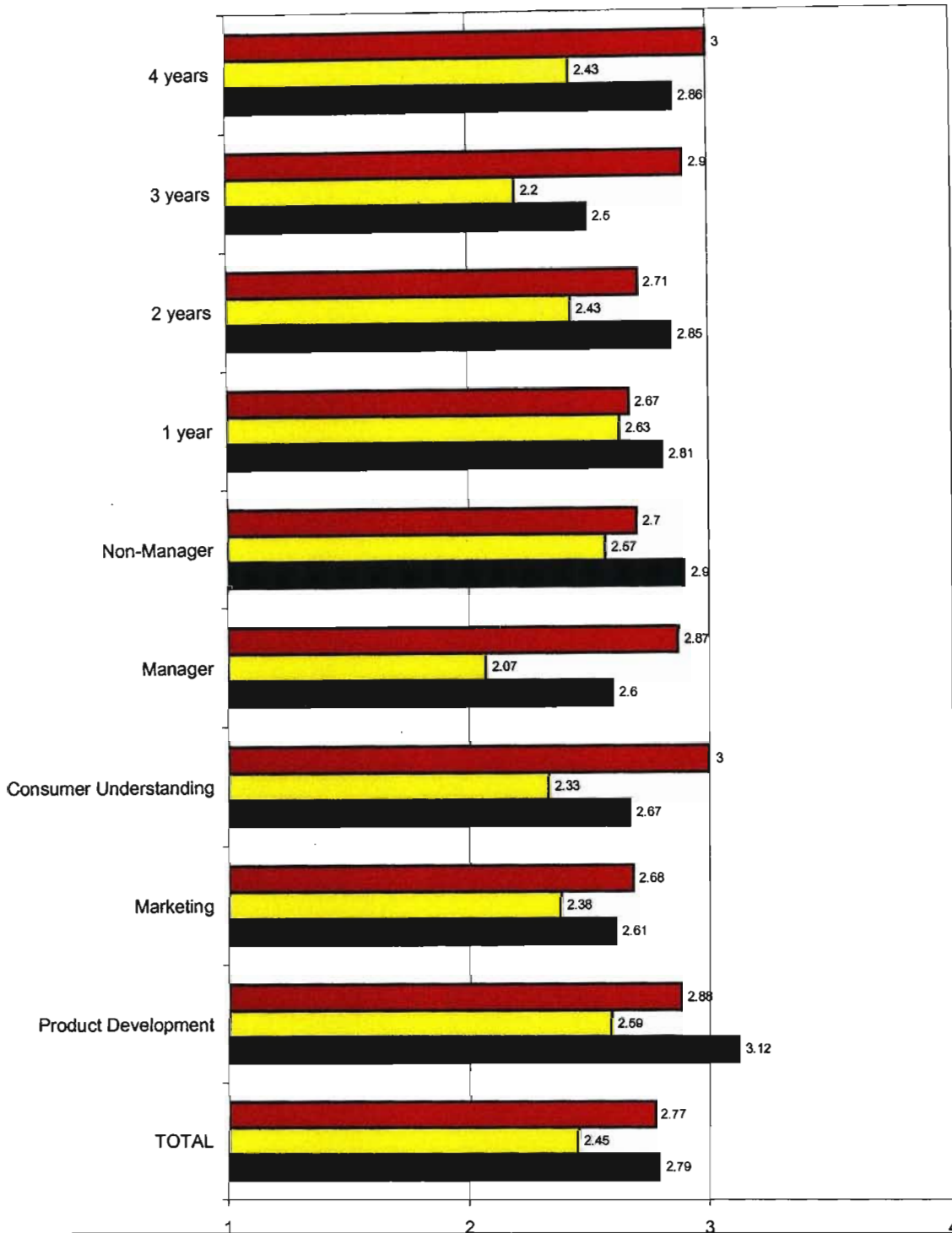


■ Innovation Capability - Core Processes : How many of the core processes in your company have been reviewed with the specific objective of enhancing their contributions to innovation?

■ Innovation Capability - Core Processes : Do company's IT systems truly support innovation, rather than blocking the development and implementation of new ideas?

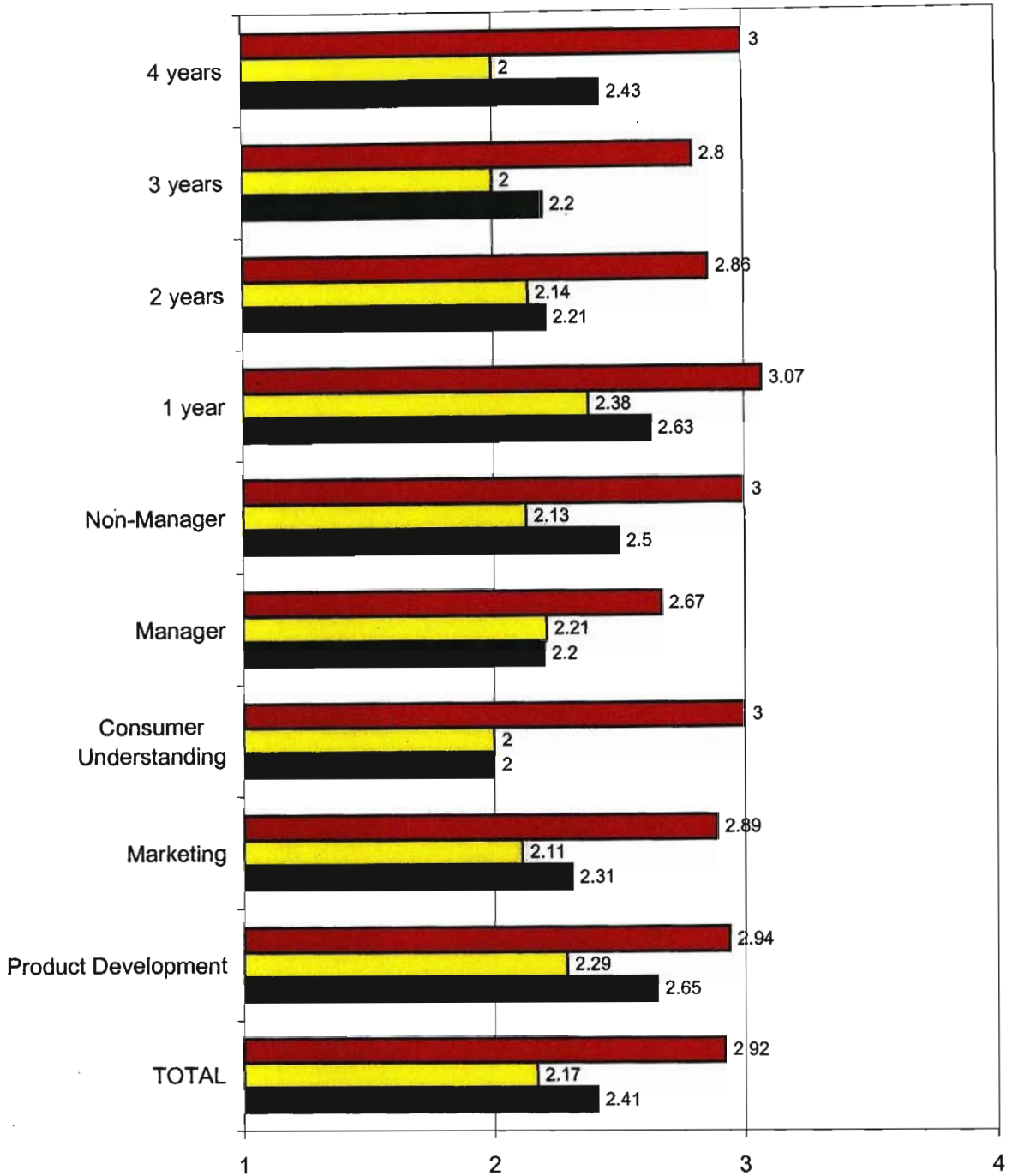
■ Innovation Capability - Core Processes : Do your company's financial systems foster and promote investment in promoting/implementing new ideas, even if the risk of failure is significant?

Fig. 7. Innovation Capability - Structure



■ Innovation Capability - Structure : How effectively do people from different functions and regions in our company work together?
■ Innovation Capability - Structure : To what extent is your company committed to consistently working towards breaking down barriers between different parts of the organisation?
■ Innovation Capability - Structure : How effective is your company in promoting meetings involving people from different functions for the purpose of exchanging ideas?

Fig. 8. Innovation Capability - Resources

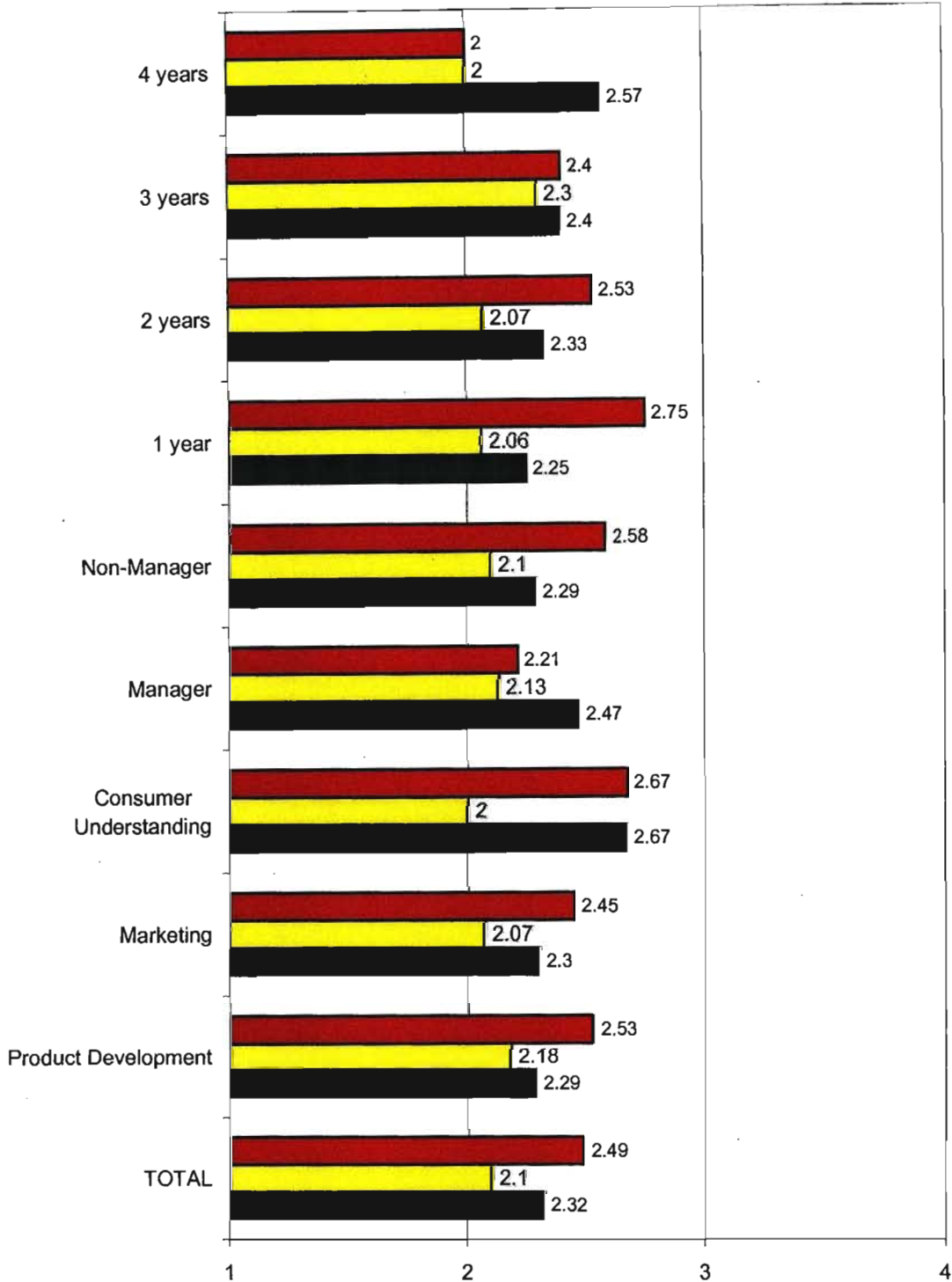


■ Innovation Capability - Resources : Are your company's development facilities and resources adequate to enable them to remain competitive?

■ Innovation Capability - Resources : Is your company willing to invest reasonable amounts in risky but exciting ventures?

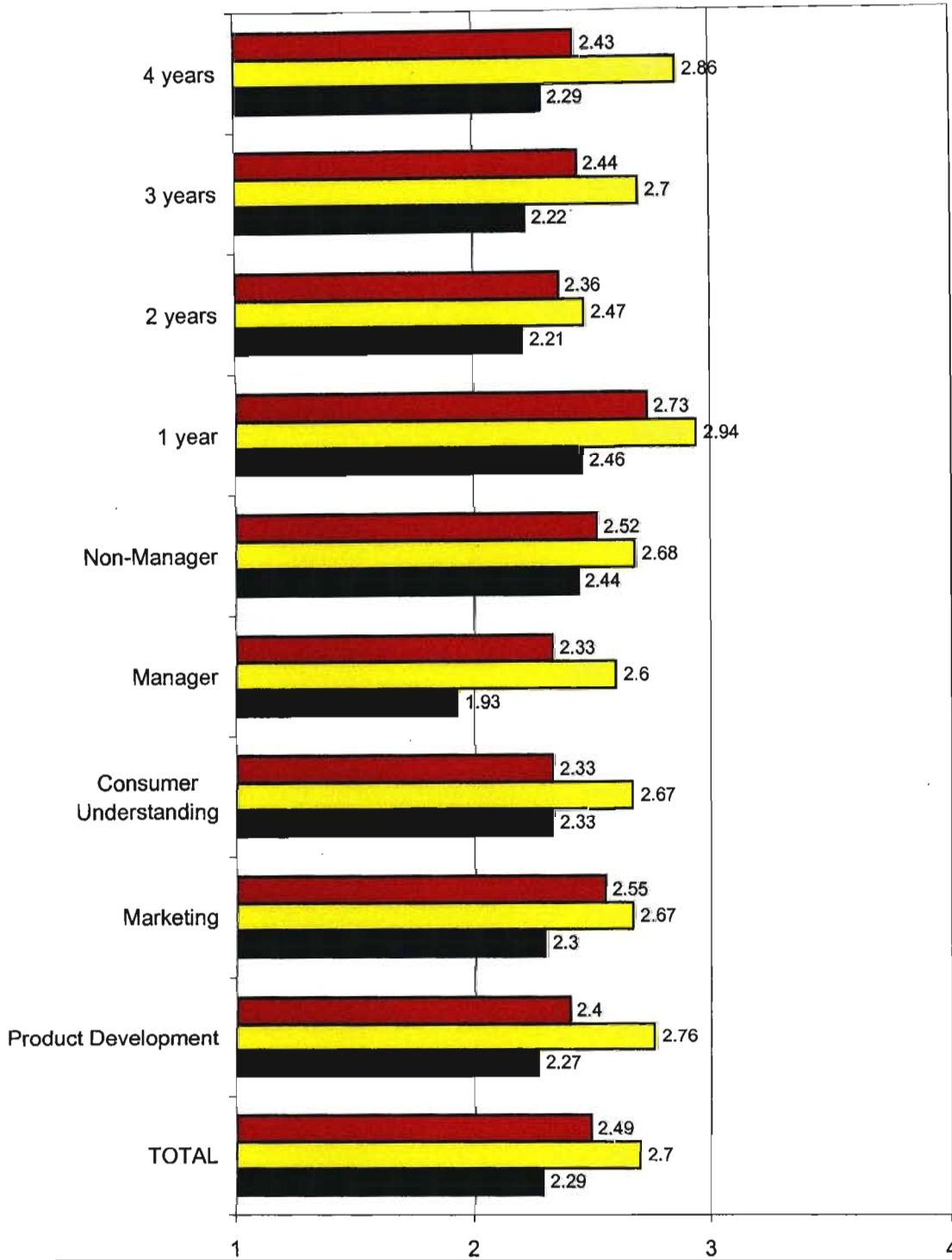
■ Innovation Capability - Resources : Does your company deliberately seek to identify individuals with talent for innovation and to select teams with the right mix of experience, capabilities and thinking styles to enhance creativity?

Fig. 9. Innovation Capability - Attitudes



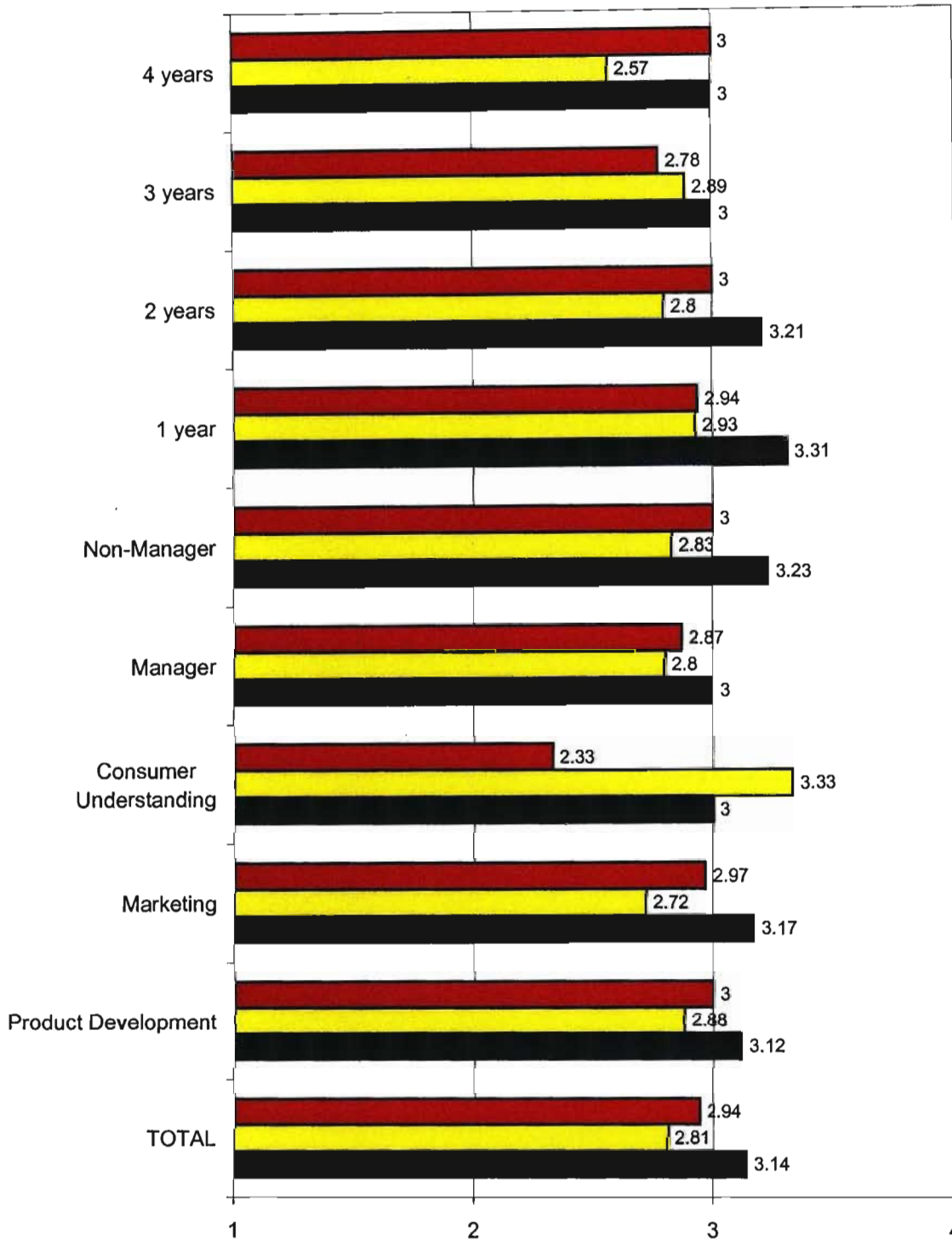
- Innovation Capability - Attitudes : Do people in your company regard the failure a risky venture as being a learning experience?
- Innovation Capability - Attitudes : What proportion of employees regard looking for, and developing new ideas as being a vital part of their role, rather than being the responsibility of someone else?
- Innovation Capability - Attitudes : Is equal acceptance and recognition given to new ideas that originate from any source within the organisation?

Fig. 10. Innovation Capability - Innovation skills



- Innovation skills : How many of our managers and senior staff have sufficient knowledge of the elements of strategy to enable them to conceptualise new business concepts?
- Innovation skills : How many of our people truly understand the role and importance of innovation in the business?
- Innovation skills : How many managers and senior staff have been trained in creative problem solving processes?

Fig. 11. Innovation Capability - Innovation Process



■ Innovation Process : How effective is our company at managing risk?
■ Innovation Process : How effective is your company in actively seeking new ideas from all possible sources, both internally and externally, including customers/consumers?
■ Innovation Process : How effective is your company at consistently maintaining a funnel of ideas in various stages of development from conception through to implementation?

Fig. 12. Innovation Assessment - General View (Total Sample)

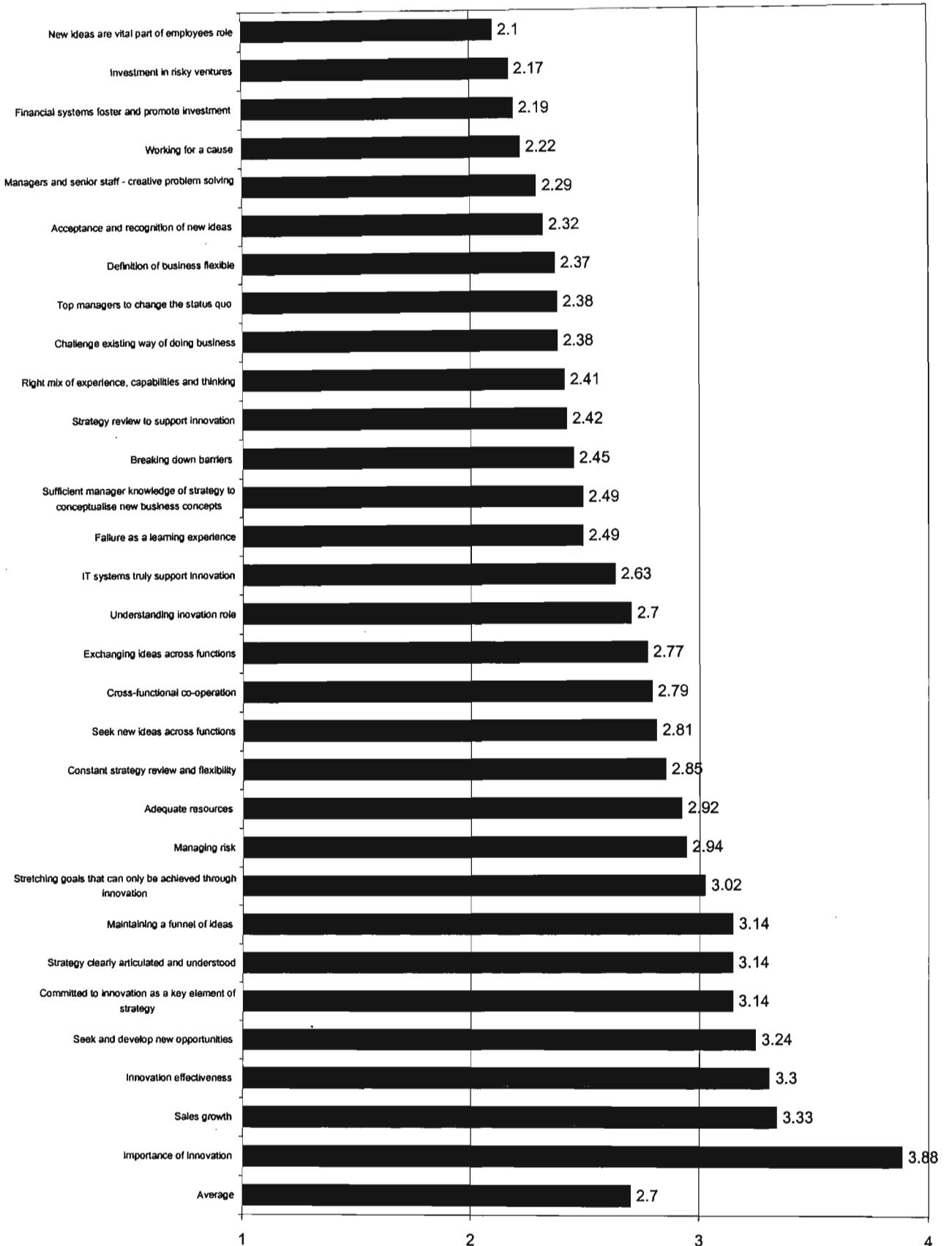


Fig. 13. Innovation Assessment - Management

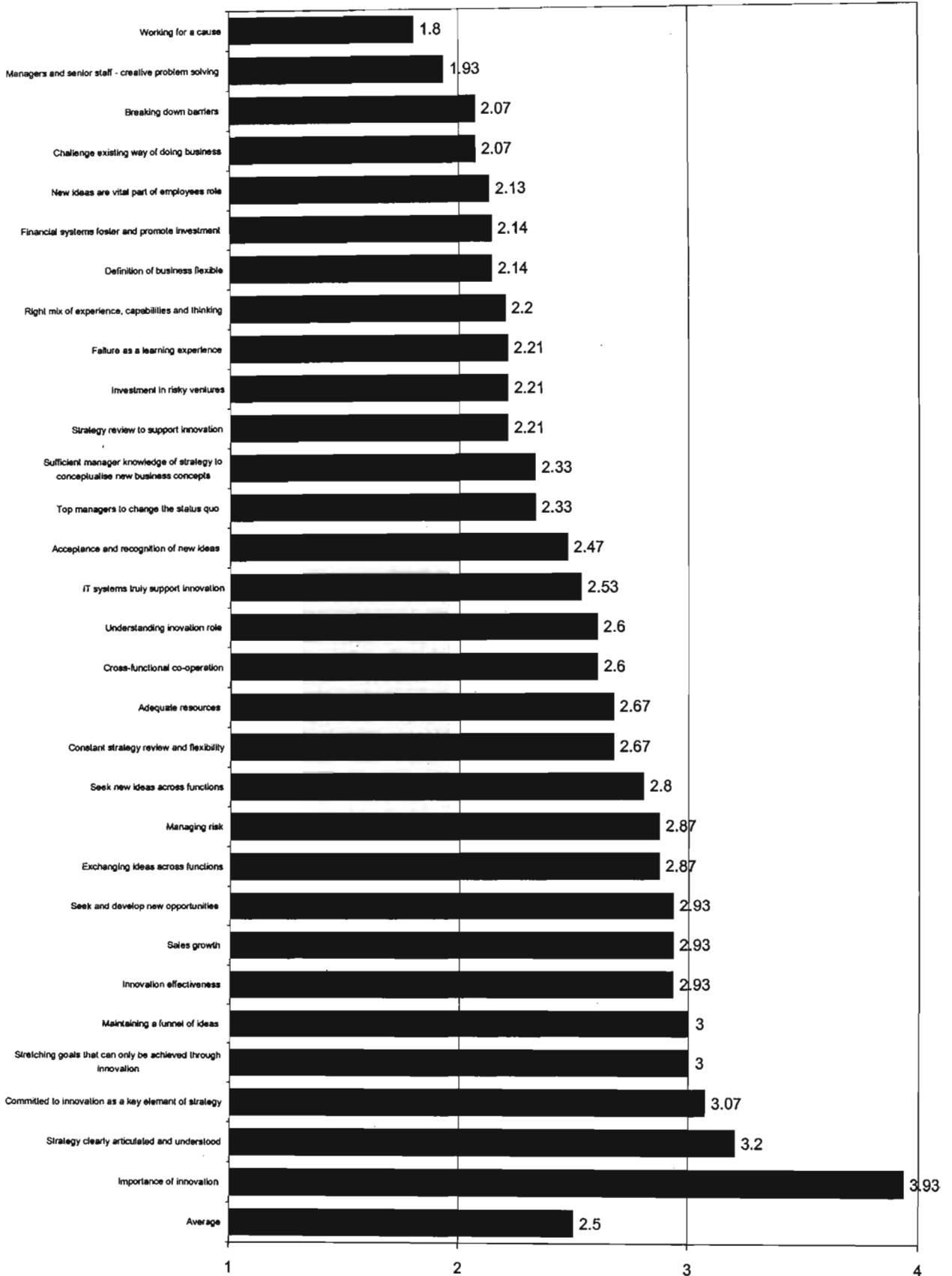


Fig. 14. Innovation Assessment - Non-management

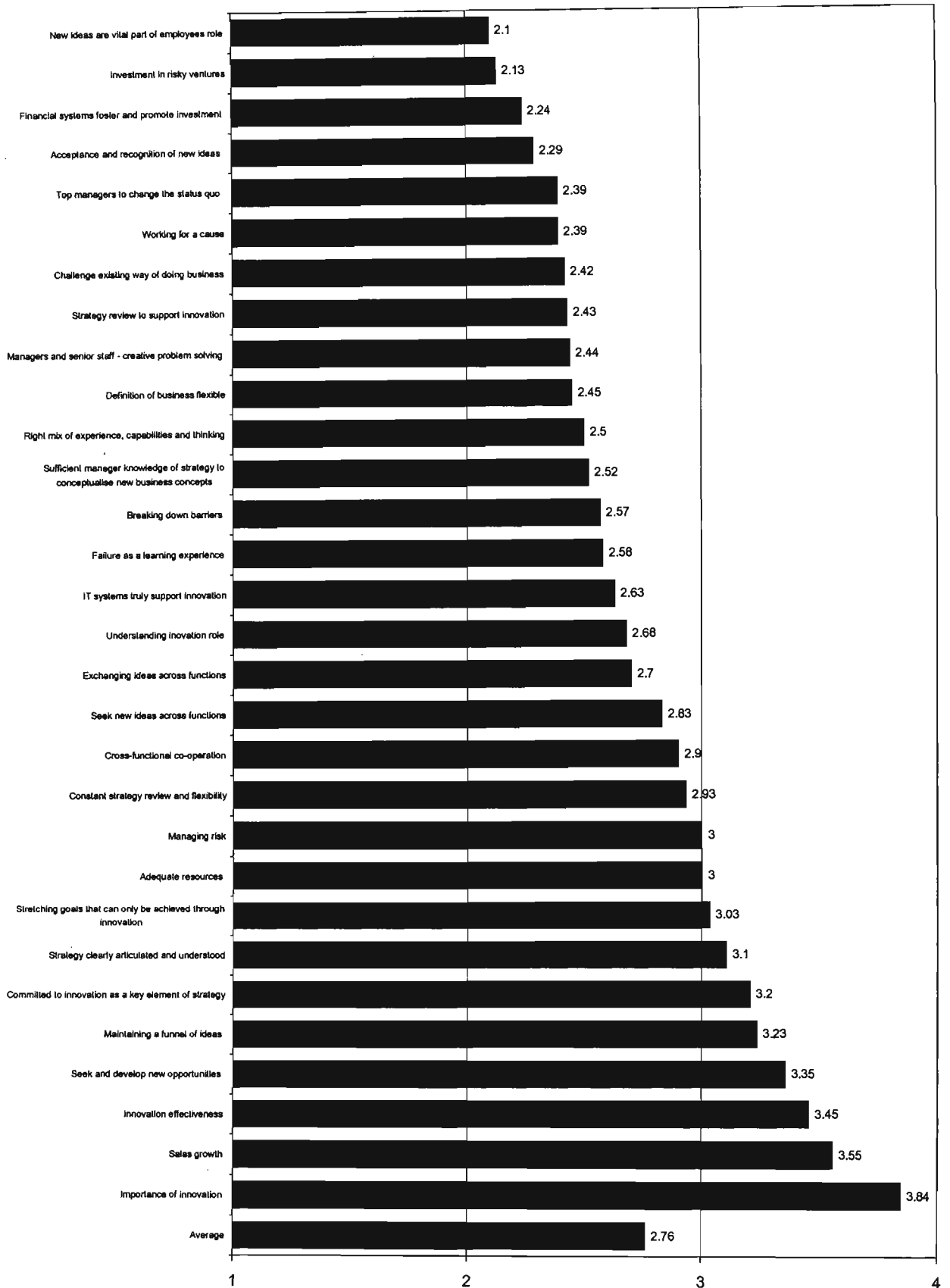


Fig. 15. Innovation Assessment - Marketing

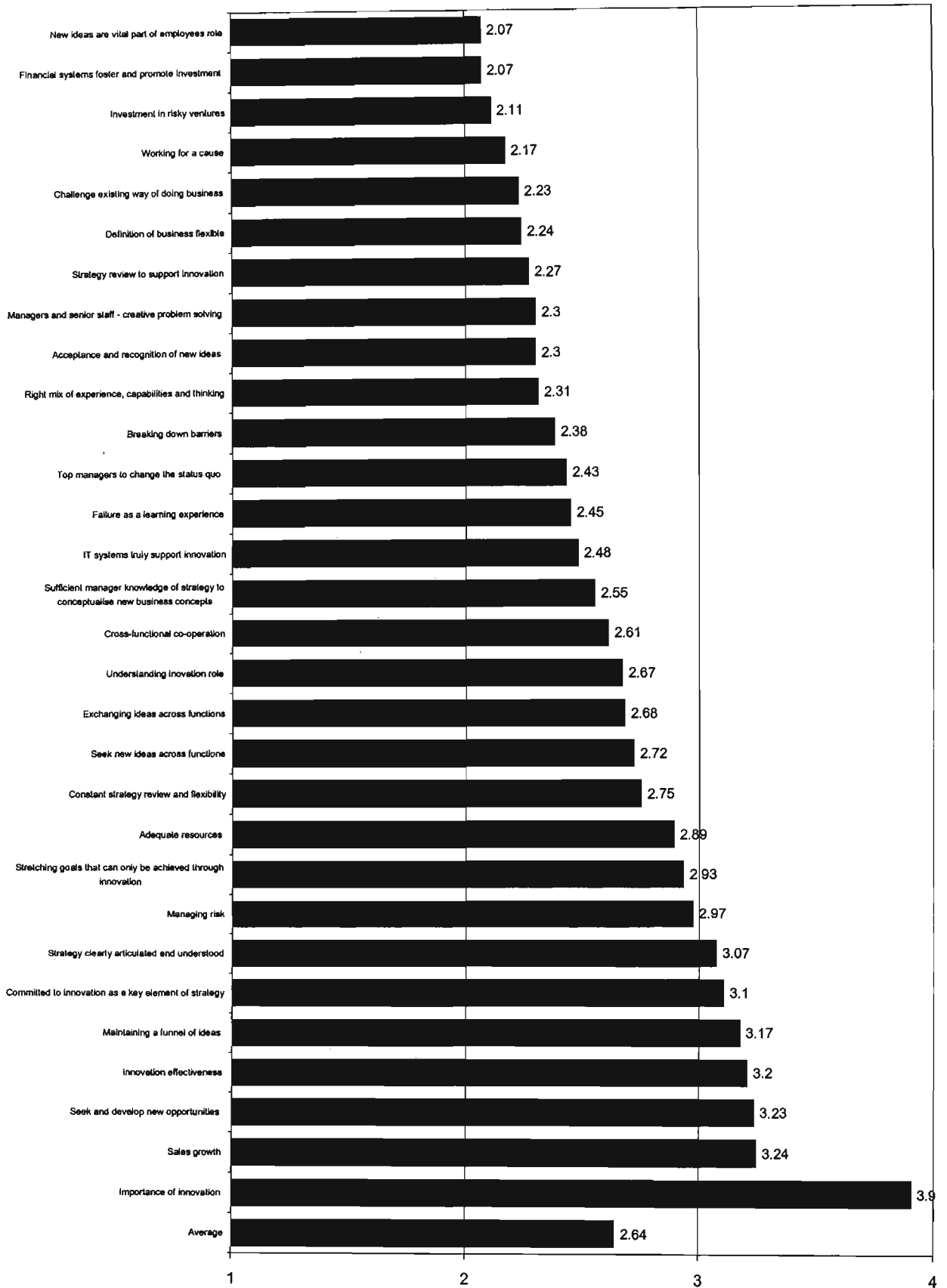


Fig. 16. Innovation Assessment - Development

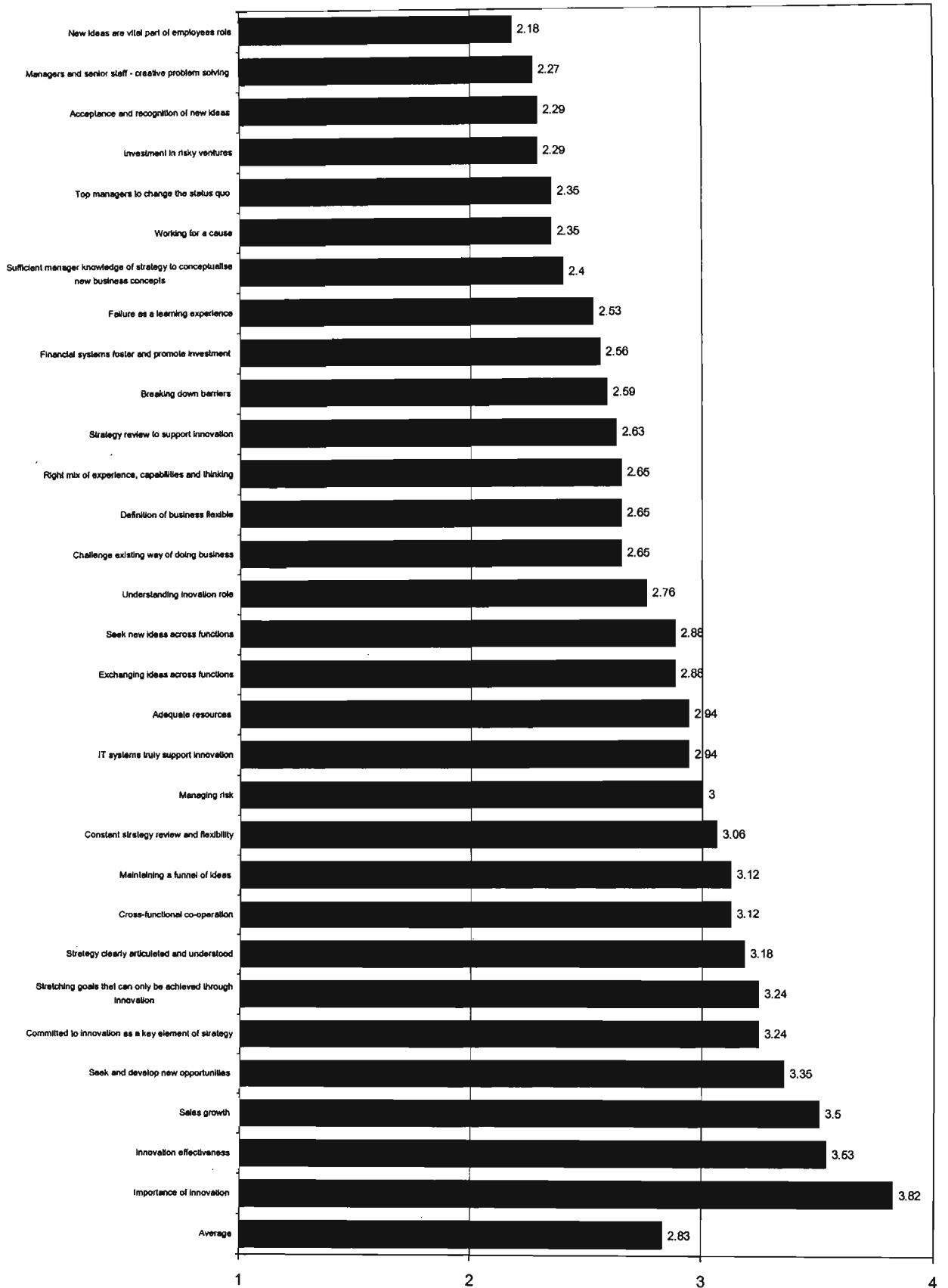


Fig. 17. Innovation Assessment - Consumer Understanding

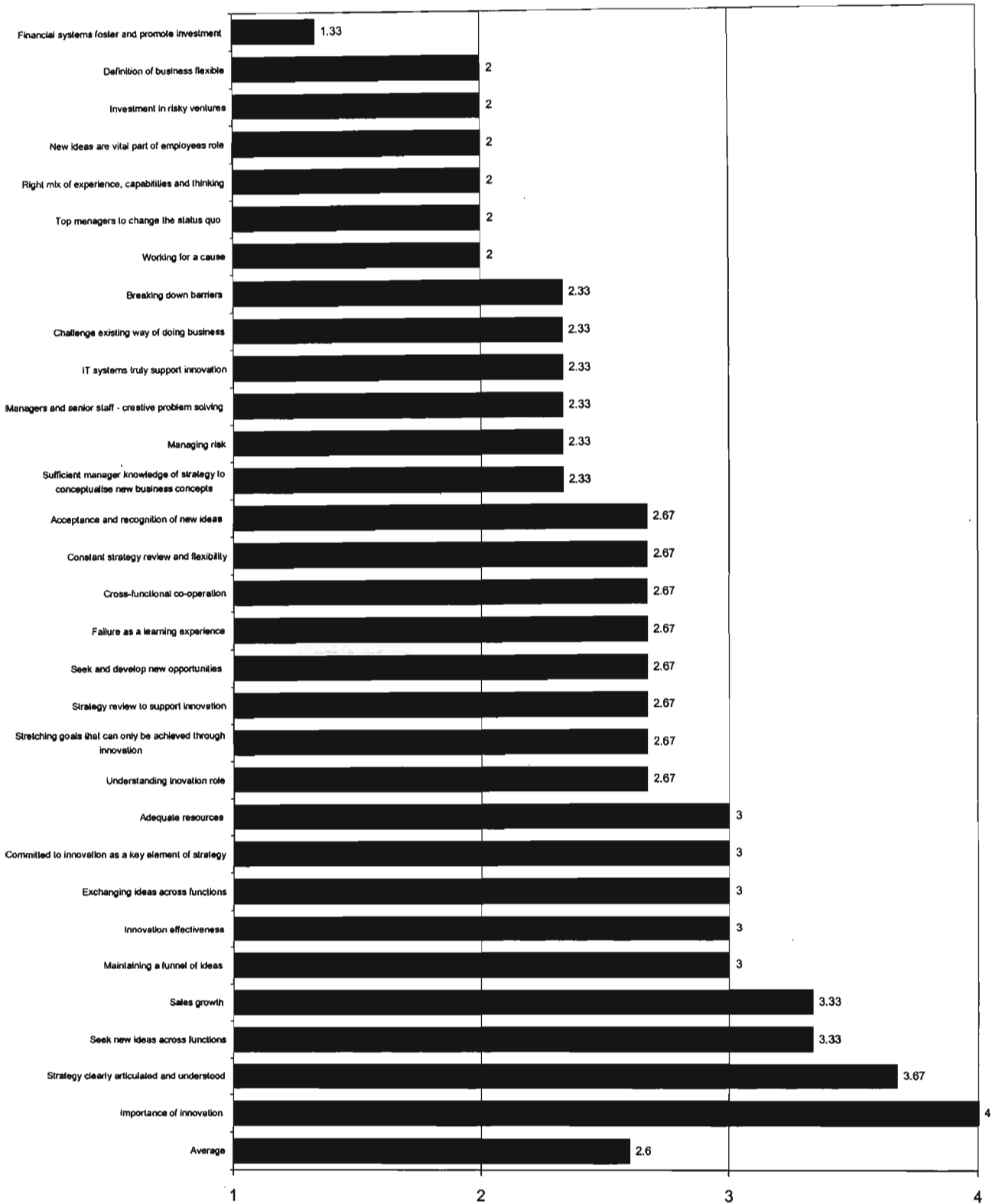


Fig. 18. Innovation Assessment - One year with the company

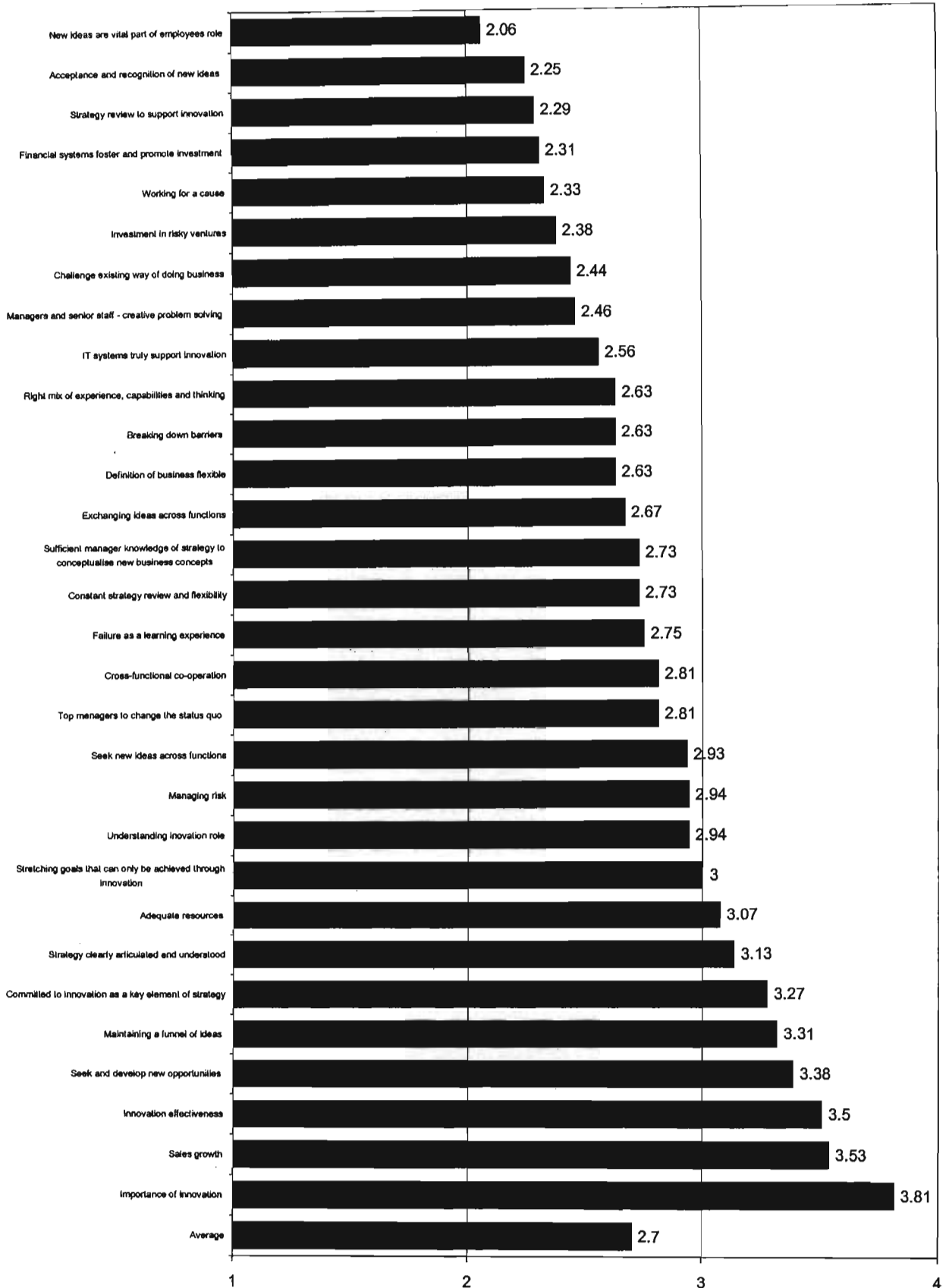


Fig. 19. Innovation Assessment - Two years with the company

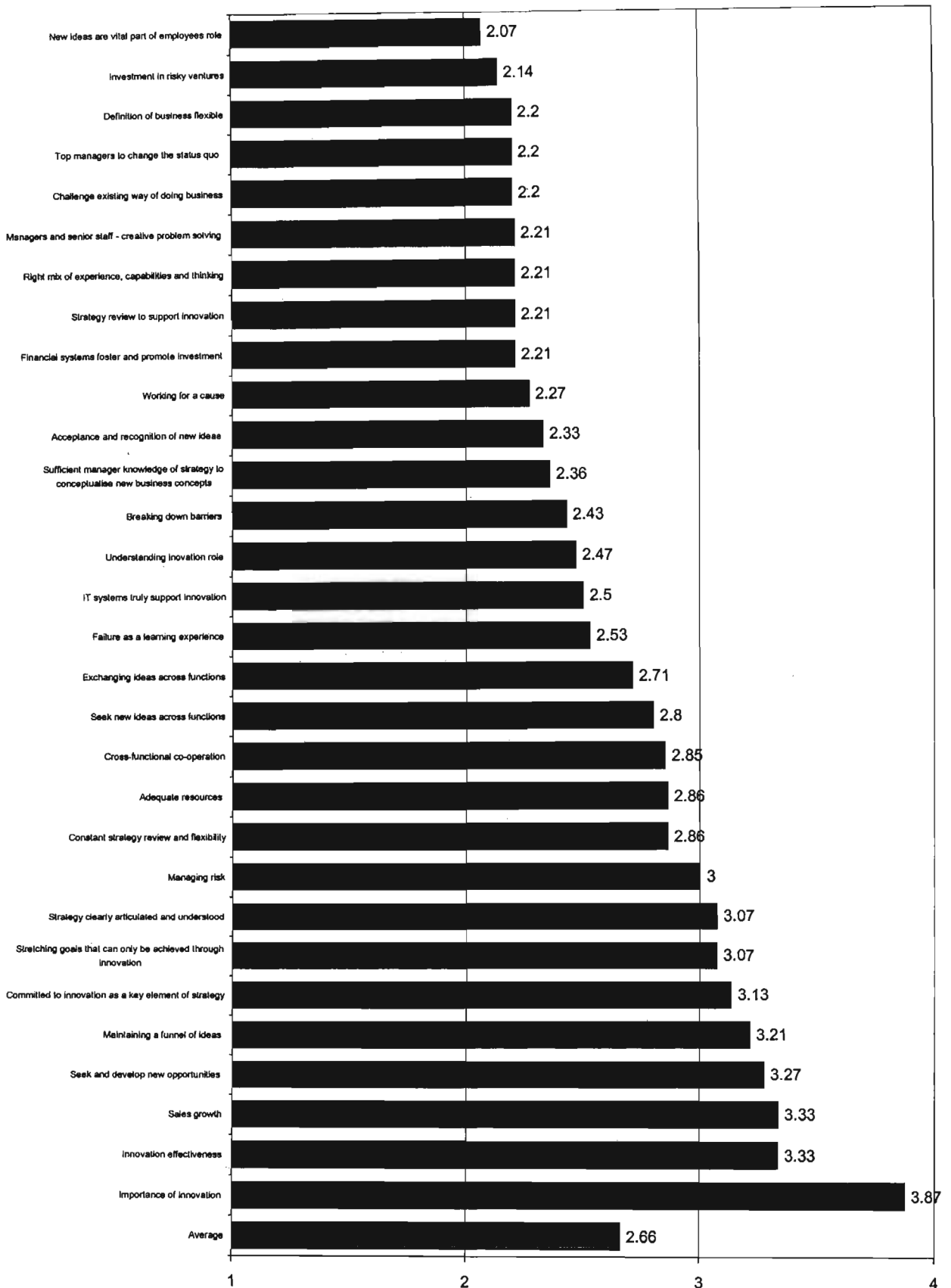


Fig. 20. Innovation assessment - Three years in the company

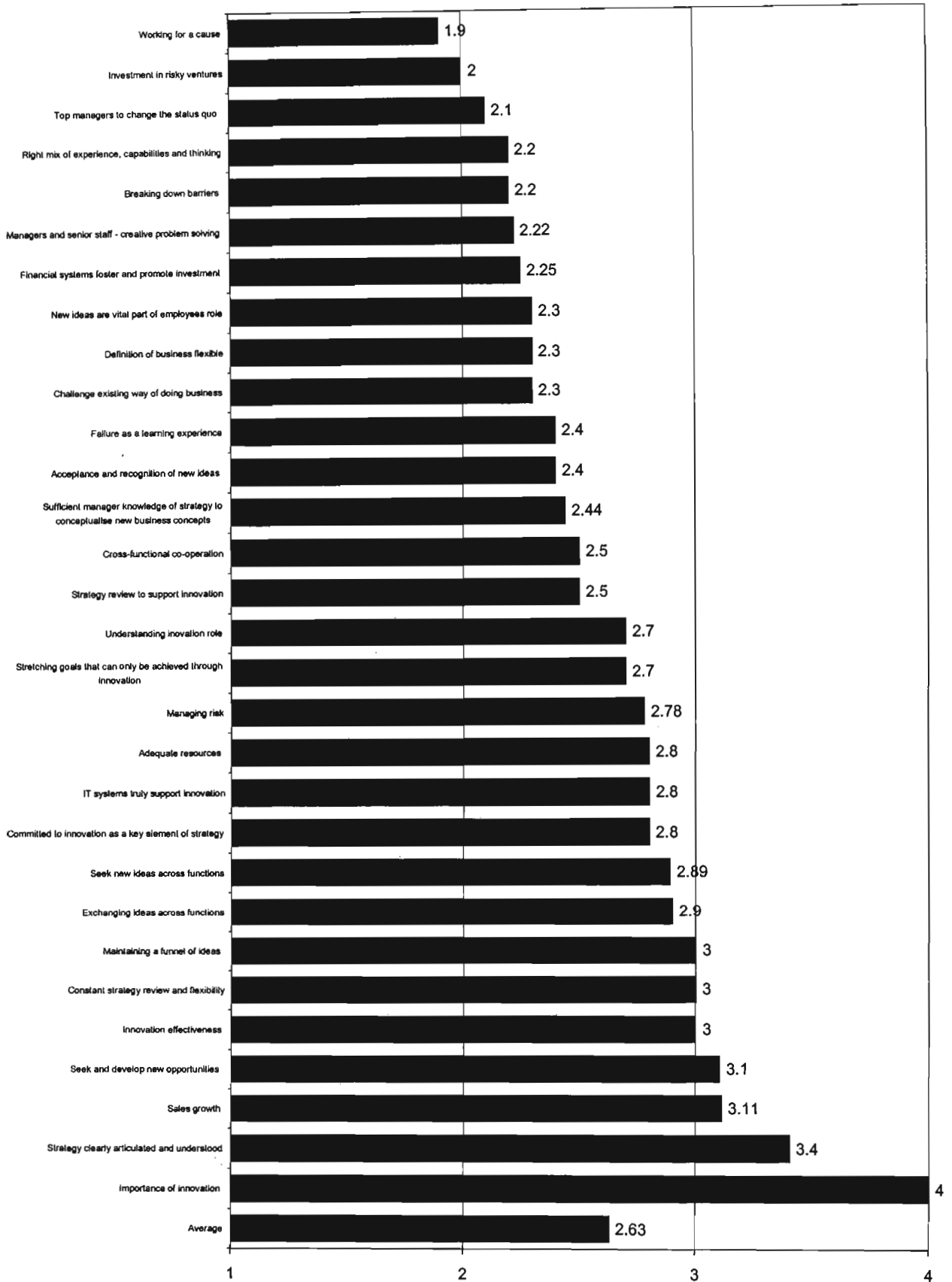
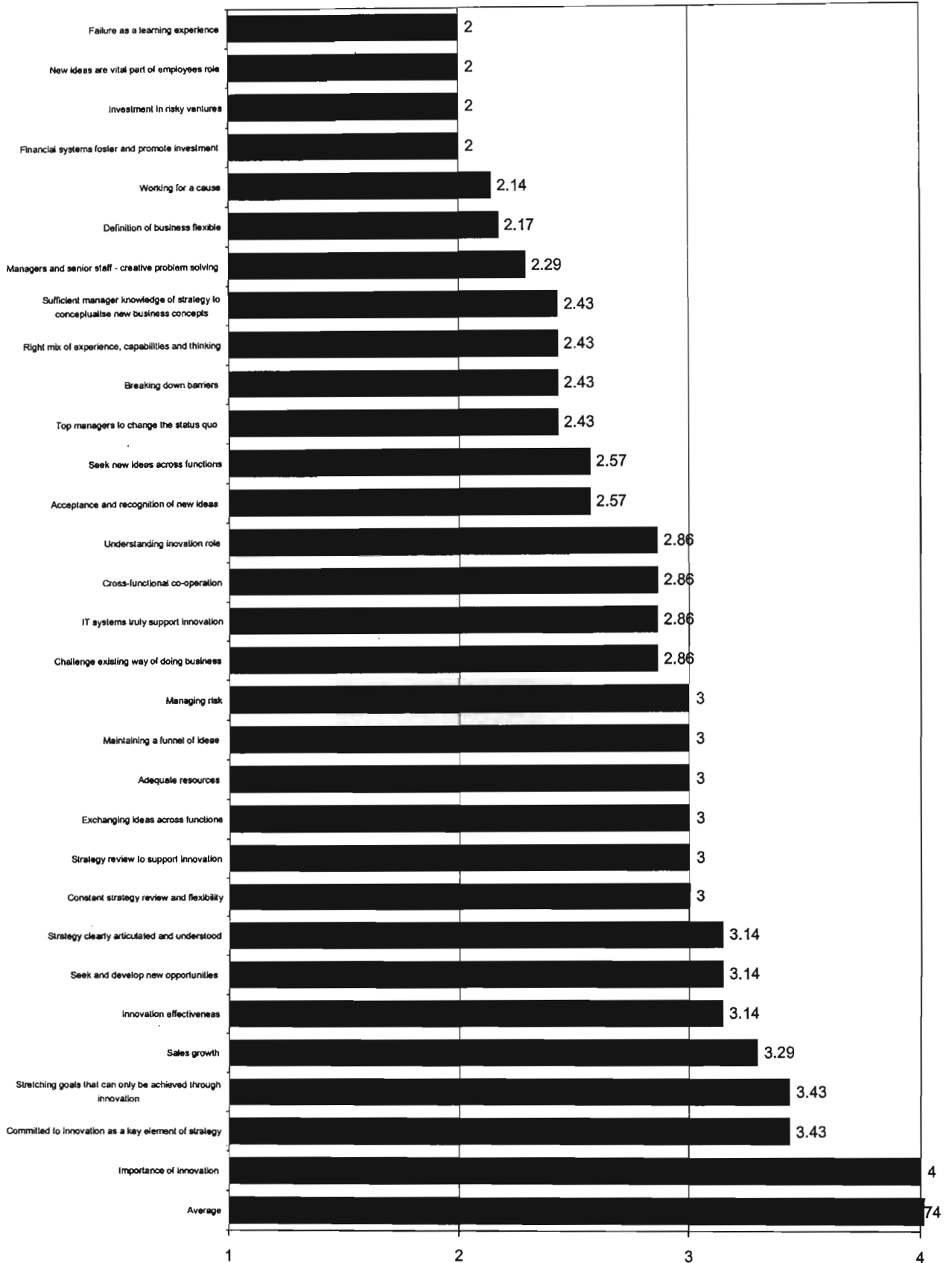


Fig. 21. Innovation assessment - Four years with the company



APPENDIX 3

Overall Perception : How do you perceive the importance of innovation in determining the future success of your company?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Critical	88	82	90	100	93	84	81	87	100	100
(wt3) Very	12	18	10	-	7	16	19	13	-	-
(wt2) Slightly	-	-	-	-	-	-	-	-	-	-
(wt1) Not at all	-	-	-	-	-	-	-	-	-	-
Mean	3.88	3.82	3.9	4	3.93	3.84	3.81	3.87	4	4
Standard Deviation	0.33	0.39	0.31	0	0.26	0.37	0.4	0.35	0	0
Standard Error	0.05	0.1	0.06	0	0.07	0.07	0.1	0.09	0	0
Error Variance	0	0.01	0	0	0	0	0.01	0.01	0	0

Overall Perception : How do you rank your company's effectiveness at innovation compared to other SA companies?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Top 25%	46	59	43	-	27	55	63	47	20	43
(wt3) Above average	38	35	33	100	40	35	25	40	60	29
(wt2) Below average	16	6	23	-	33	10	13	13	20	29
(wt1) Bottom 25%	-	-	-	-	-	-	-	-	-	-
Mean	3.3	3.53	3.2	3	2.93	3.45	3.5	3.33	3	3.14
Standard Deviation	0.74	0.62	0.81	0	0.8	0.68	0.73	0.72	0.67	0.9
Standard Error	0.1	0.15	0.15	0	0.21	0.12	0.18	0.19	0.21	0.34
Error Variance	0.01	0.02	0.02	0	0.04	0.01	0.03	0.03	0.04	0.12

Overall Perception : How do you rank your company's sales growth over the last 3 years compared to other companies in the industry

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Top 25%	36	47	30	33	7	52	50	33	10	57
(wt3) Above average	56	47	60	67	80	42	44	67	80	14
(wt2) Below average	4	-	7	-	13	-	-	-	-	29
(wt1) Bottom 25%	-	-	-	-	-	-	-	-	-	-
Mean	3.33	3.5	3.24	3.33	2.93	3.55	3.53	3.33	3.11	3.29
Standard Deviation	0.56	0.52	0.58	0.58	0.46	0.51	0.52	0.49	0.33	0.95
Standard Error	0.08	0.13	0.11	0.33	0.12	0.09	0.13	0.13	0.11	0.36
Error Variance	0.01	0.02	0.01	0.11	0.01	0.01	0.02	0.02	0.01	0.13

Innovation Capability - Commitment : Does your company actively seek and develop new opportunities for improving and growing the existing business?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) All the time	36	47	33	-	20	42	38	40	30	43
(wt3) Often	52	41	57	67	53	52	63	47	50	29
(wt2) Occasionally	12	12	10	33	27	6	-	13	20	29
(wt1) Never	-	-	-	-	-	-	-	-	-	-
Mean	3.24	3.35	3.23	2.67	2.93	3.35	3.38	3.27	3.1	3.14
Standard Deviation	0.66	0.7	0.63	0.58	0.7	0.61	0.5	0.7	0.74	0.9
Standard Error	0.09	0.17	0.11	0.33	0.18	0.11	0.13	0.18	0.23	0.34
Error Variance	0.01	0.03	0.01	0.11	0.03	0.01	0.02	0.03	0.05	0.12

Innovation Capability - Commitment : Does your company challenge the existing way of doing business and actively seek ways to 'break the rules' and radically shake up the industry?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) All the time	8	18		33	7	3	6		10	29
(wt3) Often	30	29	33		13	39	44	27	20	29
(wt2) Occasionally	54	53	57	33	60	55	38	67	60	43
(wt1) Never	8		10	33	20	3	13	7	10	
Mean	2.38	2.65	2.23	2.33	2.07	2.42	2.44	2.2	2.3	2.86
Standard Deviation	0.75	0.79	0.63	1.53	0.8	0.62	0.81	0.56	0.82	0.9
Standard Error	0.11	0.19	0.11	0.88	0.21	0.11	0.2	0.14	0.26	0.34
Error Variance	0.01	0.04	0.01	0.78	0.04	0.01	0.04	0.02	0.07	0.12

Innovation Capability - Commitment : Is your company truly committed to innovation in the sense that it is treated as a key element of the overall strategy, with significant time and energy devoted to it?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Completely	24	35	20		27	26	25	20	20	43
(wt3) Largely	66	53	70	100	60	65	69	73	50	57
(wt2) Slightly	6	12	3		7	6		7	20	
(wt1) Not at all	2		3		7				10	
Mean	3.14	3.24	3.1	3	3.07	3.2	3.27	3.13	2.8	3.43
Standard Deviation	0.61	0.66	0.62	0	0.8	0.55	0.46	0.52	0.92	0.53
Standard Error	0.09	0.16	0.11	0	0.21	0.1	0.12	0.13	0.29	0.2
Error Variance	0.01	0.03	0.01	0	0.04	0.01	0.01	0.02	0.08	0.04

Innovation Capability - Leadership : Has your company set really stretching goals that can only be achieved through innovation?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Fully	22	41	13	-	27	23	13	27	10	57
(wt3) Largely	58	41	67	67	47	58	75	53	50	29
(wt2) Somewhat	20	18	20	33	27	19	13	20	40	14
(wt1) Not at all	-	-	-	-	-	-	-	-	-	-
Mean	3.02	3.24	2.93	2.67	3	3.03	3	3.07	2.7	3.43
Standard Deviation	0.65	0.75	0.58	0.58	0.76	0.66	0.52	0.7	0.67	0.79
Standard Error	0.09	0.18	0.11	0.33	0.2	0.12	0.13	0.18	0.21	0.3
Error Variance	0.01	0.03	0.01	0.11	0.04	0.01	0.02	0.03	0.05	0.09

Innovation Capability - Leadership : To what extent do the people in your company feel they are working for a cause"

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Fully	-	-	-	-	-	-	-	-	-	-
(wt3) Largely	36	41	37	-	13	45	44	33	10	43
(wt2) Somewhat	48	53	40	100	53	48	38	60	70	29
(wt1) Not at all	14	6	20	-	33	6	13	7	20	29
Mean	2.22	2.35	2.17	2	1.8	2.39	2.33	2.27	1.9	2.14
Standard Deviation	0.69	0.61	0.76	0	0.68	0.62	0.72	0.59	0.57	0.9
Standard Error	0.1	0.15	0.14	0	0.17	0.11	0.19	0.15	0.18	0.34
Error Variance	0.01	0.02	0.02	0	0.03	0.01	0.03	0.02	0.03	0.12

Innovation Capability - Leadership : Do your top managers model the type of behaviour necessary for innovation, e.g. willingness to change the status quo and 'stick their necks out' by considering ideas that are truly unconventional?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Fully	4	6	3	-	7	3	13	-	-	-
(wt3) Largely	36	35	40	-	27	39	56	27	20	43
(wt2) Somewhat	54	47	53	100	60	52	31	67	70	57
(wt1) Not at all	6	12	3	-	7	6	-	7	10	-
Mean	2.38	2.35	2.43	2	2.33	2.39	2.81	2.2	2.1	2.43
Standard Deviation	0.67	0.79	0.63	0	0.72	0.67	0.66	0.56	0.57	0.53
Standard Error	0.09	0.19	0.11	0	0.19	0.12	0.16	0.14	0.18	0.2
Error Variance	0.01	0.04	0.01	0	0.03	0.01	0.03	0.02	0.03	0.04

Innovation Capability - Strategy : Is your company's strategy clearly articulated and understood, not only by the top management team but by most employees?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Fully	32	35	27	67	47	26	25	27	60	29
(wt3) Largely	50	47	53	33	27	58	63	53	20	57
(wt2) Somewhat	18	18	20	-	27	16	13	20	20	14
(wt1) Not at all	-	-	-	-	-	-	-	-	-	-
Mean	3.14	3.18	3.07	3.67	3.2	3.1	3.13	3.07	3.4	3.14
Standard Deviation	0.7	0.73	0.69	0.58	0.86	0.65	0.62	0.7	0.84	0.69
Standard Error	0.1	0.18	0.13	0.33	0.22	0.12	0.15	0.18	0.27	0.26
Error Variance	0.01	0.03	0.02	0.11	0.05	0.01	0.02	0.03	0.07	0.07

Innovation Capability - Strategy : How often does your company review the continued effectiveness of each segment of its strategy and consider new and different approaches that will outflank the competitors?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) All the time	6	18	-	-	7	3	-	-	10	29
(wt3) Often	68	65	70	67	53	81	69	80	70	43
(wt2) Occasionally	20	12	23	33	40	10	25	13	10	29
(wt1) Never	-	-	-	-	-	-	-	-	-	-
Mean	2.85	3.06	2.75	2.67	2.67	2.93	2.73	2.86	3	3
Standard Deviation	0.51	0.57	0.44	0.58	0.62	0.37	0.46	0.36	0.5	0.82
Standard Error	0.07	0.14	0.08	0.33	0.16	0.07	0.12	0.1	0.17	0.31
Error Variance	0.01	0.02	0.01	0.11	0.03	0	0.01	0.01	0.03	0.1

Innovation Capability - Strategy : To what extent is your company's definition of business" flexible in allowing it to seek" unconventional" opportur even if the services and markets?"

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Fully	2	6	-	-	7	-	6	-	-	-
(wt3) Largely	40	53	33	33	20	48	56	20	40	43
(wt2) Somewhat	48	41	53	33	47	48	31	80	50	14
(wt1) Not at all	8	-	10	33	20	3	6	-	10	29
Mean	2.37	2.65	2.24	2	2.14	2.45	2.63	2.2	2.3	2.17
Standard Deviation	0.67	0.61	0.64	1	0.86	0.57	0.72	0.41	0.67	0.98
Standard Error	0.1	0.15	0.12	0.58	0.23	0.1	0.18	0.11	0.21	0.4
Error Variance	0.01	0.02	0.01	0.33	0.05	0.01	0.03	0.01	0.05	0.16

Innovation Capability - Core Processes : Do your company's financial systems foster and promote investment in promoting/implementing new ideas, even if the risk of failure is significant?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Fully	2	6	-	-	7	-	6	-	-	-
(wt3) Largely	34	53	27	-	20	42	31	47	30	29
(wt2) Somewhat	38	24	47	33	47	32	50	20	40	43
(wt1) Not at all	20	12	20	67	20	19	13	27	10	29
Mean	2.19	2.56	2.07	1.33	2.14	2.24	2.31	2.21	2.25	2
Standard Deviation	0.8	0.81	0.72	0.58	0.86	0.79	0.79	0.89	0.71	0.82
Standard Error	0.12	0.2	0.14	0.33	0.23	0.15	0.2	0.24	0.25	0.31
Error Variance	0.01	0.04	0.02	0.11	0.05	0.02	0.04	0.06	0.06	0.1

Innovation Capability - Core Processes : Do your company's IT systems truly support innovation, rather than blocking the development and implementation of new ideas?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Fully	8	18	3	-	7	6	6	-	-	43
(wt3) Largely	48	59	43	33	47	48	44	47	80	14
(wt2) Somewhat	40	24	47	67	40	42	50	47	20	29
(wt1) Not at all	2	-	3	-	7	-	-	-	-	14
Mean	2.63	2.94	2.48	2.33	2.53	2.63	2.56	2.5	2.8	2.86
Standard Deviation	0.67	0.66	0.63	0.58	0.74	0.61	0.63	0.52	0.42	1.21
Standard Error	0.1	0.16	0.12	0.33	0.19	0.11	0.16	0.14	0.13	0.46
Error Variance	0.01	0.03	0.01	0.11	0.04	0.01	0.02	0.02	0.02	0.21

Innovation Capability - Core Processes : How many of the core processes in your company have been reviewed with the specific objective of enhancing their contributions to innovation?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) All	6	6	3	33	7	3	-	-	10	29
(wt3) Most	36	47	33	-	27	39	38	33	30	43
(wt2) Some	38	41	33	67	40	42	38	47	30	29
(wt1) None	10	-	17	-	20	6	13	13	10	-
Mean	2.42	2.63	2.27	2.67	2.21	2.43	2.29	2.21	2.5	3
Standard Deviation	0.78	0.62	0.83	1.15	0.89	0.69	0.73	0.7	0.93	0.82
Standard Error	0.12	0.15	0.16	0.67	0.24	0.13	0.19	0.19	0.33	0.31

Innovation Capability - Structure : How effective is your company in promoting meetings involving people from different functions for the purpose of exchanging ideas?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Extremely	18	35	10	-	13	19	13	20	10	29
(wt3) Largely	42	41	40	67	40	45	56	33	40	29
(wt2) Lightly	34	24	40	33	40	29	31	33	40	43
(wt1) Not at all	2	-	3	-	7	-	-	-	10	-
Mean	2.79	3.12	2.61	2.67	2.6	2.9	2.81	2.85	2.5	2.86
Standard Deviation	0.77	0.78	0.74	0.58	0.83	0.72	0.66	0.8	0.85	0.9
Standard Error	0.11	0.19	0.14	0.33	0.21	0.13	0.16	0.22	0.27	0.34
Error Variance	0.01	0.04	0.02	0.11	0.05	0.02	0.03	0.05	0.07	0.12

Innovation Capability - Structure : To what extent is your company committed to consistently working towards breaking down barriers between different parts of the organisation?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Fully	4 -		7 -	-		6	6 -		10 -	
(wt3) Largely	38	59	27	33	13	42	50	40	10	43
(wt2) Somewhat	54	41	60	67	80	48	44	53	70	57
(wt1) Not at all	2 -		3 -		7 -	-	-		10 -	
Mean	2.45	2.59	2.38	2.33	2.07	2.57	2.63	2.43	2.2	2.43
Standard Deviation	0.61	0.51	0.68	0.58	0.46	0.63	0.62	0.51	0.79	0.53
Standard Error	0.09	0.12	0.13	0.33	0.12	0.11	0.15	0.14	0.25	0.2
Error Variance	0.01	0.02	0.02	0.11	0.01	0.01	0.02	0.02	0.06	0.04

Innovation Capability - Structure : How effectively do people from different functions and regions in our company work together?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Extremely	2	6 -	-		7 -	-	-	-		14
(wt3) Largely	70	76	63	100	73	68	63	67	90	71
(wt2) Lightly	24	18	30 -		20	29	31	27	10	14
(wt1) Not at all	-	-	-	-	-	-	-	-	-	-
Mean	2.77	2.88	2.68	3	2.87	2.7	2.67	2.71	2.9	3
Standard Deviation	0.47	0.49	0.48	0	0.52	0.47	0.49	0.47	0.32	0.58
Standard Error	0.07	0.12	0.09	0	0.13	0.09	0.13	0.13	0.1	0.22
Error Variance	0	0.01	0.01	0	0.02	0.01	0.02	0.02	0.01	0.05

Innovation Capability - Resources : Does your company deliberately seek to identify individuals with talent for innovation and to select teams with the right mix of experience, capabilities and thinking styles to enhance creativity?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) All the time	4	6	3 -		13 -	-		7	10 -	
(wt3) Often	40	59	30	33	13	52	63	13	20	57
(wt2) Occasionally	46	29	57	33	53	42	38	67	50	29
(wt1) Never	8	6	7	33	20	3 -		7	20	14
Mean	2.41	2.65	2.31	2	2.2	2.5	2.63	2.21	2.2	2.43
Standard Deviation	0.7	0.7	0.66	1	0.94	0.57	0.5	0.7	0.92	0.79
Standard Error	0.1	0.17	0.12	0.58	0.24	0.1	0.13	0.19	0.29	0.3
Error Variance	0.01	0.03	0.02	0.33	0.06	0.01	0.02	0.03	0.08	0.09

Innovation Capability - Resources : Is your company willing to invest reasonable amounts in risky but exciting ventures?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) All the time	4	6	3 -		7	3	13 -	-	-	
(wt3) Often	16	24	13 -		20	13	13	20	10	29
(wt2) Occasionally	68	65	67	100	53	74	75	67	70	43
(wt1) Never	8	6	10 -		13	6 -		7	10	29
Mean	2.17	2.29	2.11	2	2.21	2.13	2.38	2.14	2	2
Standard Deviation	0.63	0.69	0.63	0	0.8	0.57	0.72	0.53	0.5	0.82
Standard Error	0.09	0.17	0.12	0	0.21	0.1	0.18	0.14	0.17	0.31
Error Variance	0.01	0.03	0.01	0	0.05	0.01	0.03	0.02	0.03	0.1

Innovation Capability - Resources : Are your company's development facilities and resources adequate to enable them to remain competitive?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Fully	28	24	30	33	20	32	38	27	20	29
(wt3) Largely	40	53	33	33	40	39	38	40	40	43
(wt2) Somewhat	20	18	20	33	27	19	6	13	40	29
(wt1) Not at all	8	6	10	-	13	6	13	13	-	-
Mean	2.92	2.94	2.89	3	2.67	3	3.07	2.86	2.8	3
Standard Deviation	0.92	0.83	0.99	1	0.98	0.91	1.03	1.03	0.79	0.82
Standard Error	0.13	0.2	0.19	0.58	0.25	0.17	0.27	0.27	0.25	0.31
Error Variance	0.02	0.04	0.04	0.33	0.06	0.03	0.07	0.08	0.06	0.1

Innovation Capability - Attitudes : Is equal acceptance and recognition given to new ideas that originate from any source within the organisation?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) All the time	2	-	3	-	7	-	-	-	-	14
(wt3) Often	34	41	27	67	33	39	31	40	40	29
(wt2) Occasionally	58	47	67	33	60	52	63	53	60	57
(wt1) Never	6	12	3	-	-	10	6	7	-	-
Mean	2.32	2.29	2.3	2.67	2.47	2.29	2.25	2.33	2.4	2.57
Standard Deviation	0.62	0.69	0.6	0.58	0.64	0.64	0.58	0.62	0.52	0.79
Standard Error	0.09	0.17	0.11	0.33	0.17	0.12	0.14	0.16	0.16	0.3
Error Variance	0.01	0.03	0.01	0.11	0.03	0.01	0.02	0.03	0.03	0.09

Innovation Capability - Attitudes : What proportion of employees regard looking for, and developing new ideas as being a vital part of their role, rather than being the responsibility of someone else?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) All	-	-	-	-	-	-	-	-	-	-
(wt3) Most	14	24	10	-	13	16	13	13	30	-
(wt2) Some	82	71	87	100	87	77	81	80	70	100
(wt1) None	4	6	3	-	-	6	6	7	-	-
Mean	2.1	2.18	2.07	2	2.13	2.1	2.06	2.07	2.3	2
Standard Deviation	0.42	0.53	0.37	0	0.35	0.47	0.44	0.46	0.48	0
Standard Error	0.06	0.13	0.07	0	0.09	0.08	0.11	0.12	0.15	0
Error Variance	0	0.02	0	0	0.01	0.01	0.01	0.01	0.02	0

Innovation Capability - Attitudes : Do people in your company regard the failure a risky venture as being a learning experience?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) All the time	4	6	3	-	7	3	-	7	10	-
(wt3) Often	44	41	43	67	20	52	75	40	30	14
(wt2) Occasionally	46	53	43	33	53	45	25	53	50	57
(wt1) Never	4	-	7	-	13	-	-	-	10	14
Mean	2.49	2.53	2.45	2.67	2.21	2.58	2.75	2.53	2.4	2
Standard Deviation	0.65	0.62	0.69	0.58	0.8	0.56	0.45	0.64	0.84	0.63
Standard Error	0.09	0.15	0.13	0.33	0.21	0.1	0.11	0.17	0.27	0.26
Error Variance	0.01	0.02	0.02	0.11	0.05	0.01	0.01	0.03	0.07	0.07

Innovation skills : How many managers and senior staff have been trained in creative problem solving processes?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) All	-	-	-	-	-	-	-	-	-	-
(wt3) Most	34	24	40	33	13	42	50	27	30	29
(wt2) Some	48	65	37	67	67	42	19	60	50	71
(wt1) None	8	-	13	-	20	3	13	7	10	-
Mean	2.29	2.27	2.3	2.33	1.93	2.44	2.46	2.21	2.22	2.29
Standard Deviation	0.63	0.46	0.72	0.58	0.59	0.58	0.78	0.58	0.67	0.49
Standard Error	0.09	0.12	0.14	0.33	0.15	0.11	0.22	0.15	0.22	0.18
Error Variance	0.01	0.01	0.02	0.11	0.02	0.01	0.05	0.02	0.05	0.03

Innovation skills : How many of our people truly understand the role and importance of innovation in the business?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) All	8	12	7	-	13	3	13	-	10	14
(wt3) Most	54	53	53	67	33	61	69	47	50	57
(wt2) Some	38	35	40	33	53	35	19	53	40	29
(wt1) None	-	-	-	-	-	-	-	-	-	-
Mean	2.7	2.76	2.67	2.67	2.6	2.68	2.94	2.47	2.7	2.86
Standard Deviation	0.61	0.66	0.61	0.58	0.74	0.54	0.57	0.52	0.67	0.69
Standard Error	0.09	0.16	0.11	0.33	0.19	0.1	0.14	0.13	0.21	0.26
Error Variance	0.01	0.03	0.01	0.11	0.04	0.01	0.02	0.02	0.05	0.07

Innovation skills : How many of our managers and senior staff have sufficient knowledge of the elements of strategy to enable them to conceptualise new business concepts?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) All	-	-	-	-	-	-	-	-	-	-
(wt3) Most	46	35	53	33	33	48	69	33	40	43
(wt2) Some	48	53	43	67	67	45	25	60	50	57
(wt1) None	-	-	-	-	-	-	-	-	-	-
Mean	2.49	2.4	2.55	2.33	2.33	2.52	2.73	2.36	2.44	2.43
Standard Deviation	0.51	0.51	0.51	0.58	0.49	0.51	0.46	0.5	0.53	0.53
Standard Error	0.07	0.13	0.09	0.33	0.13	0.09	0.12	0.13	0.18	0.2
Error Variance	0.01	0.02	0.01	0.11	0.02	0.01	0.01	0.02	0.03	0.04

Innovation Process : How effective is your company at consistently maintaining a funnel of ideas in various stages of development from conception through to implementation?**

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Extremely	26	24	30	-	13	35	38	27	10	29
(wt3) Largely	60	65	53	100	73	48	56	60	80	43
(wt2) Lightly	12	12	13	-	13	13	6	7	10	29
(wt1) Not at all	-	-	-	-	-	-	-	-	-	-
Mean	3.14	3.12	3.17	3	3	3.23	3.31	3.21	3	3
Standard Deviation	0.61	0.6	0.66	0	0.53	0.68	0.6	0.58	0.47	0.82
Standard Error	0.09	0.15	0.12	0	0.14	0.12	0.15	0.15	0.15	0.31
Error Variance	0.01	0.02	0.01	0	0.02	0.02	0.02	0.02	0.02	0.1

Innovation Process : How effective is your company in actively seeking new ideas from all possible sources, both internally and externally, including customers/consumers?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Extremely	10	12	7	33	13	10	13	13	10	-
(wt3) Largely	58	59	57	67	53	58	63	53	60	57
(wt2) Lightly	28	24	33	-	33	26	19	33	20	43
(wt1) Not at all	-	-	-	-	-	-	-	-	-	-
Mean	2.81	2.88	2.72	3.33	2.8	2.83	2.93	2.8	2.89	2.57
Standard Deviation	0.61	0.62	0.59	0.58	0.68	0.6	0.59	0.68	0.6	0.53
Standard Error	0.09	0.15	0.11	0.33	0.17	0.11	0.15	0.17	0.2	0.2
Error Variance	0.01	0.02	0.01	0.11	0.03	0.01	0.02	0.03	0.04	0.04

Innovation Process : How effective is our company at managing risk?

Base : All Respondents

	DEPARTMENT			FUNCTION		LENGTH IN JOB				
	TOTAL	Product Dev	Marketing	Consumer	Manager	Non-Manager	1 year	2 years	3 years	4 years
Base	50	17	30	3	15	31	16	15	10	7
(wt4) Extremely	12	12	13	-	20	10	13	13	10	14
(wt3) Largely	68	71	70	33	47	77	69	73	50	71
(wt2) Lightly	18	12	17	67	33	10	19	13	30	14
(wt1) Not at all	-	-	-	-	-	-	-	-	-	-
Mean	2.94	3	2.97	2.33	2.87	3	2.94	3	2.78	3
Standard Deviation	0.56	0.52	0.56	0.58	0.74	0.45	0.57	0.53	0.67	0.58
Standard Error	0.08	0.13	0.1	0.33	0.19	0.08	0.14	0.14	0.22	0.22
Error Variance	0.01	0.02	0.01	0.11	0.04	0.01	0.02	0.02	0.05	0.05