



Corporate Entrepreneurship

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hhu

Lehrstuhl für BWL,
insb. Management



Schedule

Day		Time	Content
Saturday	January 27	9am – 4:30pm	Lecture with interactions
Friday	February 2	6:15pm to 9:30pm	Lecture with interactions
Saturday	February 3	9am – 4:30pm	Business Planning
Friday	February 9	6:15pm to 9:30pm	Business planning
Saturday	February 10	9am – 12:15pm	Business planning

Agenda



- 1. Introduction**
- 2. Fundamentals of innovation and entrepreneurship**
- 3. Management approaches to the establishment of innovation and entrepreneurship**
 - 3.1 Planning
 - 3.2 Organization
 - 3.3 Management
- 4. Change management**

Why do some companies exist longer than others?

1. Introduction

Interesting observations:

- In 1959, General Motors was named by Forbes as the largest and strongest manufacturing company in the USA. 50 years later, it was insolvent.
- In 2000, Gary Hamel described Enron as one of the smartest companies in the world. In 2001, it no longer existed
- The company Long-Term Capital Management had two Nobel Prize winners on its management team, but collapsed in 1998

Studies show that...

- Of more than six million US companies, only 0.1% have existed for more than 40 years
- Only 160 of 1,008 large US companies survived the period from 1962 to 1998
- It is assumed that the estimated average remaining life of a company is between 5.8 and 14.6 years

Why do companies no longer exist or lose their competitive position over time?

Why are innovation and entrepreneurship important? Overview of drivers of change in corporate environments

1. Introduction

Drivers	Characteristics
Changes in competitive behaviour	<ul style="list-style-type: none">– Changing of the guard in individual industries– Superiority and dominance of young start-up companies in fast growing markets with many opportunities
Changes through technological development	<ul style="list-style-type: none">– Constant technological progress in many industries– Replacement of existing solutions with new technologies
Changes in customer behaviour	<ul style="list-style-type: none">– Increase in customer demands with decreasing loyalty– Increasing importance of individualization of products
Changes in the institutional context	<ul style="list-style-type: none">– Entry of companies from previously closed planned economies in many industries– Tightening of legal regulations in many industries

Every year Forbes selects the "World's Most Innovative Companies" - in 2013 there was only one company in the top 10 that was founded before 1990

1. Introduction

Rank	Company	Country	Year of foundation
1	salesforce.com	USA	1999
2	Alexion Pharmaceuticals	USA	1992
3	VMware	USA	1998
4	Regeneron Pharmaceuticals	USA	1998
5	ARM Holdings	Great Britain	1990
6	Baidu	China	2000
7	Amazon.com	USA	1994
8	Intuitive Surgical	USA	1995
9	Rakuten	Japan	1997
10	natural cosmetics	Brazil	1969

Source: Forbes (2013)

Revolution of an entire industry through new technologies: How the newspaper market has changed

EXAMPLE

1. Introduction

Frankfurter Rundschau

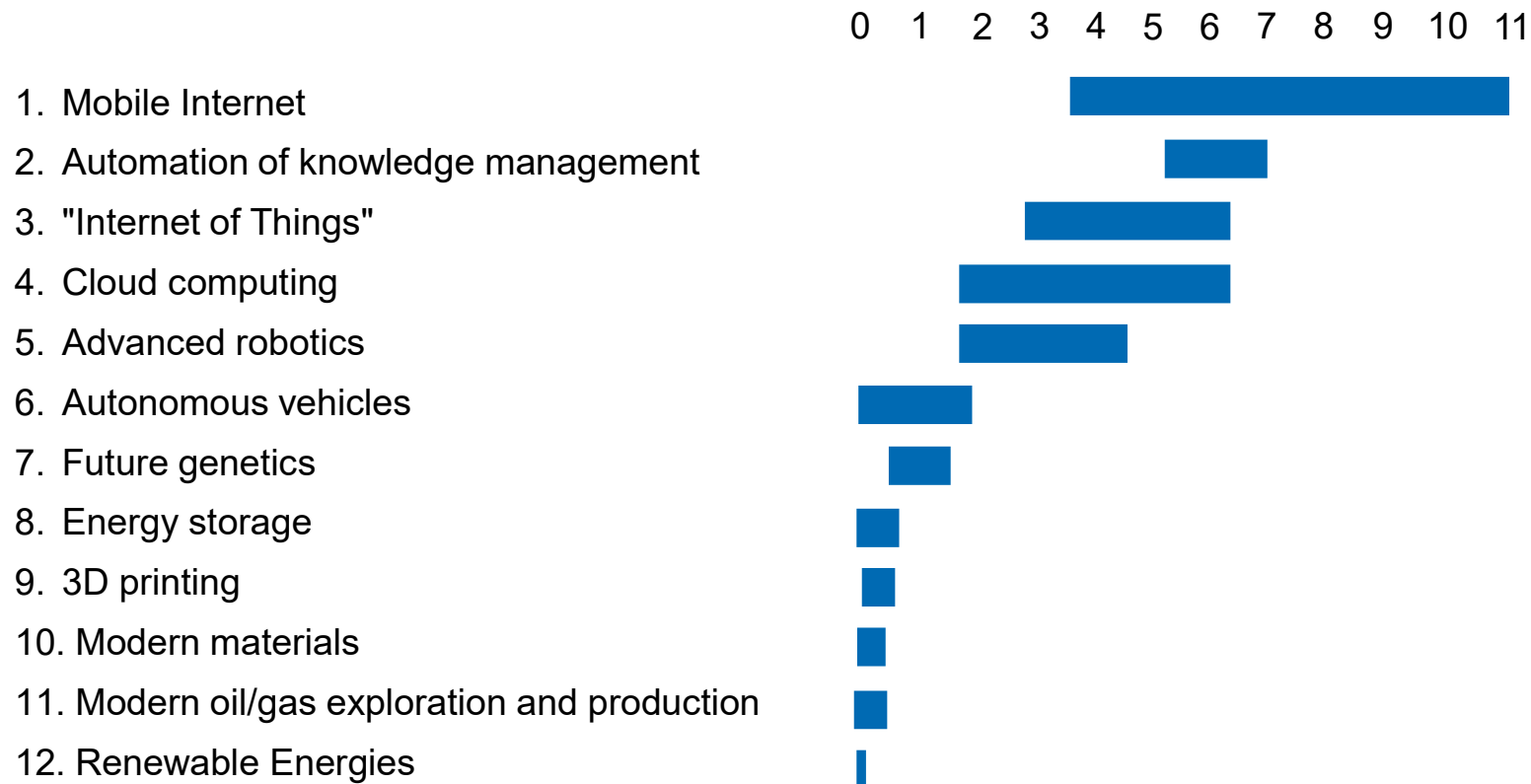
In 2012, the *Frankfurter Rundschau* made a loss of 16 million euros - just one of many indications of the difficult situation of daily newspapers in Germany. In 1992, there were still 426 daily newspapers in Germany, in 2012, according to the Federal Association of German Newspaper Publishers, there were only 333. In 2013, almost 18 million copies of daily newspapers were sold daily, compared to almost 30 million in the early 1990s.

A major reason for this development is the decline in advertising revenues in the print sector. Advertisers prefer to invest in online advertising, so that in the first few months of 2012 Google, which was only founded in the late 1990s, generated more advertising revenue than all the newspapers and magazines in the USA combined. In the USA, there are now metropolises with millions of inhabitants - such as New Orleans - where no printed regional daily newspapers can be bought at all.

Technological developments, especially through the Internet, coupled with changes in consumer behaviour, have thus led to serious changes in an entire industry.

Estimation of the global economic potential of disruptive innovations in 2025 (including monetized customer benefits) in trillions of US dollars

1. Introduction

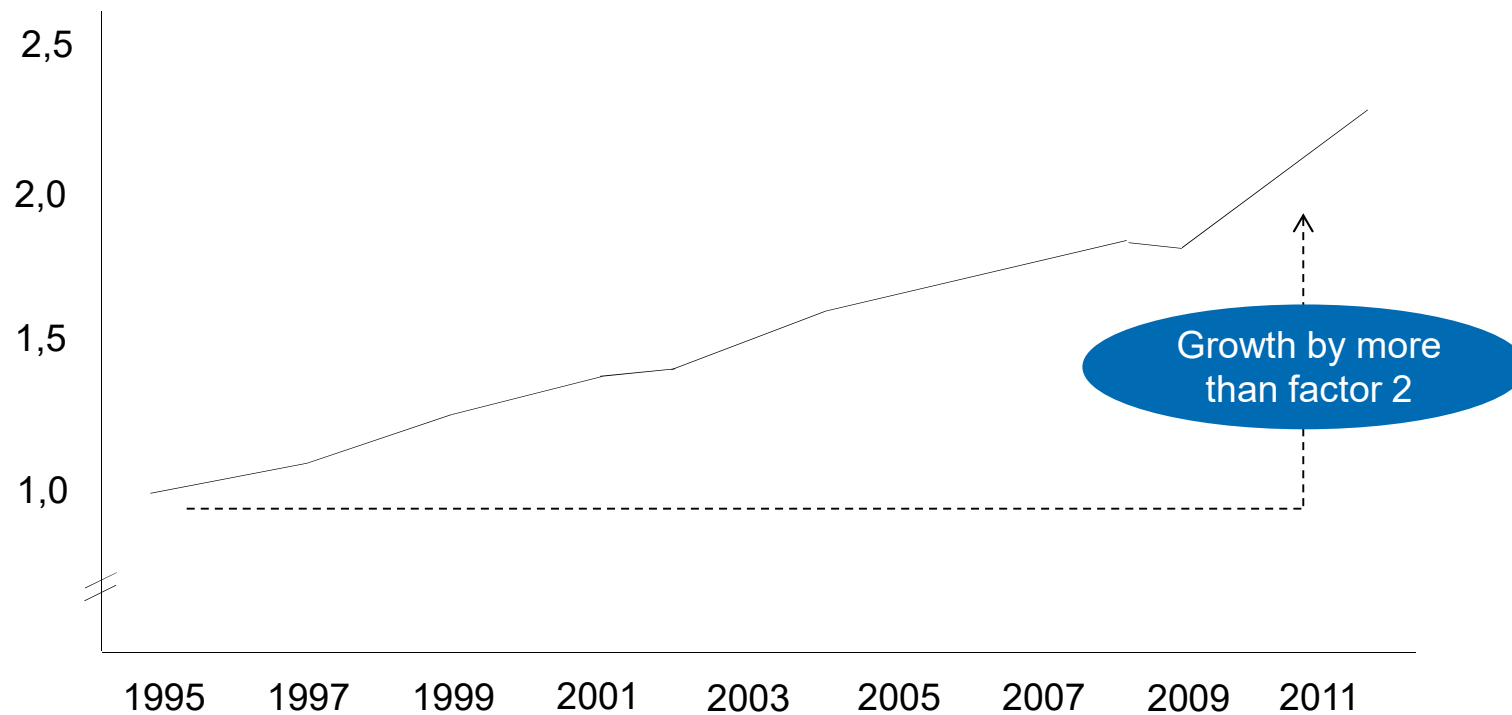


Source: Manvika et al. (2013)

Between 1995 and 2012, the number of patents filed annually worldwide has more than doubled

1. Introduction

Worldwide patent applications
(in millions)



Source: WIPO (2013)

Life cycle models: Individual phases show different situations, organisational structures, innovations, and strategies

1. Introduction

	Start-up phase	Growth phase	Maturity phase	Decline phase
Situation	<ul style="list-style-type: none"> – Small size – Low age – Founder-Dominant 	<ul style="list-style-type: none"> – Medium size – Medium age – Multiple owners 	<ul style="list-style-type: none"> – Large size – Higher age – High dispersion of shares 	<ul style="list-style-type: none"> – Large market – High competition intensity
Organizational Structure	<ul style="list-style-type: none"> – Informal organisational structure – Undifferentiated structure – Centralisation of power 	<ul style="list-style-type: none"> – First formalisation – Functional organisational structure – Moderate differentiation 	<ul style="list-style-type: none"> – High formalisation and bureaucracy – Functional organisational structure – Moderate centralisation 	<ul style="list-style-type: none"> – High formalisation and bureaucracy – Moderate centralisation – Low exchange of information
Innovation and strategy	<ul style="list-style-type: none"> – High innovativeness – Niche strategy – Considerable willingness to take risks 	<ul style="list-style-type: none"> – Expansion of the market-product portfolio into adjacent areas – Incremental innovation – Rapid growth 	<ul style="list-style-type: none"> – Consolidation of the market-product strategy – Focus on efficiency – Conservative strategy – Low growth 	<ul style="list-style-type: none"> – Low innovativeness – Price wars – Closure of parts of the company – Risk aversion – Low growth

Comparison of the competitive advantages of start-ups and established companies

1. Introduction

Competitive advantages of young start-up companies

- Distinctive flexibility
- No past liabilities
- Close exchange and physical proximity between employees

Competitive advantages of established companies

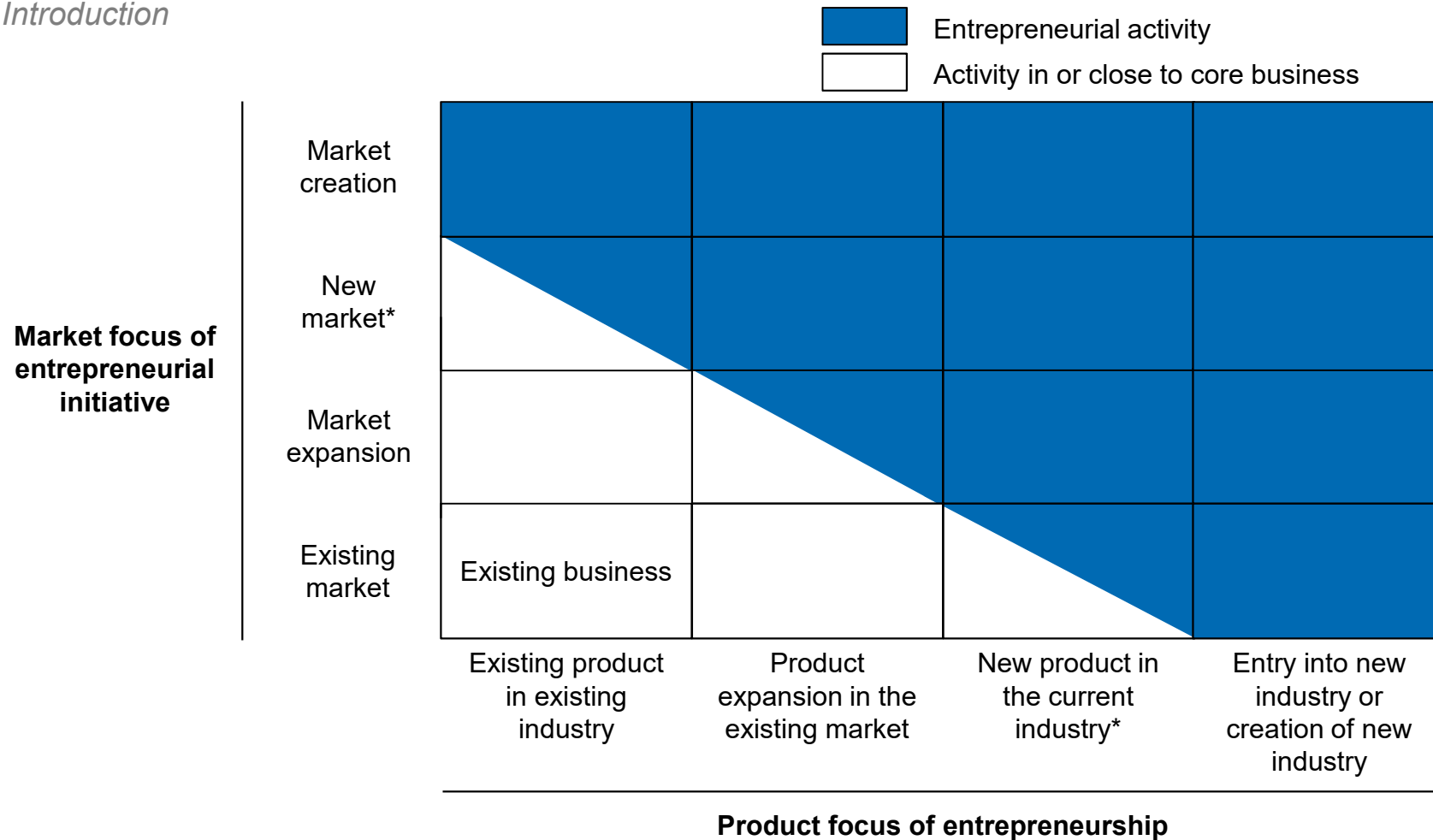
- Distinctive resource equipment
- Experience with product developments
- Typically larger portfolio of products (i.e., not fully dependent on individual projects)



Who is better positioned to act entrepreneurially?

Corporate Entrepreneurship expresses itself in the entry into new markets or products for the focal company

1. Introduction



* "New" for the focal company

Source: Kuratko et al. (2011)

Milliken and Company: from a manufacturer of fabrics to a high-tech company that produces specialty materials

EXAMPLE

1. Introduction

Milliken

Milliken and Company is a US firm that has completed a transformation from a textile company to a high-tech enterprise, as McGrath (2012) describes. Milliken was founded in 1865 as a wool producer and was a classic textile company producing fabrics until the 1960s.




While the main US competitors gradually went bankrupt from the 1970s onwards, Roger Milliken deliberately closed one textile production after another. For he had new plans: he had realized early on that he would no longer have a chance in the textile business due to the emerging global competition. By 1991, for example, 58 percent of all fabrics and clothing sold in the US retail trade were already imported. Roger Milliken had seen this development coming. He had already invested in his own research laboratory in 1958 and in many new technologies and markets in the years that followed.

Today, Milliken is a high-tech company that produces specialty materials that make mattresses fire-resistant, windmills lighter and refrigerator containers clearer. Milliken has often taken on employees from previous waves of innovation, provided consistent internal training and prepared them for future challenges.

Examples of entrepreneurial activities of established companies (1/2)

EXAMPLE




1. Introduction

Company	Entrepreneurial activity	Underlying (main) change(s)	Innovation	Proactivity	Risk appetite
Amazon.com 	Entry into the cloud computing business	Improvement of internet connections (<i>technology</i>), increase of acceptance of cloud solutions (<i>customer behaviour</i>)	high	high	medium
Apple 	Entry into the online music market in the early 2000s	Improvement of Internet connections (<i>technology</i>), unclear legal situation of file sharing (<i>institutional framework</i>), preference of customers to buy individual songs (<i>customer behaviour</i>)	high	high	medium to high
Dropbox 	Expansion of the product offering through project management tools for business customers	Increasing acceptance of cloud solutions (<i>customer behavior</i>)	medium to high	high	medium to high

Examples of entrepreneurial activities of established companies (2/2)

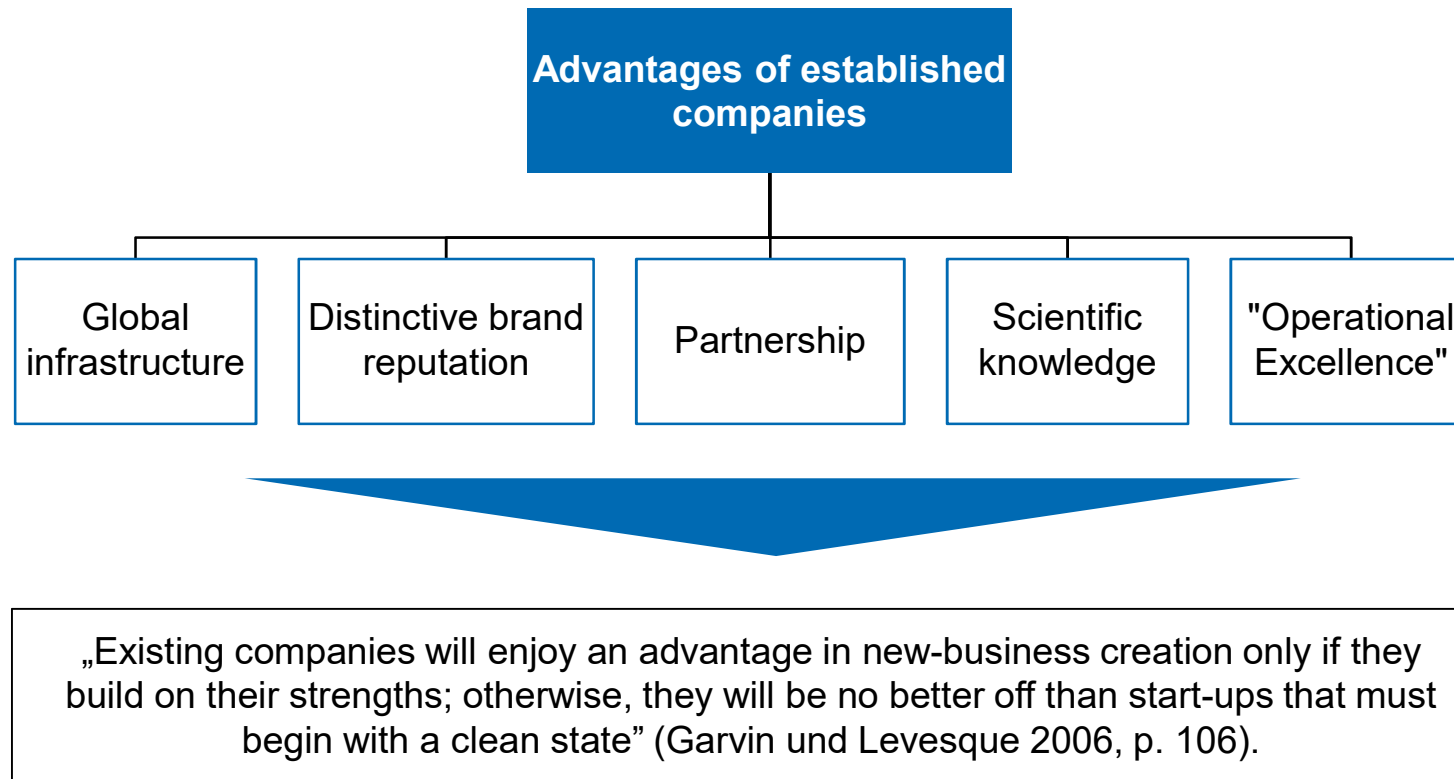
EXAMPLE

1. Introduction

Company	Entrepreneurial activity	Underlying (Main) change(s)	Innovation	Proactivity	Risk appetite
Nokia 	Entry into mobile communications by manufacturing the first automobile telephone for the Scandinavian network at the beginning of the 1980s and reducing activities in the rubber business	Commissioning of the first mobile network (<i>technology</i>)	high	high	high
Research in Motion (RIM) 	Entry into the technology of "Wireless Pagers" in the late 1980s/early 1990s as one of the first companies and abandonment of the LED business	Further development of the possibilities of wireless data transfer (<i>technology</i>)	high	high	high
Shutterstock 	Extension of the image download service to Facebook advertisers	Changed surfing behaviour of advertising addressees (<i>customer behaviour</i>)	medium	high	medium

Anthony (2012) argues that established companies today even have some advantages over start-ups in entrepreneurial activities

1. Introduction



There are some central differences between start-up entrepreneurship and corporate entrepreneurship

1. Introduction

	Start-up entrepreneurship	Corporate entrepreneurship
Profit distribution	Potential rewards are theoretically unlimited for the entrepreneur	Clear limits of financial rewards that the entrepreneur can achieve
Risk distribution	Entrepreneur bears the risk	Company bears the non-career-related risks
Conditions for actions	Flexibility in changing course and experimenting with new directions	Rules and bureaucracy limit the entrepreneur's freedom of action
Exchange possibilities	Few people available for the exchange of ideas	Large internal network for the exchange of ideas
Ownership structure	Entrepreneur owns the concept or the innovative idea	Company owns the concept and typically also the rights
Availability of resources	Strict limitation of resources	Access to diverse resources such as finance, sales channels, and customer base
Role of failure	A wrong step can lead to failure	More room for error, companies can often compensate for failure

Source: Kuratko et al. (2011)

Overview of good management practices in medium and large companies

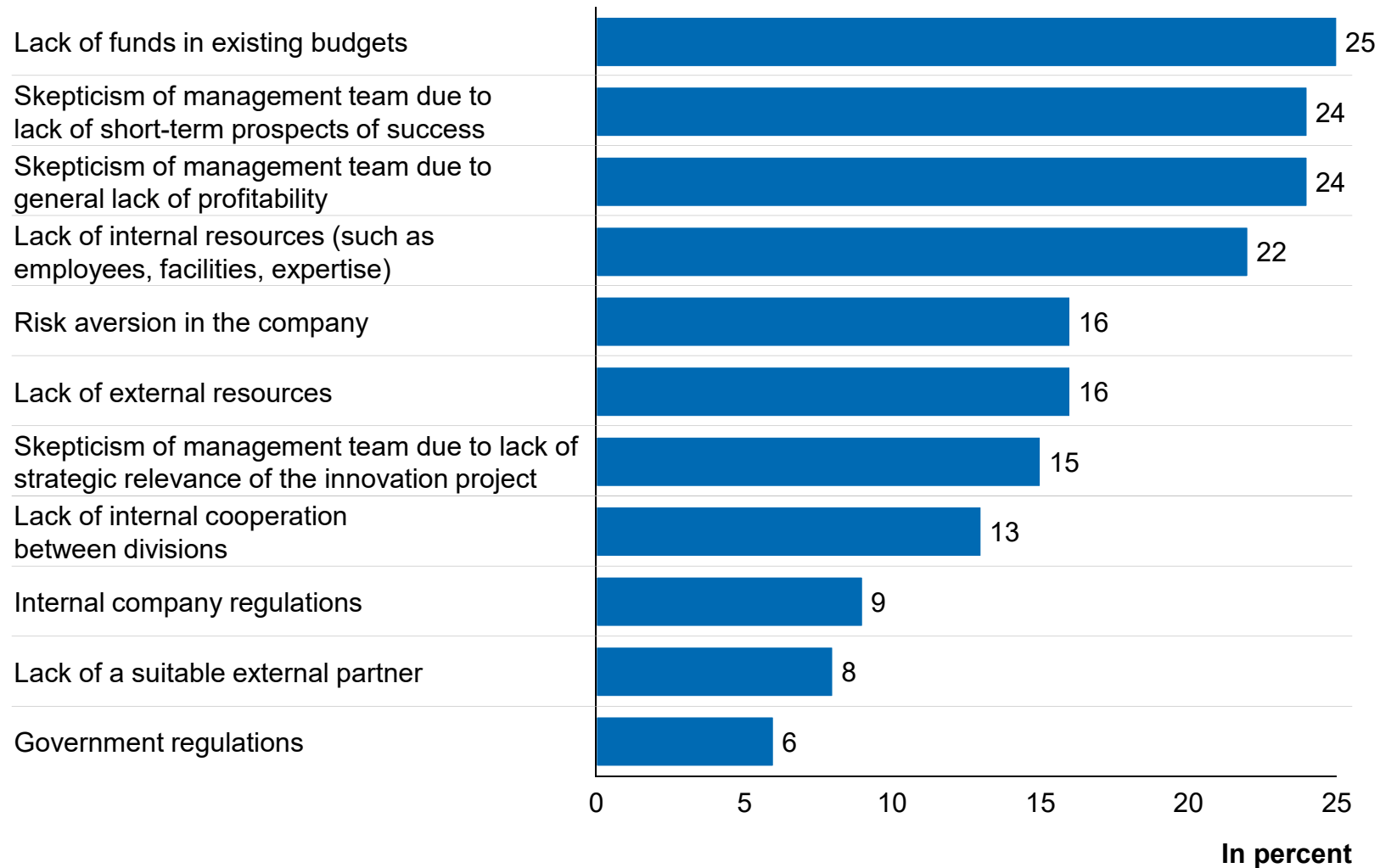
1. Introduction



Source: Own presentation according to Burns (2013)

Why are innovations not implemented in established companies? Most reasons are internal and can be influenced by the company

1. Introduction



Source: Own representation according to Forbes (2011)

How W.L. Gore & Associates emerged from the DuPont laboratories

EXAMPLE

1. Introduction



The DuPont chemicals group is one of the most prominent companies in the US economy. Founded in 1802 as an explosives company, DuPont is now active in chemicals, materials and energy, manufacturing products for agriculture, nutrition, electronics, communications, security, home, construction, transportation, and apparel. In the late 2000s, DuPont was in the midst of a major crisis. Thomas Connelly, who had worked for DuPont for 33 years, noted that the company was still living off the research successes of the 1930s and 1940s and that lack of innovativeness was a major reason for the crisis (Bergmann 2009).

One of the darkest spots in DuPont's history is a missed opportunity worth billions: chemist Wilbert Gore, who worked on the plastic polytetrafluoroethylene (PTFE) at DuPont in the 1950s, had discovered that PTFE could be spun into insulation material. But the idea met with no interest at DuPont. So Gore continued in his own garage - and built a family business. Since then, W.L. Gore & Associates has brought this technology to a variety of industries, and Gore-Tex products generated billions in sales by the time the patent protection expired. Although the innovative idea basically existed in DuPont, DuPont was unable to bring it to market. Proactivity, perhaps also a little willingness to take risks, and the necessary management processes were missing.

IBM's homemade barriers to doing business: Why IBM missed promising opportunities

EXAMPLE

1. Introduction



On September 12, 1999, Lou Gerstner, then Chairman of IBM, learned that his top management team had failed to pursue a promising opportunity in the biotechnology and life sciences sector. **This opportunity has since been successfully seized by competitors and young start-up companies.**

Lou Gerstner set up a task force to understand why IBM had missed this opportunity. The task force compared IBM's organizational structures with those of other large companies such as Microsoft and Cisco, but also with those of active start-ups, and revealed that IBM was having difficulty developing new business and taking advantage of emerging opportunities at the time. This was due to five main reasons:

- a management system that was geared to short-term profits
- too strong a focus on today's markets and businesses
- a focus on market analysis with historical financial data that was not yet available for emerging markets
- lack of processes to identify and select new business ideas and lack of entrepreneurial skills of employees

Interaction

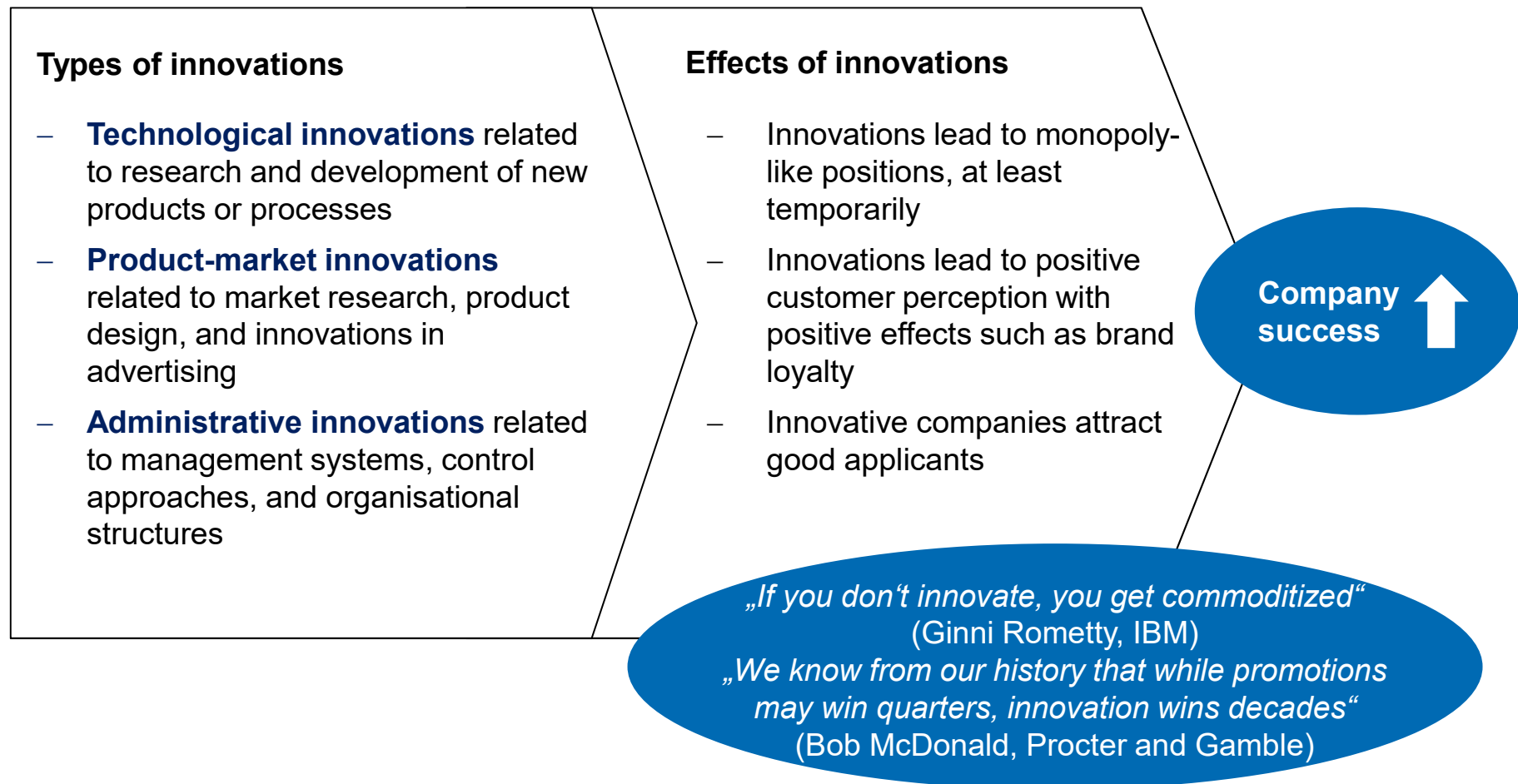
Get together in groups of two students and discuss: What changes are taking place in the environment of your company and why does the company have problems (if any) to react to these changes?

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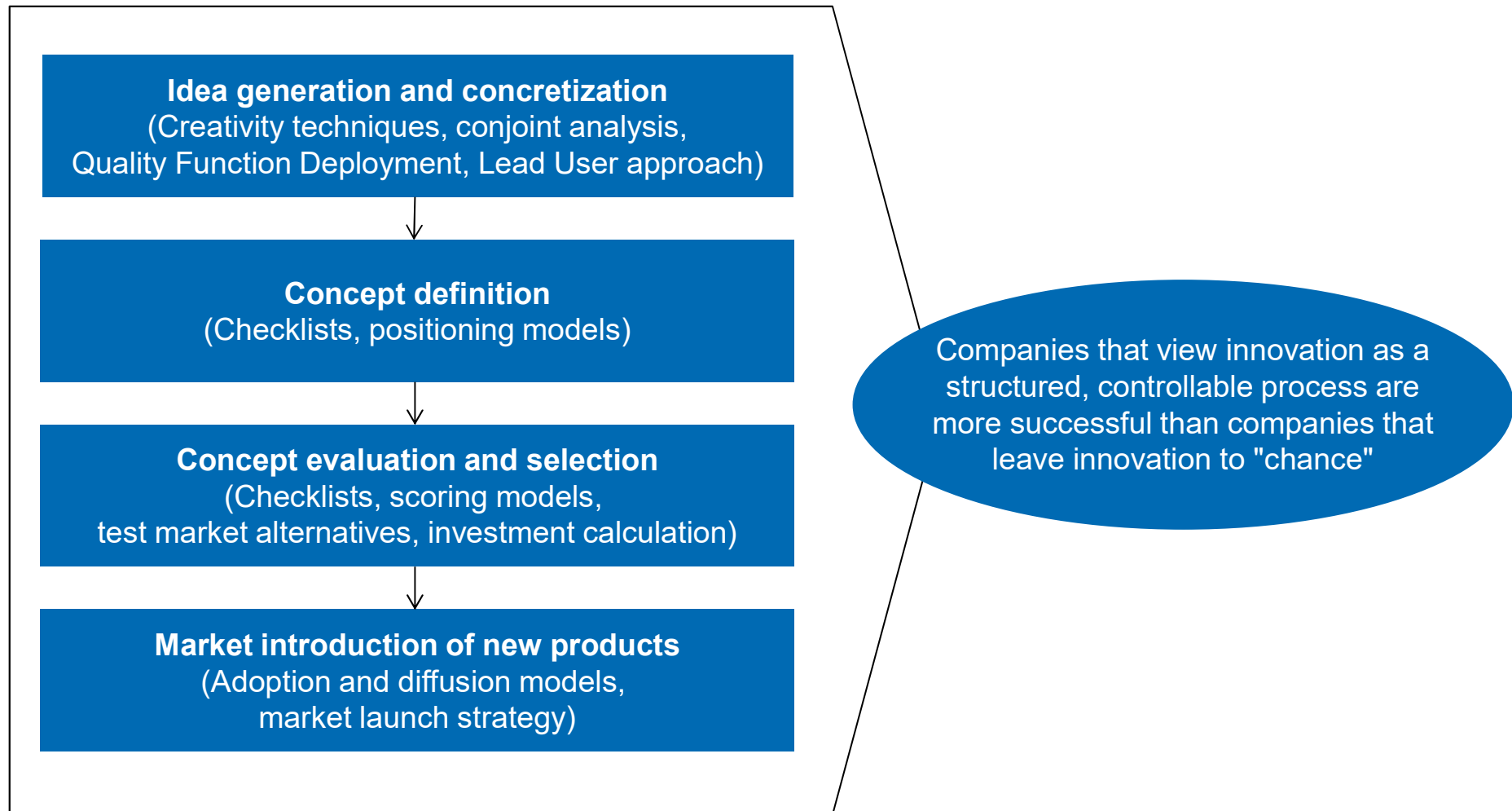
Innovative enterprises are typically more successful than less innovative enterprises

2. Fundamentals of innovation and entrepreneurship



The generation and development of innovations in a company can be captured in a structured process of successive steps

2. Fundamentals of innovation and entrepreneurship



Internal and external sources for idea generation in the innovation process

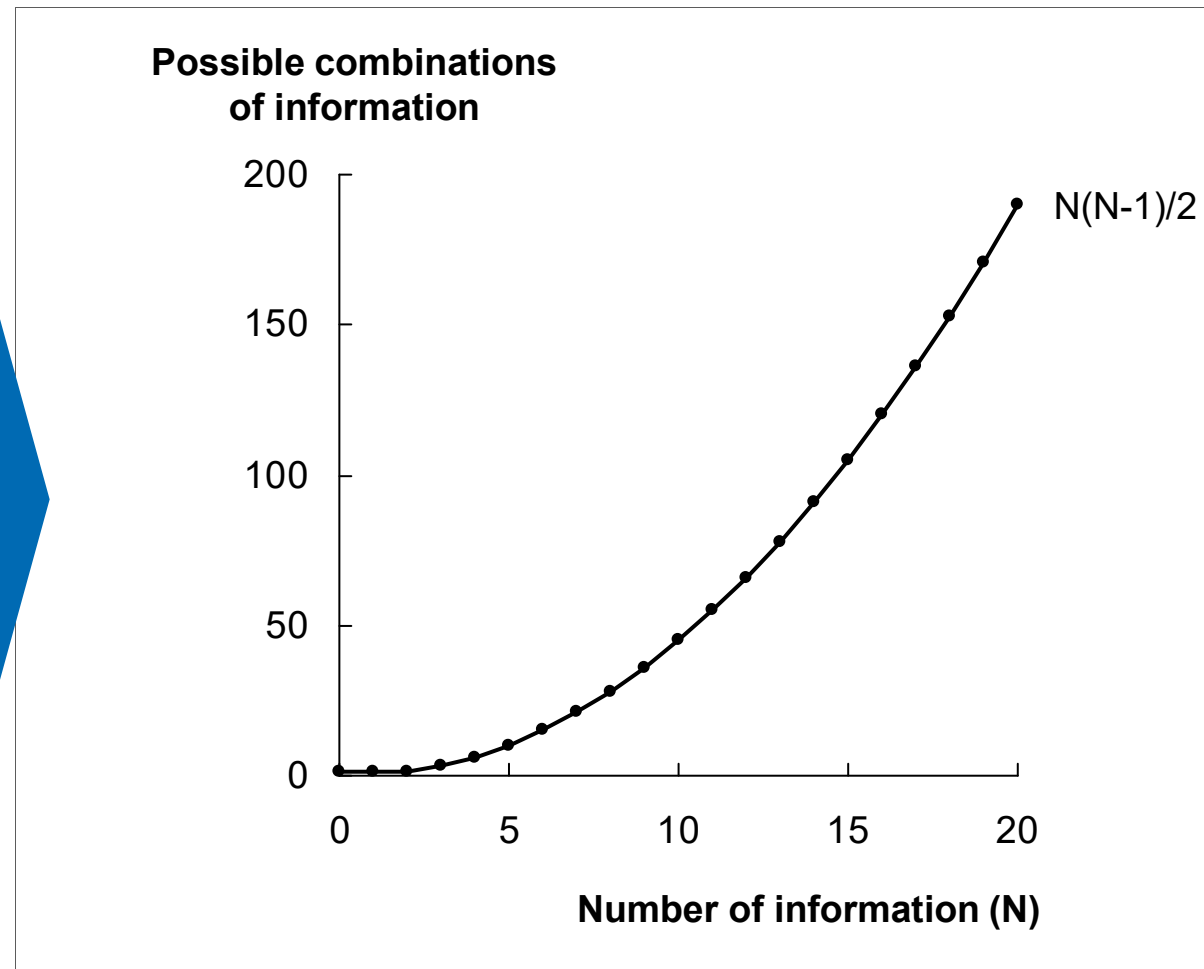
2. Fundamentals of innovation and entrepreneurship

Internal sources	External sources
<ul style="list-style-type: none">– Company suggestion scheme– Employees of the R&D department (e.g., with regard to technology trends)– Sales representatives– Customer service staff/service hotline– Complaint information	<ul style="list-style-type: none">– Customers (direct questioning, focus groups with customers, observation of product use by customers, suggestions/requests from customers)– Competitors (e.g., analysis of exhibitions, trade fairs and new product announcements by competitors)– New products on other markets– Technological developments– Experts (e.g., survey of sales agents or industry experts)– Insights from trend and market research institutes, management consultancies and advertising agencies

The combination possibilities of information increase (at least) quadratically with the number of information

2. Fundamentals of innovation and entrepreneurship

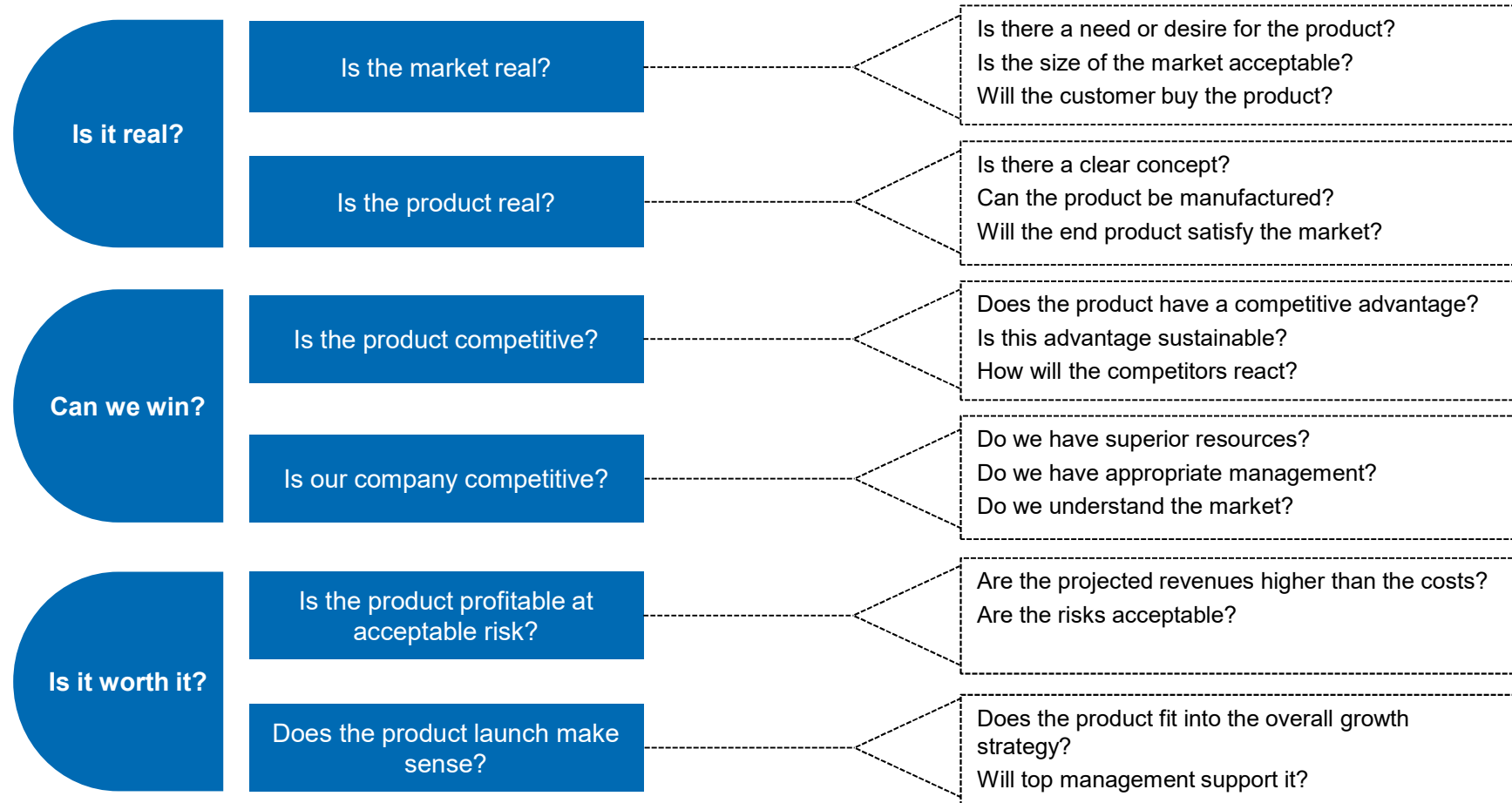
- According to **Schumpeter**, innovations arise as new combinations of existing information
- The more (meaningful) information a company generates, the greater the probability that innovative opportunities will arise



Source: Christensen et al. (2011)

The R-W-W concept is a structured approach to evaluate the potential and the feasibility of potential innovation projects

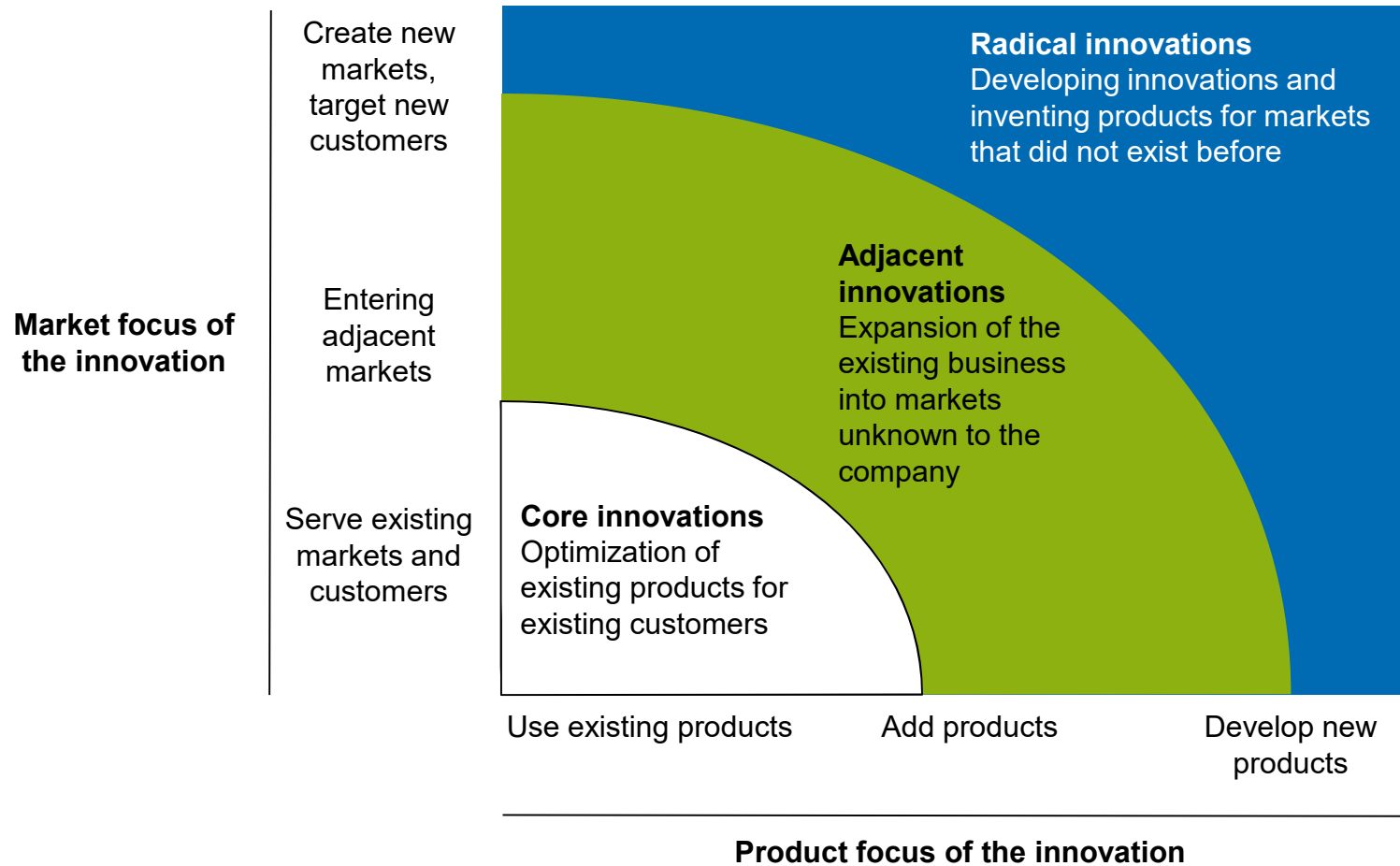
2. Fundamentals of innovation and entrepreneurship



Source: Day (2007)

The Innovation Ambition Matrix: Innovations differ in terms of their "radicality" – three types of innovation emerge

2. Fundamentals of innovation and entrepreneurship



Source: Nagji/Tuff (2012)

How should innovation resources be distributed among the types of innovation? The optimal distribution differs according to industry

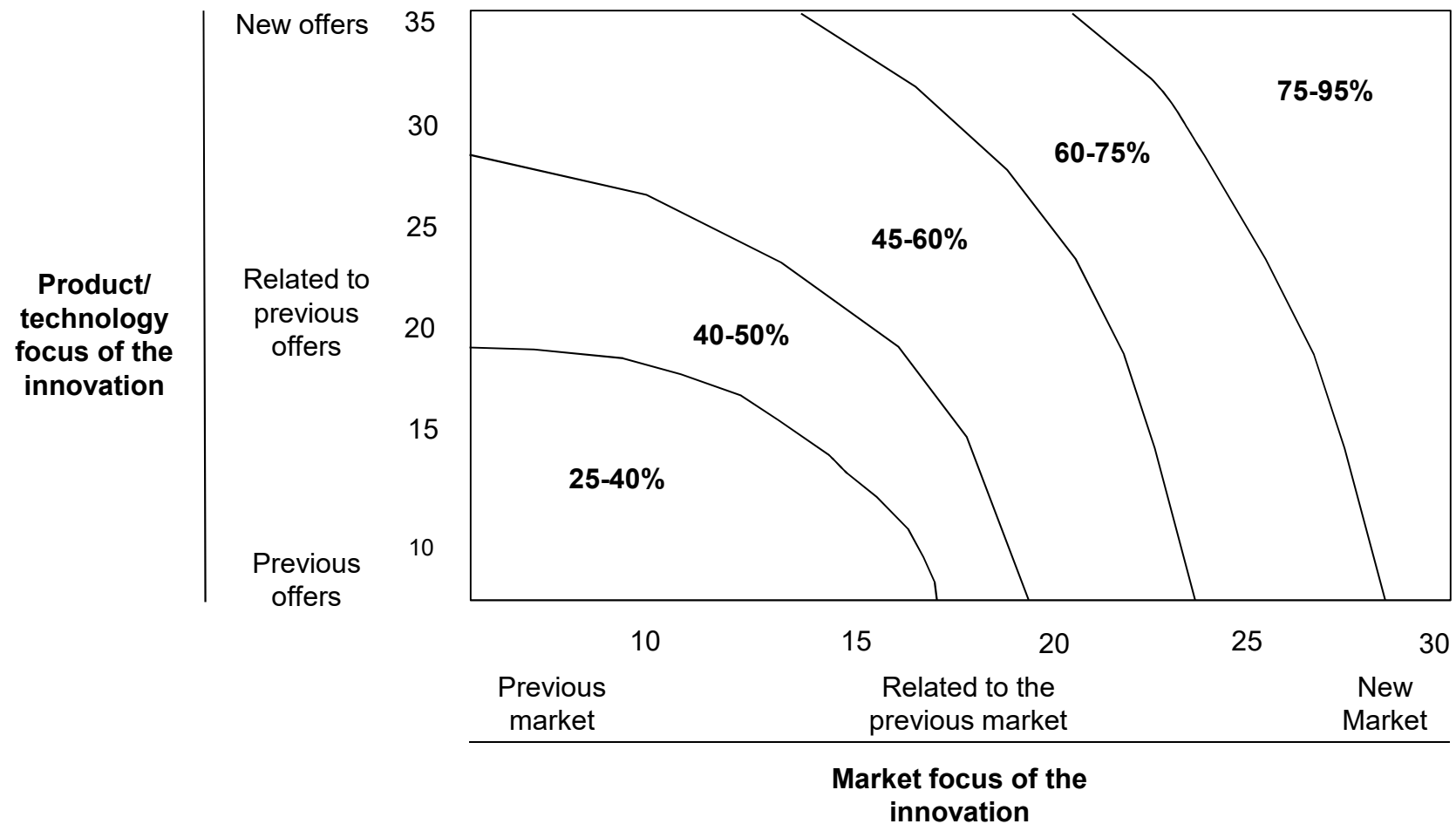
2. Fundamentals of innovation and entrepreneurship



Source: Nagji/Tuff (2012)

**The types of innovation differ in their probability of failure.
The probability of failure is high, especially in unknown markets**

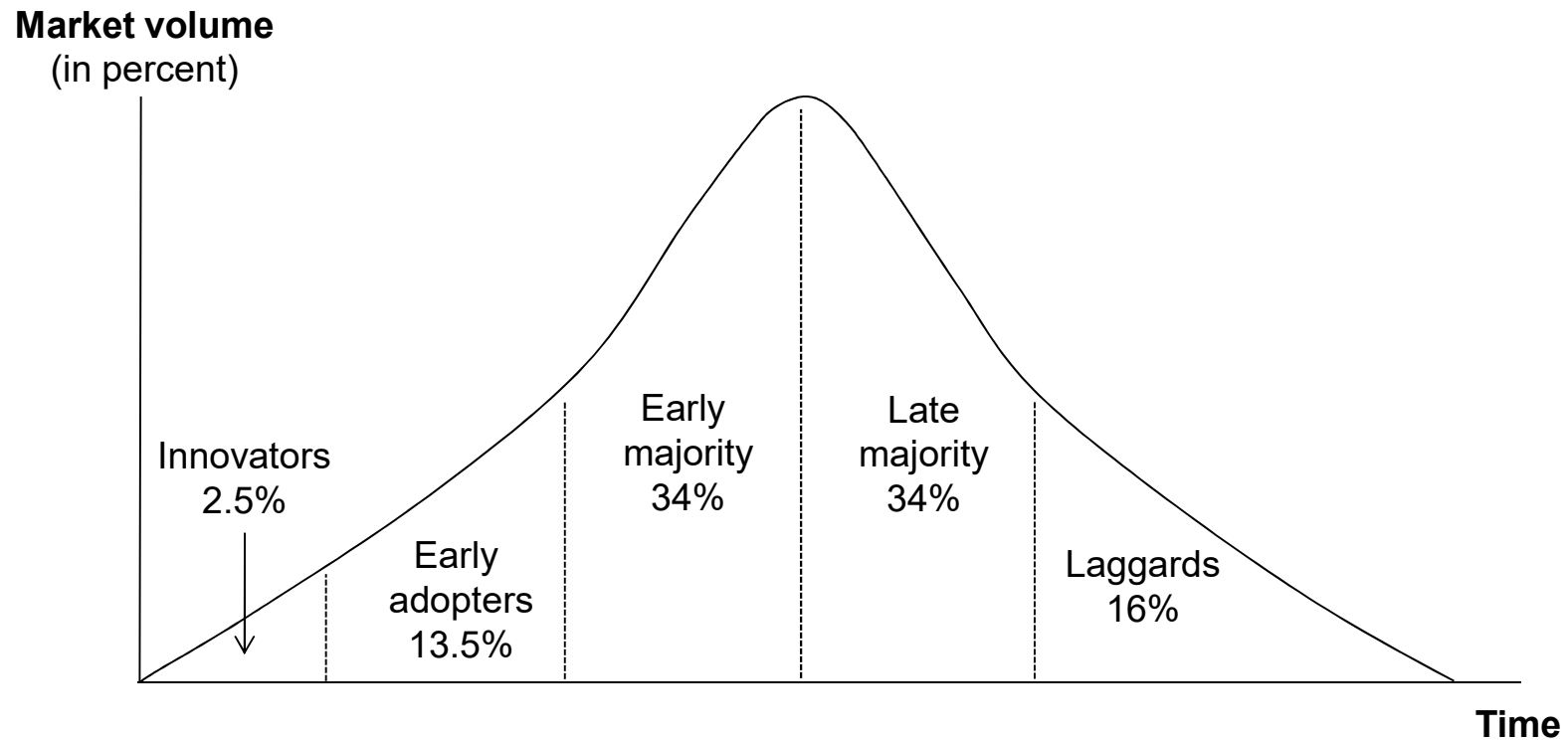
2. Fundamentals of innovation and entrepreneurship



Source: Day (2007)

**Innovations are often not immediately accepted by the entire market.
Rogers' diffusion model shows different target groups over time**

2. Fundamentals of innovation and entrepreneurship

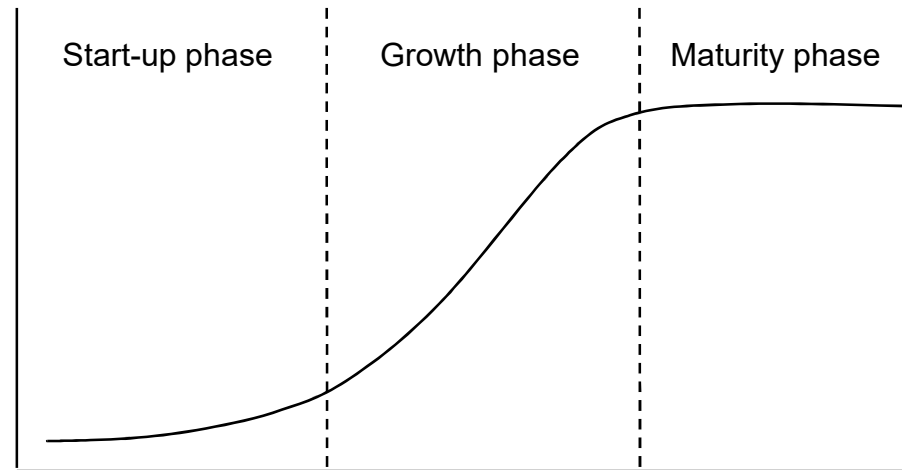


Source: Rogers (2010)

The innovation paradox captures the phenomenon that entrepreneurial efforts are always initiated too late

2. Fundamentals of innovation and entrepreneurship

Life cycle phase/sales development of the existing core business



Need for new/additional growth

extremely low

low

high

Resources available to stimulate new growth

low

high

low

Top management opinion on new opportunities

no time

not strictly
necessary

should have been
initiated ten years
earlier

Innovation efforts

... are focused on
the turning point

... lack discipline
and focus

... are very
impatient

Video:

- Innovation paradox

Source: Anthony (2010)

Interaction

Get together in groups of two students and discuss: What kind of sources for new information could be valuable for your company to identify future options for growth and innovation?

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The first step in strategic planning is usually the derivation of a vision for the whole company

3.1 Planning

What is a vision?

A vision...

- describes the basic direction of the company
- sets out the company's self-image
- is typically not longer than a few sentences

What does a vision do?

A vision...

- enables the derivation of consistent decisions in all hierarchical levels and departments of the company
- motivates employees and increases their identification with the company
- informs outsiders about the "purpose" of the company

Various companies, which are well known for their entrepreneurial spirit, have "entrepreneurial elements" in their visions

EXAMPLE

3.1 Planning



LinkedIn: „Our mission is to connect the world’s professionals to make them more productive and successful. Our members come first. We believe that prioritizing the needs of our members is the most effective, and ultimately most profitable, way to accomplish our mission and create long-term value for all our stakeholders. We will continue to **concentrate on opportunities** we believe are in the best interests of our members. Our long-term approach enables us to invest, **innovate and pioneer** in unexplored segments of our industry to increase the value proposition of our proprietary platform and extensive data.“

(Source: <http://www.linkedin.com/about-us>)



Salesforce.com: "Salesforce.com is the **pioneer of cloud computing for** business applications. What does that mean? We provide business solutions, e.g. for customer relationship management (CRM), online. That makes our applications better tools for businesses of all sizes. Because with us, you reduce the costs of hardware and software, IT management and maintenance. At the same time you increase your flexibility and efficiency. In short: **Salesforce.com is "the end of software" as we know it.** Because all you need for business applications from now on is a browser."

(Source: <http://www.salesforce.com/de/company/>)



IBM: "On a smarter planet, we want to **change the paradigm** from react to anticipate."

(Source: <http://www.ibm.com/smarterplanet/us/en/overview/ideas/index.html?re=sph>)



Bosch: "In order to ensure dynamic development of our company and to guarantee longterm corporate success, we participate in shaping the changes in markets and technologies. (...) We act on **our own initiative, with an entrepreneurial but accountable spirit**, and demonstrate determination in pursuing our goals."

(Source: http://www.bosch.com/en/com/sustainability/corporatemanagement/global_culture/values/values.php)

Video:

- Apple's vision

Entrepreneurial activities can be captured using a whole range of key figures and measured over time

3.1 Planning

What are the targets for entrepreneurial initiatives for which no turnover exists yet?

Key figure	Definition
(3-year) survival rate	– Number of launched/commercialized products still on the market / Total number of launched/commercialized products
(3-year) success rate	– Number of launched/commercialized products that exceeded their sales expectations / Total number of launched/commercialized products
R&D emphasis ratio	– Cumulative R&D expenditure allocated to completely new opportunities / cumulative total R&D expenditure
Innovation-sales-ratio	– Cumulative sales contribution from new products / total sales
Innovation portfolio mix	– Share of new products along the following categories: <ul style="list-style-type: none"> • „New-to-the-world/country“ • Line extension • Repositioning • "New-to-the-company" • Product improvements
Innovation pipeline	– Share of entrepreneurial projects in the individual stages of the product development process for new products
Innovation turnover per employee	– Sales of commercialized new products / full-time employees for innovation initiatives

3M and DELO set very clear objectives as to how new products and services should contribute to sales

EXAMPLE

3.1 Planning

3M DELO

At 3M and DELO, there is the 30% rule: Every year, at least 30% of the current turnover must be made with products that have been on the market for less than three years. Thus, 3M and DELO build up the pressure to continuously work on new products for new growth - even in "good" years - and thus, lay the foundation for future developments.

How high should the research and development budget be?

EXAMPLE

3.1 Planning



The German company DELO produces industrial adhesives that are used in microelectronics, metal processing as well as glass and plastics processing. Today, DELO adhesives are found in every second smartphone in Europe. Every year, DELO invests 15 percent of its turnover in research and development. This budget is clearly above the industry average.

At Gore, eight to ten percent of annual turnover is reinvested in research and development.

David Packard, one of the two founders of Hewlett-Packard, describes in his book about the "HP-way" that regardless of the current financial situation, they have always made sure that between 8% and 10%, and sometimes even more than 10%, of the turnover is put back into research and development. Only by doing so, long-term success and survival were possible in an extremely dynamic environment in which Hewlett-Packard moved and still moves.

The design of planning can differ in terms of environmental monitoring, its flexibility, time horizon, and employee participation

3.1 Planning

Characteristics of the planning dimensions

①	Focus of environmental monitoring	Market- and customer-oriented ↔ Technology related
②	Flexibility	No adjustment ↔ Continuous adaptation
③	Planning horizon	Narrow valuation horizons ↔ Long-term valuation horizons
④	Participation in the planning process	Top-down planning ↔ Bottom-up planning



How should entrepreneurial companies design their planning?

1 Environmental monitoring can focus on the technology or the market

3.1 Planning

	Observation of technological advances	Observation of market-related developments
Activities	<ul style="list-style-type: none"> – Attendance of scientific conferences – Establishing contact with research institutions – Analysis of patents 	<ul style="list-style-type: none"> – Survey and observation of customers – Detection of trends – Analysis of competitive activities
Opportunities	<ul style="list-style-type: none"> – Developments of groundbreaking innovations – Addressing latent customer needs 	<ul style="list-style-type: none"> – Matching products to customers – Addressing communicated customer needs
Risks	<ul style="list-style-type: none"> – Development of technically "perfect" products without demand – Missing the right time of entry 	<ul style="list-style-type: none"> – No development of groundbreaking innovations – Focus on incremental improvement

- Successful entrepreneurial companies combine both approaches
- Successful entrepreneurial companies allocate substantial resources to environmental monitoring

Source: Jaworski et al. (2000); Jaworski/Kohli (1993)

1 "Don't listen to the customer, he has no idea"

EXAMPLE

3.1 Planning



Shortly before his death, Steve Jobs made it clear to his biographer what was a central secret of success of Apple's development since 2000: They developed something that the customer did not ask for and that you would not have heard about if you had asked the customer about his current needs. The potential customer could not even imagine the new product at hand, so he had "no idea about it at all", as Jobs says. Accordingly he would not have been able to articulate a need for this product. Therefore, Jobs concludes that really large companies should rather think about what latent, unconscious needs potential customers have. Only then truly great business revolutions become possible, says Jobs.

EXAMPLE

1 Cisco's search for the great opportunity - the "I-Prize"

3.1 Planning



In the fall of 2007, Cisco took a completely new approach to identifying new opportunities in its environment that could create a new billion-dollar business: The company announced the so-called "I-Prize" (Jouret 2009). Any individual outside of Cisco could participate by outlining and submitting an idea for a new business that showed a strategic fit with Cisco's core business and underlined Cisco's innovation leadership in the Internet. 2,500 individuals from 104 countries submitted approximately 1,200 different ideas. The winner received a reward of 250,000 US dollars.

This way, Cisco was able to generate a large number of new ideas that at first glance seemed "cost-effective". Internally, however, this competition caused some effort: legal issues had to be clarified (e.g., regarding the ownership of the innovative idea?), all 1,200 ideas had to be viewed and evaluated, and often additional numbers had to be generated to estimate the actual market potential of an idea. The best ideas were refined and developed further with the originators of the ideas. A total of six Cisco employees worked full-time on this project for three months. In the end, a team of three participants won in the field of smart grid, which Cisco then aimed to develop into a multi-billion dollar business.

What was the added value for Cisco? The main added value is certainly the smart grid idea. The team around Guido Jouret - Cisco's board member for "Emerging Technologies" – explains, however, that Cisco has learned a lot more. The worldwide field of participants showed, for example, how the ideas of the participants, and thus indirectly the customer wishes, differ among nations. Jouret concludes that the immense and initially underestimated effort was justified. Cisco had learned a lot!

1 What are first indicators of fundamental changes in the market and technological environment of a company?

3.1 Planning

Indicators of fundamental changes in the market and technological environment

- Pupils and students begin to use seemingly inferior products as substitute for the provider's own products
- Pupils and students adapt their behavior, for example in the way they communicate via social networks
- Suppliers or distribution companies penetrate into new businesses that affect the provider's business
- Companies from other industries offer products that compete with the provider's products
- New competitors enter the market and become rivals, even though the business model appears completely unprofitable from the outside
- New competitors enter the market and nobody in the company understands the underlying technology or product idea

1 Students as a source of new technological ideas

EXAMPLE

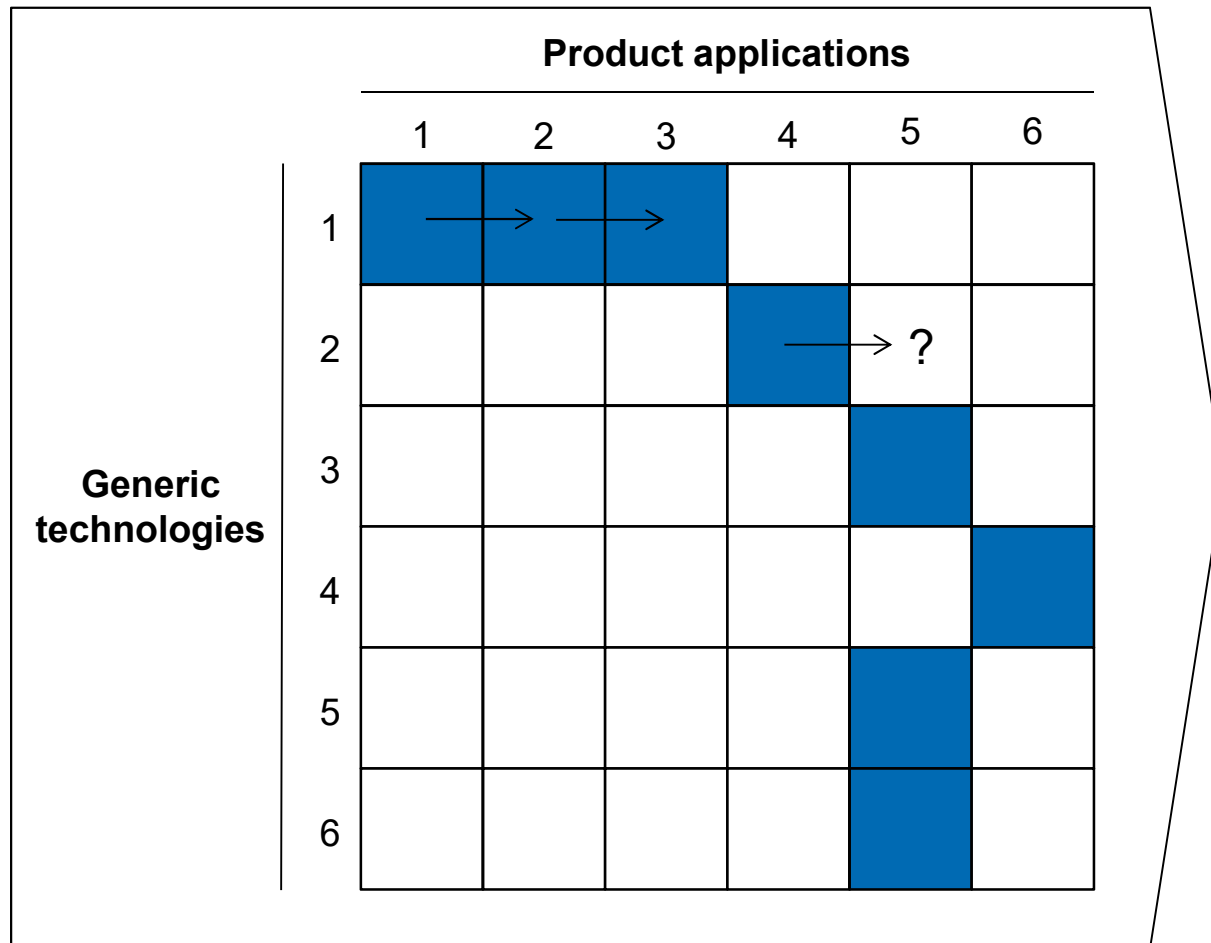
3.1 Planning



Xerox's legendary Palo Alto Research Center (PARC), where Bill Gates and Steve Jobs found the inspiration for their graphic interfaces in the 1970s, recently held a brainstorming session with tech-savvy high school students over several weeks. Xerox knew that in today's fast-paced technology world, students are the experts. They grow up with technology products such as the iPod, use such devices intuitively, and may see future development opportunities more realistically.

① **Own technologies can be the starting point for the search for new opportunities, which are then developed in an entrepreneurial way**

3.1 Planning



- Existing skills/technologies are the starting point in the search for new opportunities
- Checking whether other markets (possibly those already known) can be served with existing skills/technologies

① Where a new material has created new products everywhere ...

EXAMPLE

3.1 Planning



Bob Gore, founder of Gore, while still working at DuPont, discovered that by rapidly stretching PTFE, a very strong, microporous material can be created, a material known as expanded PTFE. Today, Gore is the global market leader in the know-how and processing of expanded PTFE and has integrated this technology into a very large number of products, such as breathable jackets and various yarns in the textile industry, implants in medicine, sealing products in various industries, membranes especially in the chemical industry and non-conductive materials in electronics.

This makes Gore an example of a company that has **gradually carried a technology into various industries**, thereby continuously generating new business.

2 Planning can be kept flexible in the context of dashboarding. In particular, learning experiences are ideally implemented directly

3.1 Planning

Adoption	Success criterion	Actual figures			Insights gained and adjustments made
		Monday	Tuesday	Wednesday	
Hypothesis 1: Commuters will stop and buy a soft drink					
At least 10 customers per day	number of customers	Two customers	When it rains, nobody stops	Six customers	<ul style="list-style-type: none">– High prices scare customers away, they look, but do not buy– No need to build up when it rains– Demand lower than expected
Hypothesis 2: Customers will pay the premium price					
1,50 Euro per glass is an acceptable price	Total sales, price paid	At a price of 1.50 Euro per glass, 3.00 Euro turnover		At a price of 1,00 Euro per glass, 6 Euro turnover	<ul style="list-style-type: none">– Monday sales indicate: 1.50 Euro too expensive– Therefore price reduction and experimenting with different price thresholds– 1,00 Euro seems to be a reasonable price

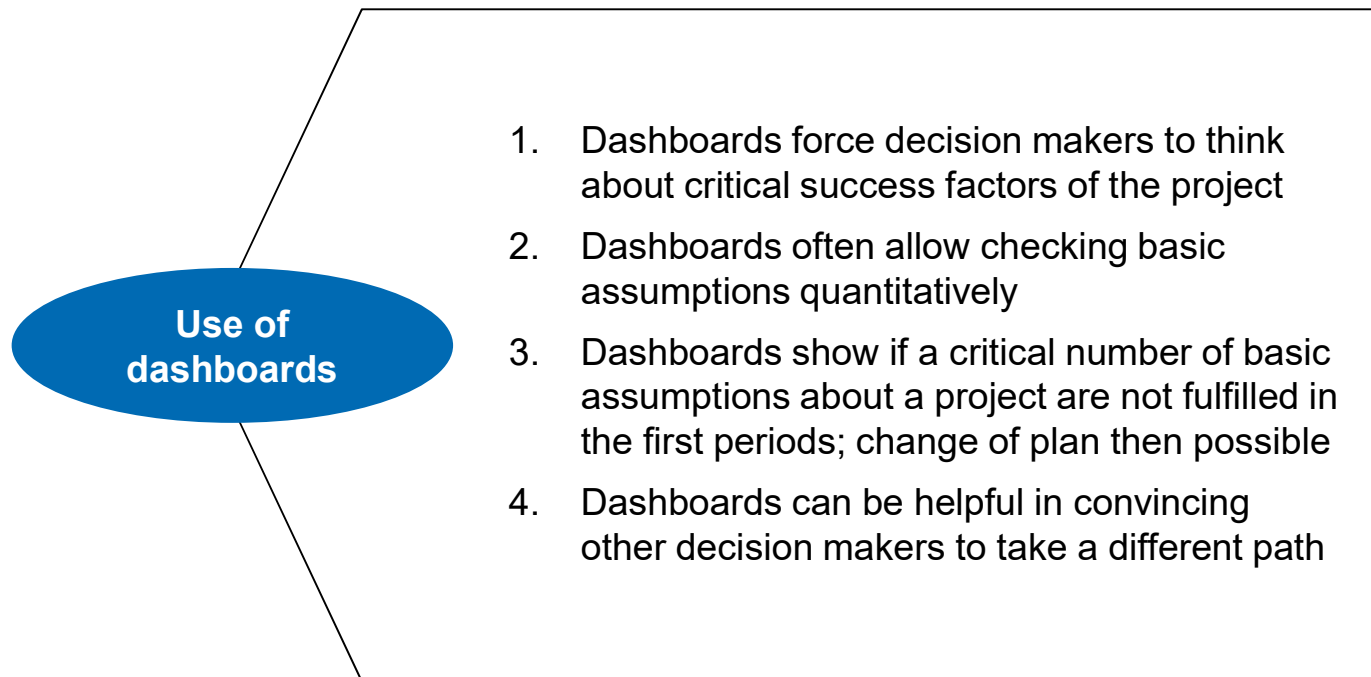
Source: Mullins/Kumar (2010)

Video:

- Innovate like Google
- Catherine Courage

② Dashboards have several advantages that allow flexible planning

3.1 Planning



② Twitter - a "Plan B" company

EXAMPLE

3.1 Planning

241 million people use Twitter every month, 500 million tweets are sent out daily, and the company, which has been listed on the stock exchange since 2013, currently employs 2,700 people worldwide. But the original idea behind Twitter was quite different (Mullins and Komisar 2010).



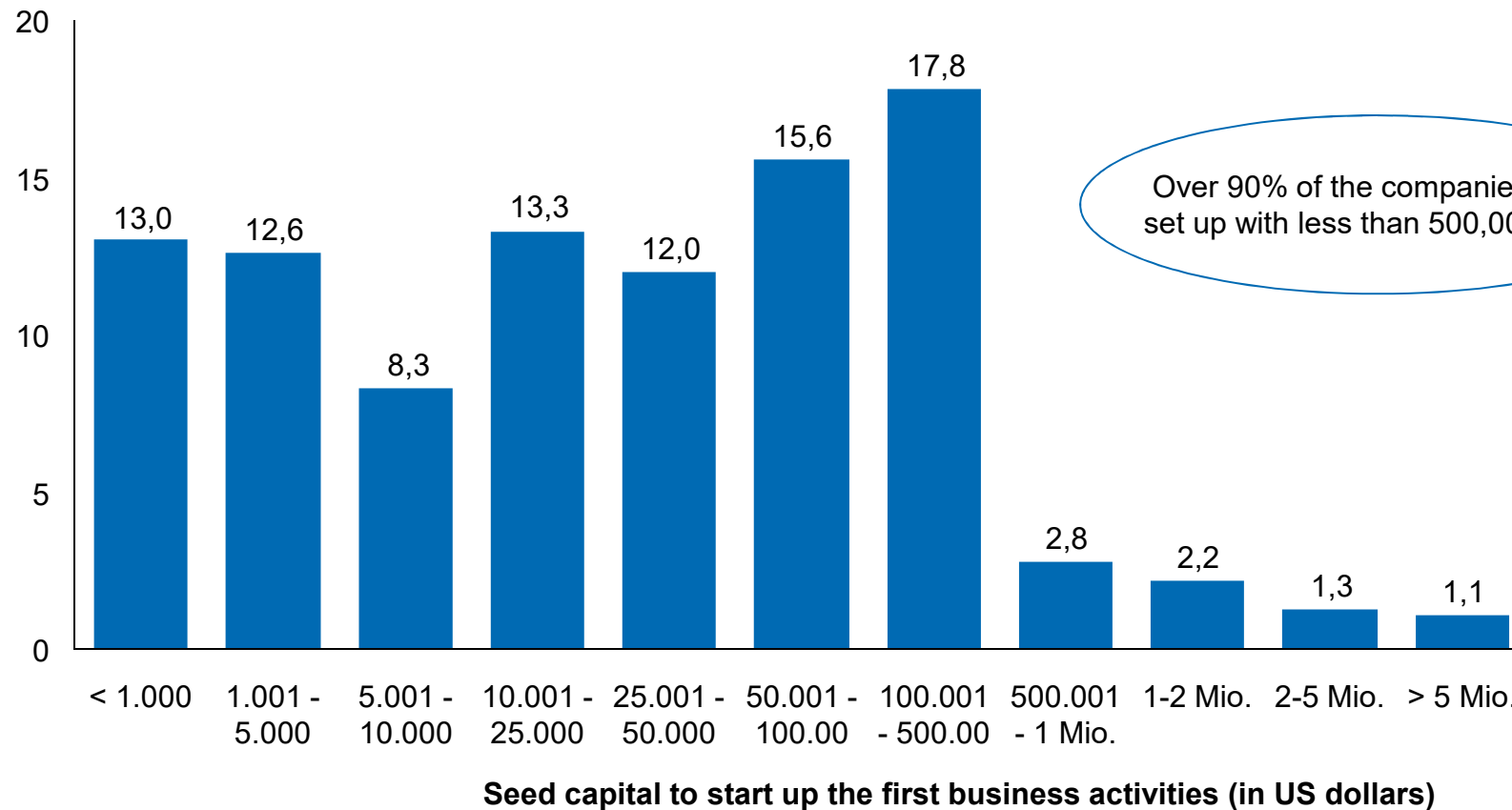
In 2006, several small groups worked on improving the podcasting company Odeo in San Francisco. Because of the strong competition with Apple and other companies, the objective is to develop promising competitive initiatives. The exchange between the individual teams is very chaotic, which is why Jack Dorsey, in one of the first brainstorming meetings, suggests using an SMS service that allows the other participants in the groups to exchange information quickly and efficiently. So Twitter was initially intended exclusively as an internal service for Odeo employees. The first prototype was ready to be used just two weeks later.

The group members use the service regularly, and later also family members and close friends adopt it. **Soon the group realizes that the idea of short messages is much more promising than the original podcasting idea.** Winning the SXSW Web Award of Digital Confab in March 2007 finally convinced the Twitter inventors. The short news service gets quickly spun off from the company and Twitter Inc. is founded in April 2007.

② A study shows the amount of seed capital needed to initiate first activities in successful US growth companies

3.1 Planning

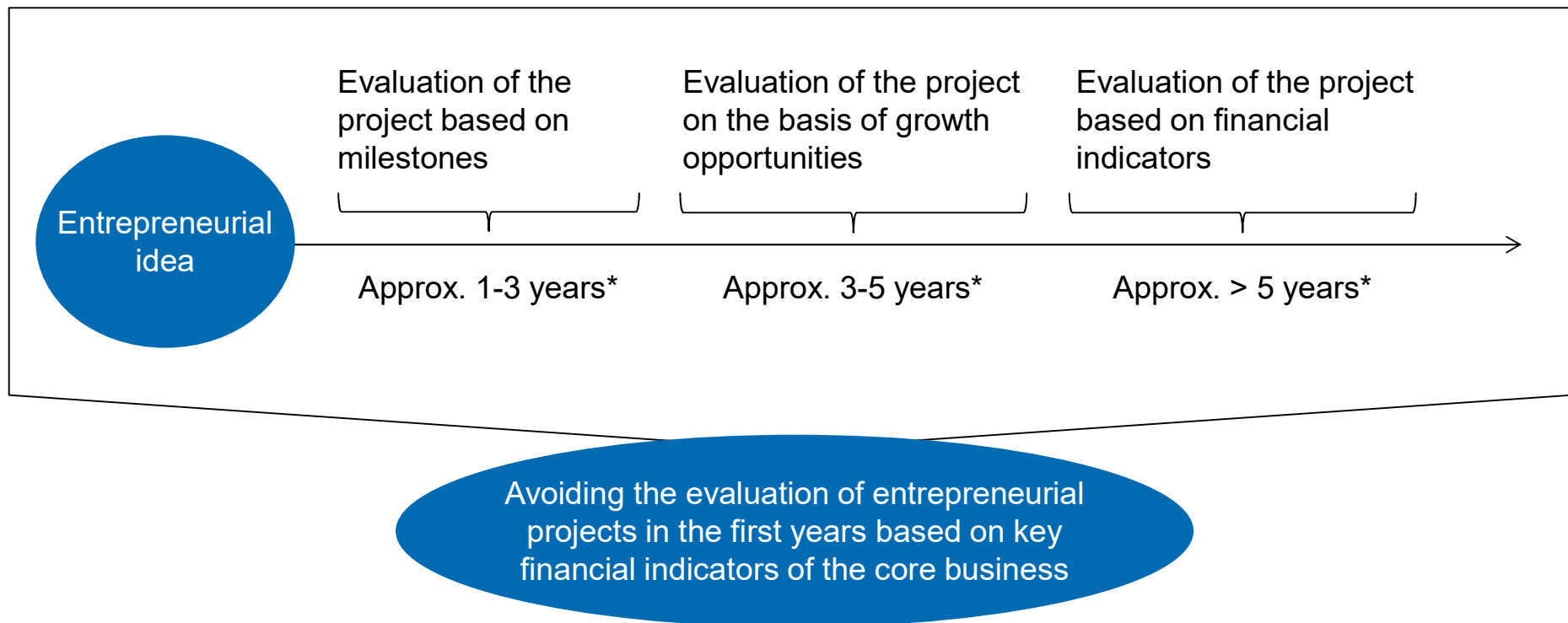
**Share of the 500 most successful
Growth companies in the
USA in 1992 (in percent)**



Source: Own representation according to Mangelsdorf (1992)

3 Successful entrepreneurial companies do not use financial indicators in the first years to evaluate their entrepreneurial projects

3.1 Planning



* Depending on the specific project

3 Microsoft's impatience in the paid search business

EXAMPLE

3.1 Planning



Even before in 2002 Google launched Google AdWords - i.e. the placement of paid advertisements to the right of the actual search results for a query - Microsoft had already developed a similar model for its MSN website in 2000. Advertisers could buy advertising space on the page for a certain amount of money, and the person who bidding the most for a particular search term was displayed.

Microsoft's efforts showed first positive results and were profitable, but only generated sales of about one million US dollars, which was not enough for Microsoft. Considering the size of the paid search market today, the sales that Google has made in this business in recent years, and how in general this "product" has revolutionized the whole advertising market, Microsoft had a huge opportunity at hand - and left it aside. Microsoft did not understand that it takes some time for such a business to develop, and made **the mistake of evaluating the business by its revenue at a very early stage**.

Steve Ballmer, CEO of Microsoft at this time, summarized the situation as follows: „The biggest mistakes I claim I’ve been involved with is where I was impatient — even though we didn’t have a business yet in something, **we should have stayed patient.**”

4 Entrepreneurial companies typically pursue a combination of top-down planning and strong employee involvement

3.1 Planning

	Top-down planning process	Involving employees in the planning process
Advantages	<ul style="list-style-type: none">– Fast decision making– Enforcement even of unpopular decisions– Avoidance of consensus orientation	<ul style="list-style-type: none">– Integration of various perspectives and much information into the planning process– Employees' identification with the planning result

Which approach is advantageous for corporate entrepreneurship?

4 Three ideas from the top 100 employees

EXAMPLE

3.1 Planning

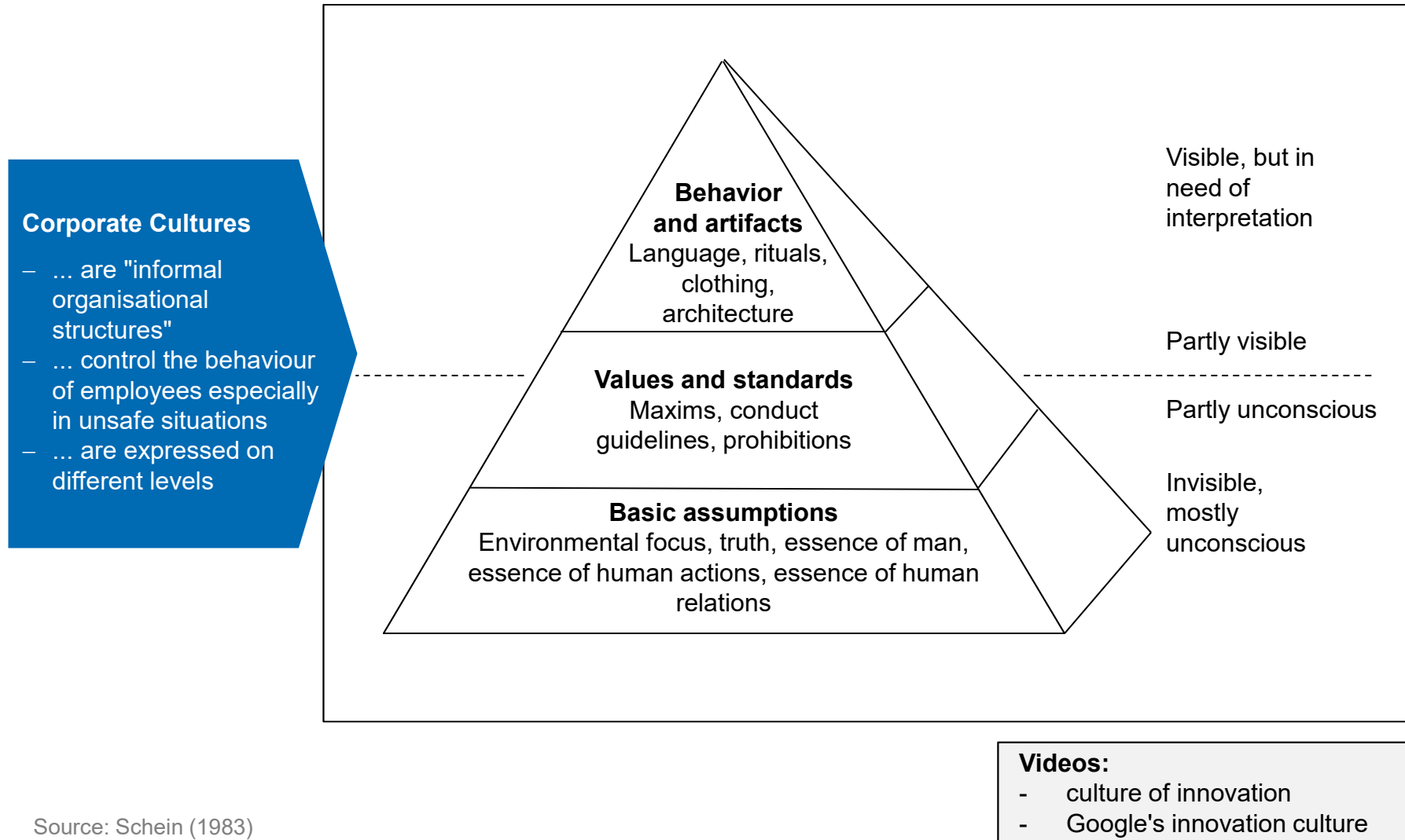


During the times of Steve Jobs, Apple held an offsite meeting with the top 100 employees every year. These were defined by Jobs as the 100 employees that you would take with you when you started a new company with initially exactly 100 employees. 100 employees seems to be a good compromise between the small group of top management and the large total number of employees.

On the last day of the offsite, the present employees were allowed to express ideas for the further development of Apple's business. Top management then selected the best ten ideas and presented them to the employees at the offsite, who were then allowed to rate them. In a final step, Jobs crossed out ideas four to ten and said that you can only really implement three ideas in a year anyway. Every year, Apple held a contest among employees to place their ideas in the top 10 or top 3.

Corporate cultures can be divided into different levels according to visibility

3.2 Organization



Source: Schein (1983)

The important thing is that engineers try out a lot ...

EXAMPLE

3.2 Organization



Hewlett-Packard stores a large number of mechanical and electrical components in its Santa Rosa branch. Hewlett-Packard engineers are free to use this warehouse and may also use it for private purposes without having to justify this. Why does Hewlett-Packard do this?

On the one hand, it may well be that engineers then also fiddle about in their spare time and possibly generate ideas that benefit Hewlett-Packard. On the other hand, such an approach shows trust in the employees. The following story is told about the founder of Hewlett-Packard, Bill Hewlett: One weekend, he briefly came into the company and saw that the materials warehouse was locked. He opened the lock personally with a bolt cutter and hung a note on the door: "Please never lock this material store again. Best regards, Bill".

Google: We do not say no!

EXAMPLE

3.2 Organization



When Nikesh Arora, a Google board member, was asked what makes Google's corporate culture so unique, he said that Google never says "no" in meetings. When an employee makes a suggestion for a new product, Google always looks for arguments why the idea is good and could work. It's assumed that sooner or later, employees' willingness to bring in new ideas would be significantly reduced if, in response to suggestions, reasons for rejection (i.e., reasons for a clear "no") were sought.

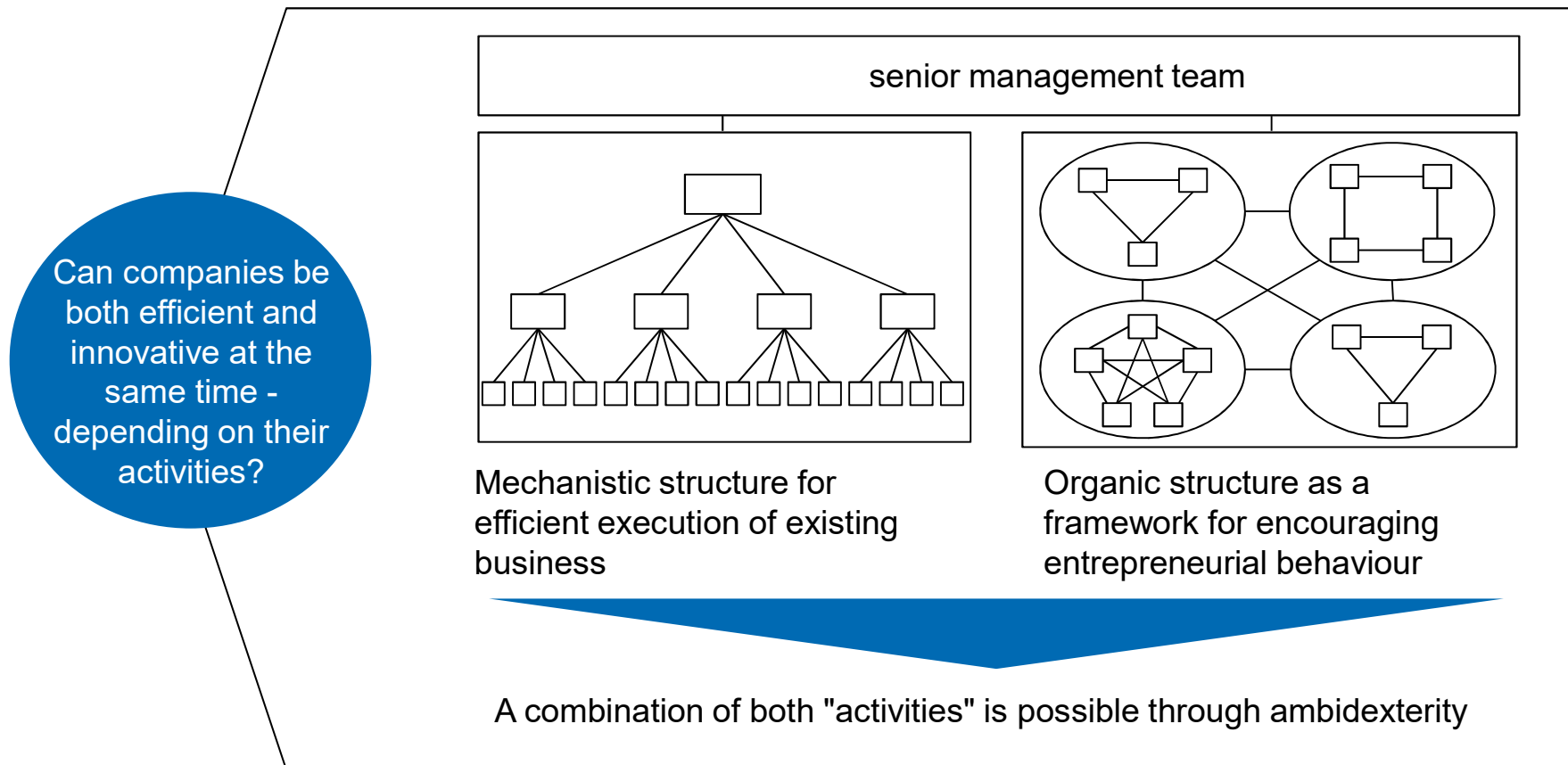
Thus, the language and the way of argumentation here is a visible artifact of an innovation-oriented and flexible corporate culture at Google.

Interaction

Describe systematically the culture of your current employer!

The concept of ambidexterity aims to leverage the advantages of different organisational structures in a company

3.2 Organization - Excursus: ambidexterity



Organic structures above all at Ericsson

EXAMPLE

3.2 Organization - Excursus: ambidexterity



The Swedish company Ericsson was one of the technological drivers of the mobile phone industry, also leading the development of global systems for mobile communication, and was an early pioneer in the pocket radio industry and many other industries.

For years Ericsson had achieved impressive sales growth, but this concealed a massive organisational structure with high costs. At peak times, 30,000 people were working in the research and development department alone, spread across 100 technology centres with a lot of duplication of effort and administrative tasks. Organic structures were strictly preferred to mechanical ones, which meant that Ericsson had to let go about 60,000 employees - more than any of its competitors - in one of the first major crises in the mobile telecommunications industry around 2000. This was the only way to restore the profitability in some business areas.

Parallel structures can be built explicitly or implicitly - a comparison between structural and contextual ambidexterity

3.2 Organization - Excursus: ambidexterity

	Structural ambidexterity	Contextual ambidexterity
How is ambidexterity reached?	Alignment-focused and adjustment-focused activities are completed in separate departments or teams	Individual employees share their time between alignment and adjustment-focused activities
Where are decisions made about the division between alignment and adjustments?	At the top of the company	At the "front line"- among sales staff, foremen, office staff
Role of top management	Definition of the structure to balance alignment and adjustment activities	Development of the organisational framework in which individuals act
Nature and type of tasks	Relatively clearly defined	Relatively flexible
Employee skills	Employees are rather specialists	Employees are rather generalists

What qualities must employees have in order to "live" contextual ambidexterity?

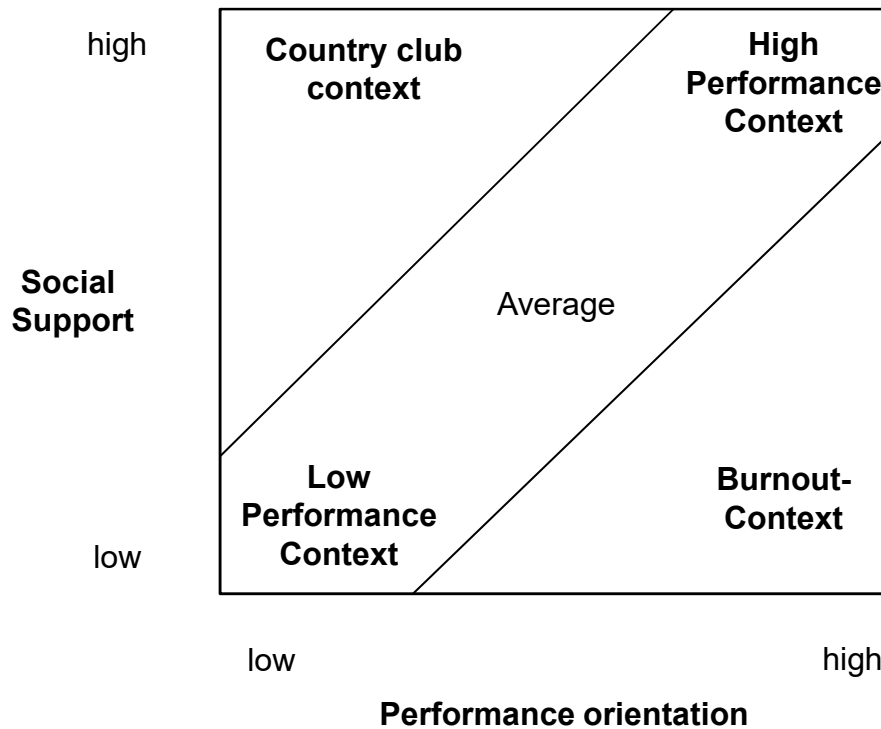
3.2 Organization - Excursus: ambidexterity

Characteristics of contextually active employees

- They pursue their own initiatives to discover new opportunities beyond their traditional role in maintaining current business
- They are cooperative and pursue opportunities in cooperation with other employees
- They are networkers by permanently contacting individuals from the company
- They are capable of handling multiple topics and feel comfortable being responsible for different topics

Whether contextual ambidexterity is promoted depends on the combination of social support and performance orientation

3.2 Organization - Excursus: ambidexterity



- Both performance orientation and social support are necessary to support **contextual ambidexterity**
- In these environments, employees are able to work efficiently on existing tasks as well as discover and drive new ideas

The establishment of ambidextrous organisational systems holds several challenges that need to be addressed

3.2 Organization - Excursus: ambidexterity

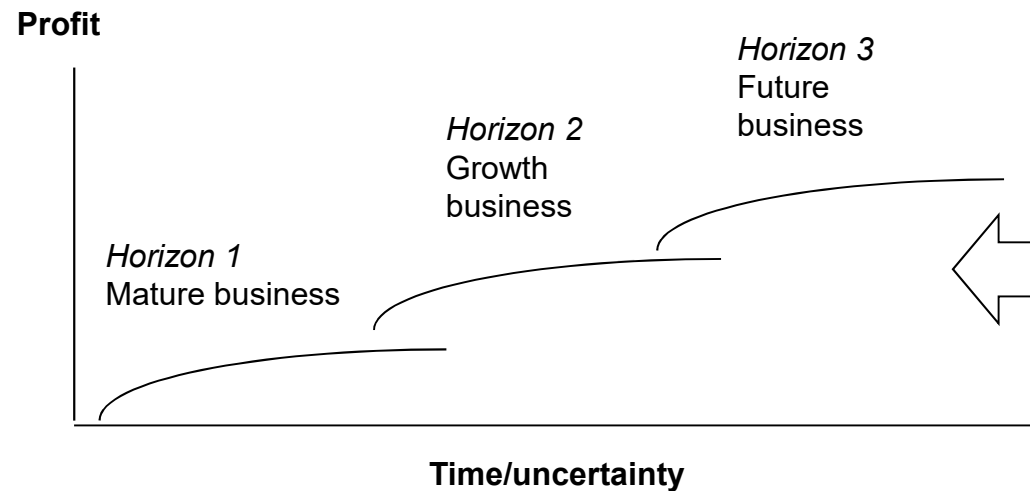
What are success factors for ambidexterity in a company?

- An appealing strategic intent that demonstrates the need to efficiently operate the existing business while investing in innovative businesses.
- A common vision and shared values that create identity for both, existing and innovative business.
- An experienced management team that is committed to the strategic intent and common vision, with a performance evaluation system that provides incentives to support both businesses and communicate the strategy tirelessly.
- Separate organisational structures for existing and innovative business, but aligned along common guidelines.
- Ability of the leadership to manage conflicts arising from the different fields.

Ambidexterity at IBM (1/5): IBM missed several opportunities for new business in the 1990s. Therefore, an "EBO model" was established

EXAMPLE

3.2 Organization - Excursus: ambidexterity



Selective development of "Emerging Business Opportunities" (EBOs), which are built up in own business units

Focus	Defence of existing business	Building resources for growth	Identification of opportunities
Success factors	Costs, efficiency, incremental innovations	Acquisition costs, speed, flexibility, execution	Learning experiences, innovations
Metrics	Profit, margins, costs	Market share, growth	Milestones

Source: O'Reilly/Tushman (2011)

Ambidexterity at IBM (2/5): A business idea must meet a number of criteria in order to be accepted into the circle of EBOs

EXAMPLE

3.2 Organization - Excursus: ambidexterity

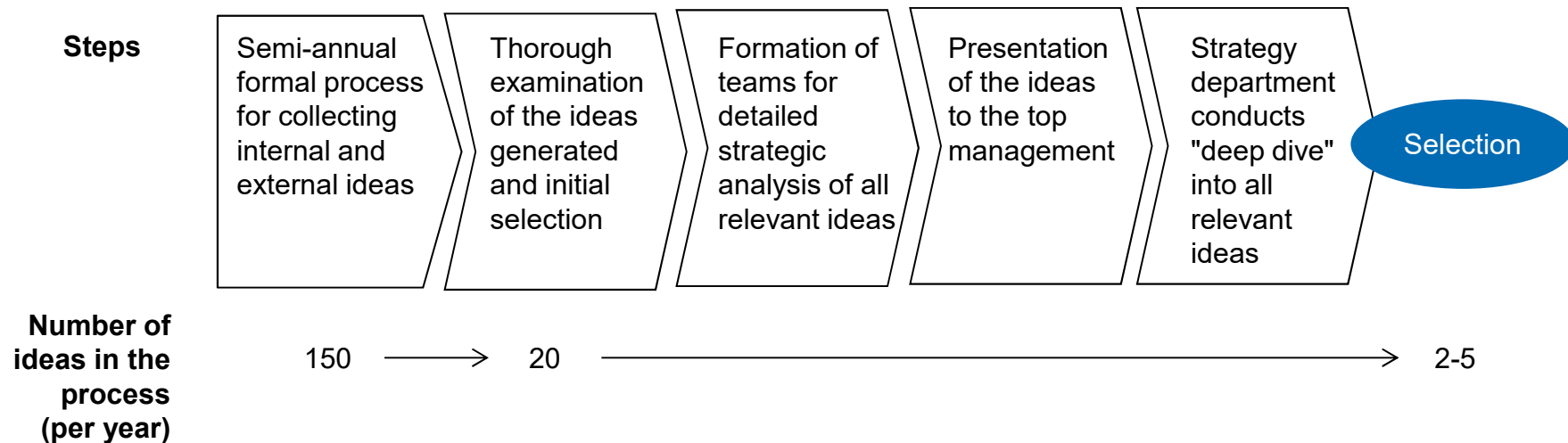
What criteria
must an EBO
fulfil?

- Strategic "fit" with IBM's strategic orientation
- Comprehensive positioning across various IBM business units
- Development of new value sources and addressing new customer benefits
- Market potential of at least one billion US dollars per year
- Possibility of market leadership
- Low risk of commoditization

Ambidexterity at IBM (3/5): Ideas for the EBO Group are screened and selected in a systematic process

EXAMPLE

3.2 Organization - Excursus: ambidexterity

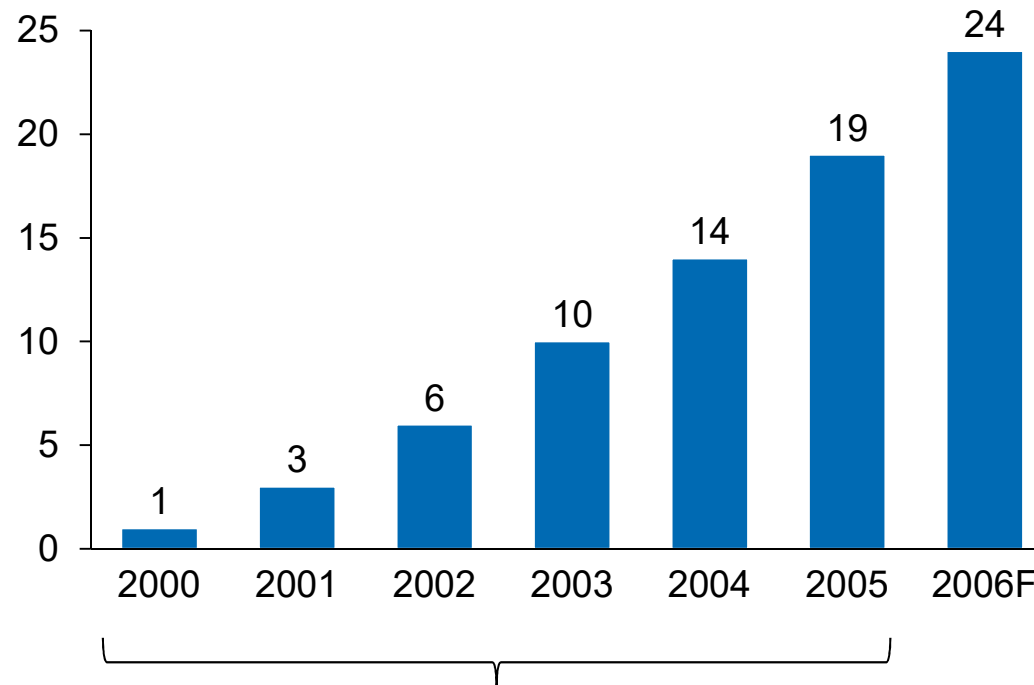


Ambidexterity at IBM (4/5): Only a few years after launching the EBO programme, it already generated a substantial proportion of IBM's sales

EXAMPLE

3.2 Organization - Excursus: ambidexterity

**Share of EBO
sales in total IBM
sales**



- 25 EBOs were launched between 2000 and 2005
- Two of the EBOs are now key growth businesses
- Only three EBOs were discontinued

Source: O'Reilly/Tushman (2011)

Ambidexterity at IBM (5/5): What makes the EBO system at IBM so successful?

EXAMPLE

3.2 Organization - Excursus: ambidexterity

Success factors of EBOs

- Active and regular top management support (sponsorship by at least one Vice President)
- Management of EBOs through "A-Team Leadership"
- Disciplined support of the EBO by other IBM units
- Avoiding reallocation of resources to mature businesses
- Evaluation of EBOs against critical milestones rather than against metrics from established businesses
- Quick start, if necessary quick end

When the World Wide Web came up: Structural ambidexterity at IBM

EXAMPLE

3.2 Organization - Excursus: ambidexterity



In 1998 IBM's software division was in a tense situation and exposed to two different forces. On the one hand, there was a need for software for classic mainframe systems based on existing programming languages. On the other hand, there was a growing demand for products for the then emerging World Wide Web with new programming languages and other customers. The customer needs differed fundamentally, as did the degree of novelty of the solutions to be created. The uncertainty about future developments also differed significantly. IBM created two independent departments that were integrated at top management level. The two divisions were managed with completely different time horizons and objectives.

Open source software at any price: ambidexterity at Misys

EXAMPLE

3.2 Organization - Excursus: ambidexterity



Misys is a \$1 billion software company that distributes its products to the banking and healthcare industries. Its CEO, Mike Lawrie, recognized the potential in open source software. His managers saw this development as a threat to their existing business, which was under pressure to cut costs, grow and improve results. The idea of spending \$300 million on researching this business area seemed to be an unnecessary distraction to many of them. Why should an already tight budget be allocated to a technology that, if successful, would undermine the existing business model? In a strategy meeting, Lawrie made it clear to his top management that it was imperative for the long-term survival of the company to focus on innovation in addition to cost and quality in existing areas. Lawrie was also able to show that open source software could be a lucrative option worth pursuing. He thus fulfilled one of the essential conditions for the successful implementation of ambidextrous organizations: the creation of a common strategy and a common vision.

But Lawrie created further conditions. Some members of the management team were replaced who did not share the vision of an innovative organization. Without this measure, the danger would have been great innovative approaches to be thwarted by opponents. To create an environment that supports innovation, the new Open Source Software unit was also set up as a separate unit reporting directly to the CEO. Finally, Lawrie was also personally prepared as a leader to endure and manage competition between the new and existing units and to sacrifice short-term revenues to the chance of being able to bring a radical innovation to market in the long term. His efforts were rewarded. In 2009, the Healthcare business grew by more than 30% thanks to the new technology.

140 out of 150: "Old White Males" as drivers of corporate entrepreneurship?

EXAMPLE

3.3 Management

Tom Peters, co-author of the legendary book "In Search of Excellence", tells of one of his management seminars, which he held at a large US company. His task was to discuss with 150 managers at upper and middle levels of the hierarchy how a company whose products have become pure commodities in recent years can become more innovative. Peters says that when he entered the seminar room, he already had the answer: of the 150 managers, an estimated 144 were between 48 and 59 years old.

Of these 144, an estimated 140 were so-called "OWMs" ("Old White Males"). And of these 140 "OWMs", an estimated 137 wore the traditional US-American offsite outfit: bright light green polyester golf pants. He concludes: Members of a group look the same, think the same, speak the same, discuss the same, eat the same food and develop the same ideas. This is followed by a rhetorical question about the initial situation: Can new entrepreneurial perspectives and initiatives arise that will lift the company out of the commodity trap?

How innovation budgets can "trickle away" ...

EXAMPLE

3.3 Management

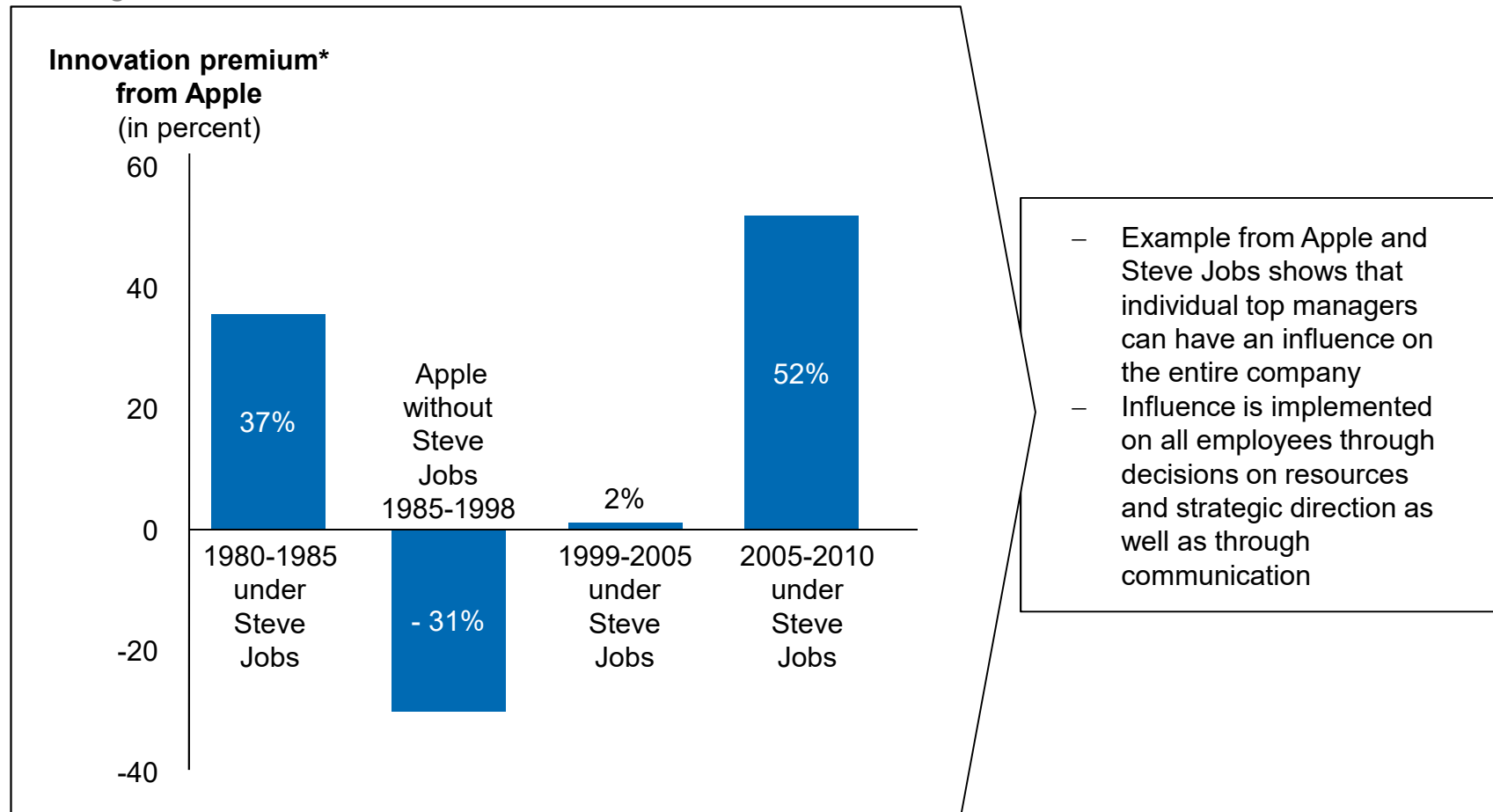


In the mid-1990s, a small team of middle and lower hierarchy level employees at Hewlett-Packard in the Scanner Division had developed the prototype of a portable scanner. The team initially received no funding for this project until Antonio Perez from the top management stepped in: he provided about \$10 million to test the feasibility of the product and let the team work with it.

When Perez asked about the progress of the project a few months later, he learned that funds in the Scanner Division were being diverted to fill another hole in the Division's budget. As a result, the team in question had neither financial resources nor ongoing top management support. The product idea was not further developed.

Can a single person at the top of the company even promote the development of the entire company?

3.3 Management

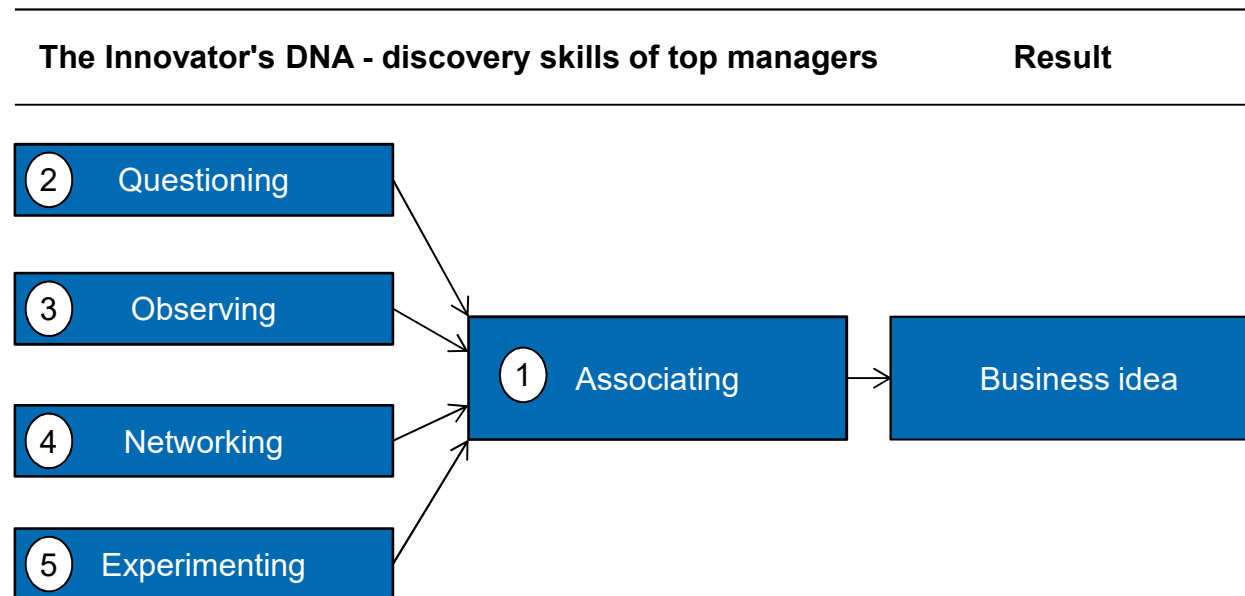


*The innovation premium measures the extent to which the stock market believes that the company will come up with profitable new ideas beyond the current business.

Source: Christensen et al. (2011)

Christensen et al. (2011) find that innovative top managers systematically have stronger discovery skills than less innovative managers

3.3 Management



Source: Christensen et al. (2011)

"Discovery skills" that make an innovator's DNA are: Associating, questioning, observing, experimenting and networking

3.3 Management

Skill	Description
Associating	<ul style="list-style-type: none">– Innovations often emerge at the interface of different disciplines ("Medici effect")– Ability of entrepreneurial managers to generate combinations of new information from a variety of existing information and experience
Questioning	<ul style="list-style-type: none">– Continuous questioning of what is actually accepted and assumed as standard– Typical questions: Why? Why not? What if?
Observing	<ul style="list-style-type: none">– Gathering of observation points through continuous observation, especially of customers and potential customers– Observations lead to information and experience
Experimenting	<ul style="list-style-type: none">– Continuous testing of new ideas, if necessary in close cooperation with potential customers
Networking	<ul style="list-style-type: none">– Building of networks as an essential part of working time– Creating access to information that would otherwise not be available

"Mr. Disney, what do you do all day long?"

EXAMPLE

3.3 Management

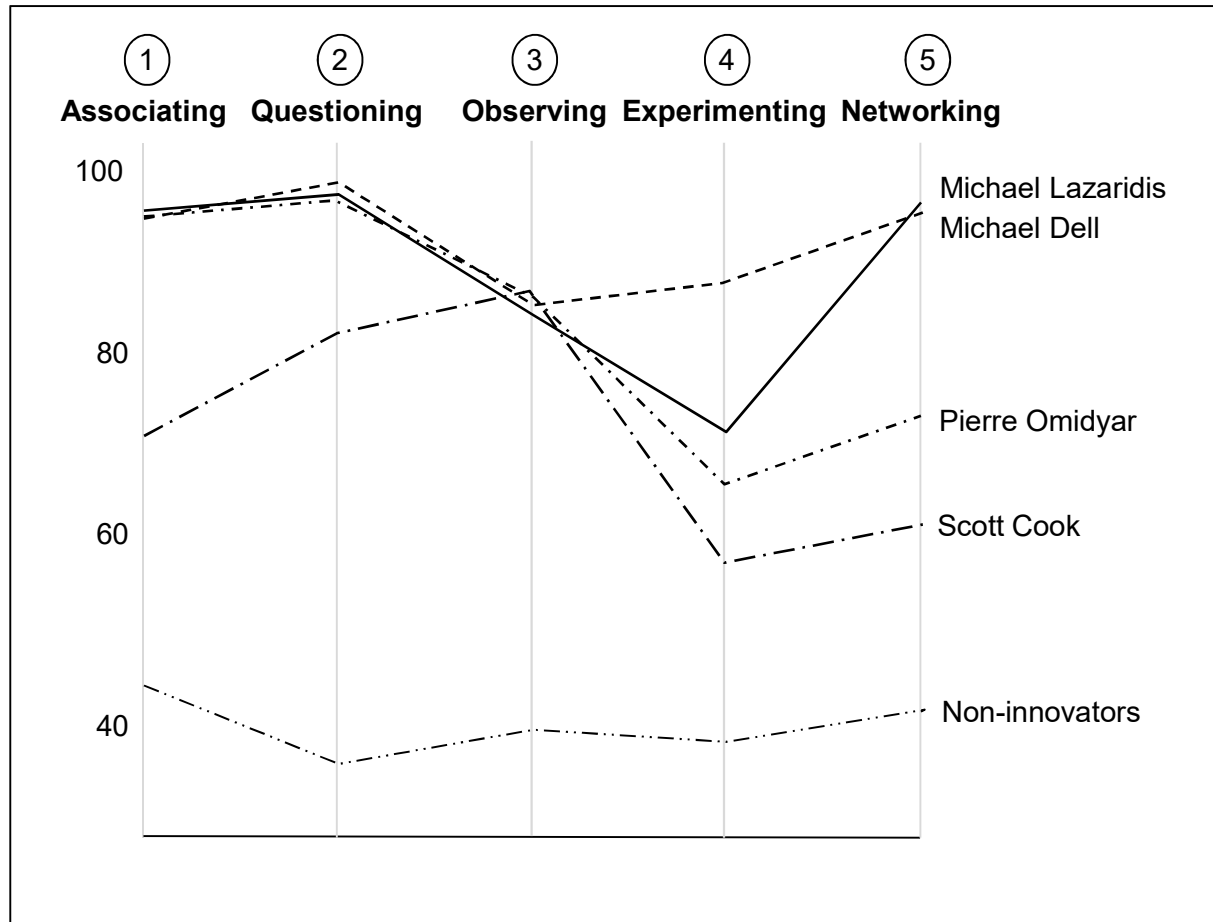


Walt Disney is considered one of the most successful entrepreneurs of all time in the USA. During a tour through the Disney studios, a little boy asked him if he personally drew Mickey Mouse. Walt Disney denied. He also declined the question whether he had made up the stories about Mickey Mouse himself. The little boy then asked Walt Disney: "What do you do all day long?"

This question made it clear to Walt Disney what his job really was and how he would succeed in constantly opening up new business areas. He went from studio to studio, bringing ideas together. He became the connecting line between his employees and their experiences and combined them into ever new ideas. This is how Walt Disney's central entrepreneurial achievements such as animated cartoons in the length of cinema films and the presentation of cartoon content in theme parks came about.

Examples of the five discovery skills in prominent top managers

3.3 Management



- Innovative top managers systematically show higher levels of the five discovery skills than non-innovators
- However, individual top managers also focus on individual discovery skills

Videos:

- The innovator's DNA

Source: Christensen et al. (2011)

Interaction

Based on the just introduced framework: How you adapt our daily routine to become more innovative?

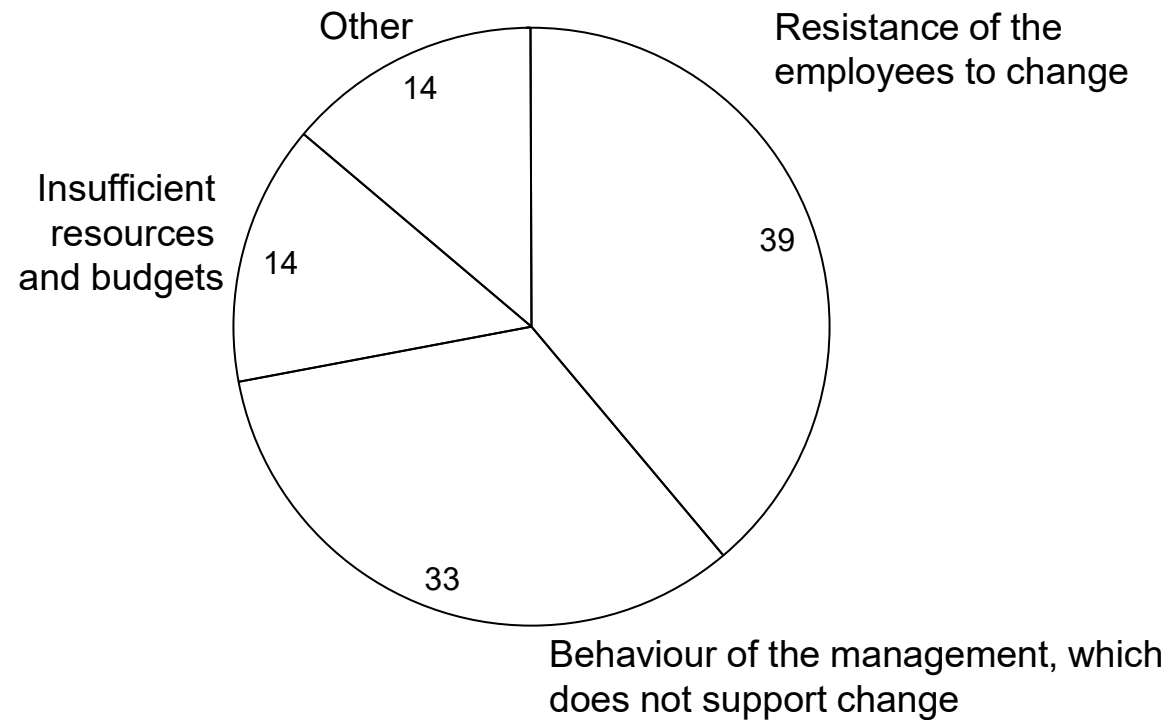
Agenda

- 1. Introduction**
- 2. Fundamentals of innovation and entrepreneurship**
- 3. Management approaches to the establishment of innovation and entrepreneurship**
 - 3.1 Planning
 - 3.2 Organization
 - 3.3 Management
- 4. Change management**



Why do the majority of all change programs fail?

4. Change management



Source: Keller/Price (2011)

What are other common mistakes and what are their consequences?

4. Change management

Common mistakes

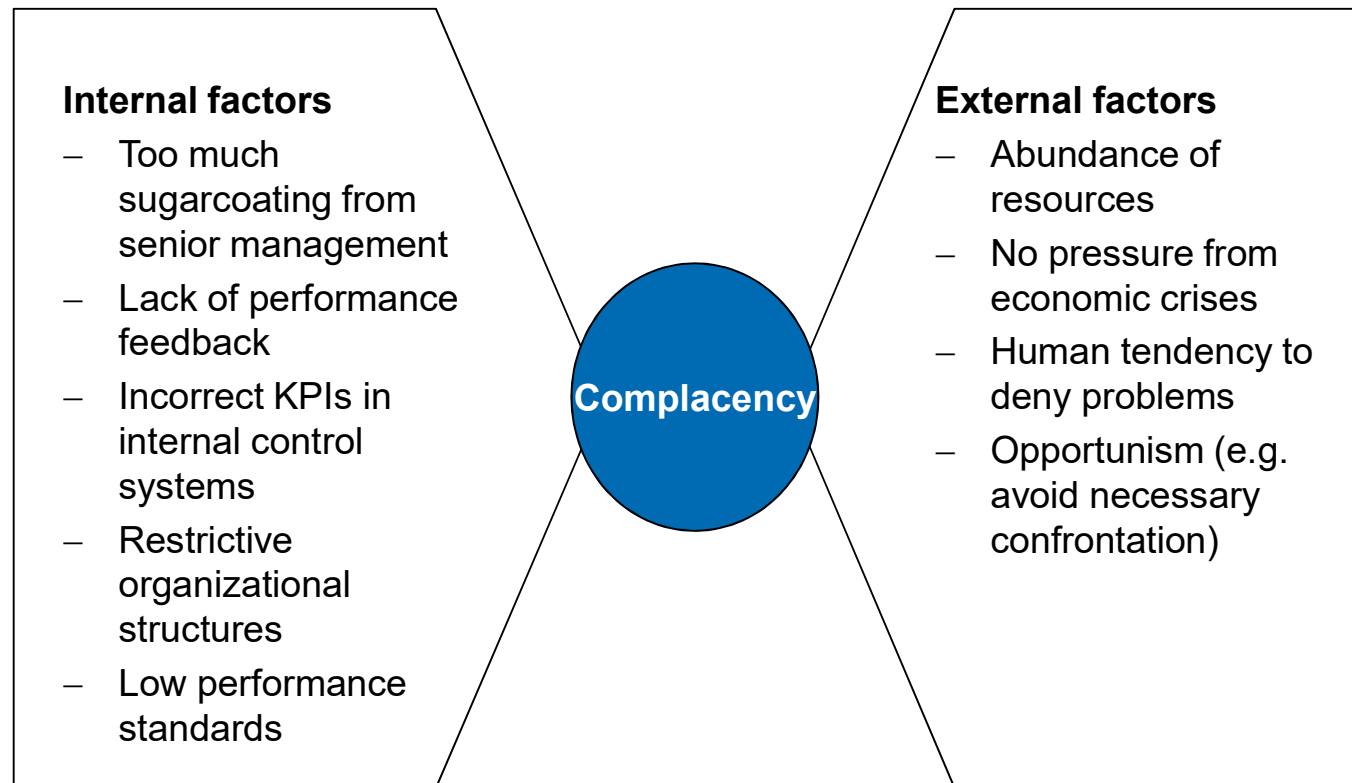
- Too much comfort
- The management level for implementing change is not powerful enough
- The power of a vision is underestimated
- The vision is not communicated enough by a factor of 10 (or 100 or even 1,000)
- Obstacles are allowed to block the vision
- No short-term profits are realized
- The "victory" is announced too early
- Change is not sustainably anchored in the organizational culture

Consequences

- New strategies are not well implemented
- Acquisitions do not generate the expected synergies
- The restructuring process takes too long and costs too much
- Staff downsizing does not control cost
- Quality programs do not bring the expected success

A common cause of unwillingness to change is the emergence of complacency

4. Change management



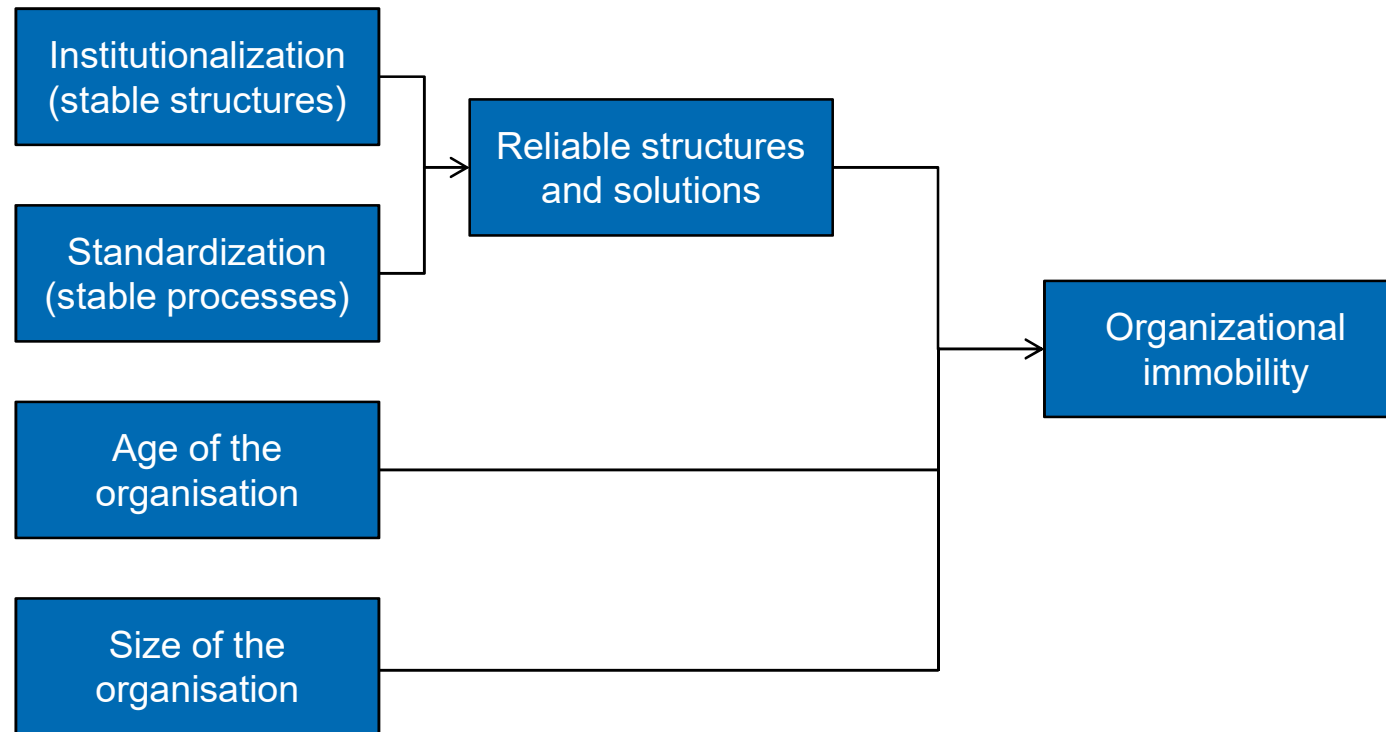
There is individual and organisational resistance to change that leads to the failure of these processes

4. Change management

Individual reasons	Organizational reasons
<ul style="list-style-type: none">– Objective: Deterioration of the work situation– Subjective (individually perceived):<ul style="list-style-type: none">• Inertia: Basic resistance to change, additional tasks etc.• Fear of loss of competence• Fear of loss of autonomy• Fear of social exclusion	<ul style="list-style-type: none">– Organizational immobility<ul style="list-style-type: none">• Institutionalization• Standardization• Age of the organization• Size of the organization

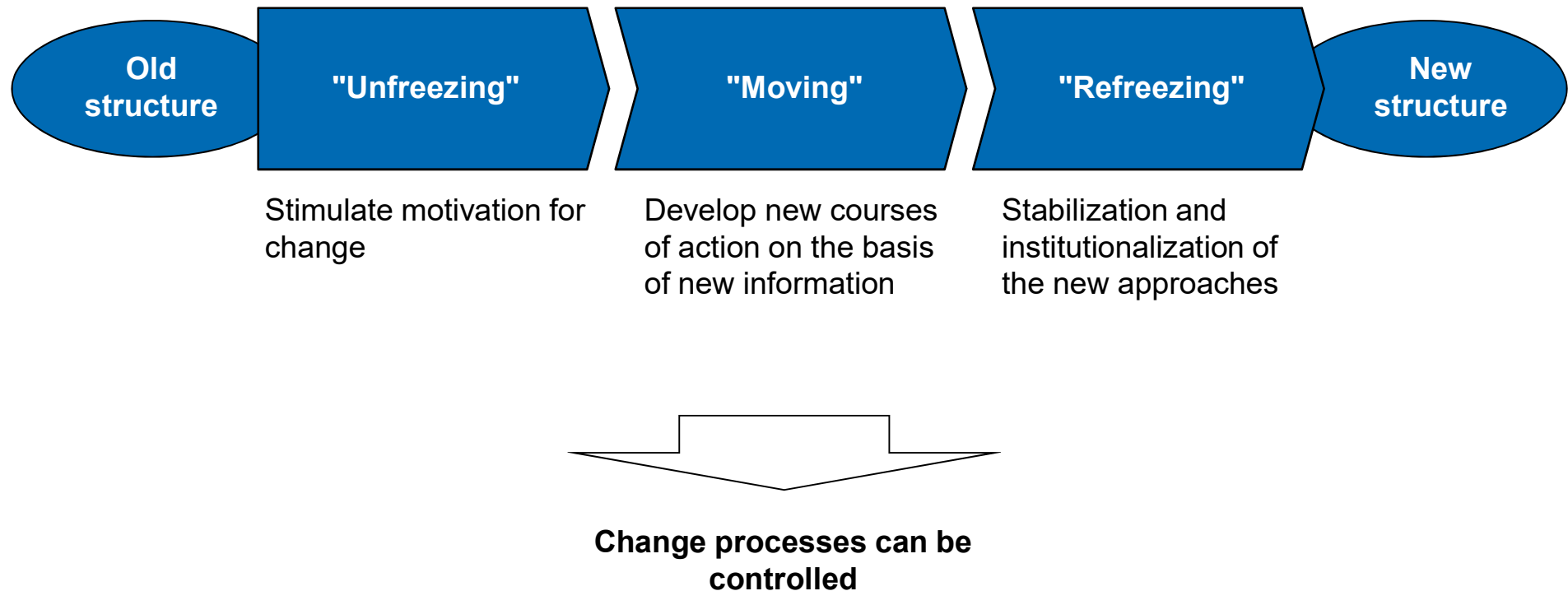
The immobility of companies depends on institutionalization, standardization, the age of the company and the size of the company

4. Change management



The three-phase model of Lewin (1947) is one of the most prominent phase schemes for change management

4. Change management

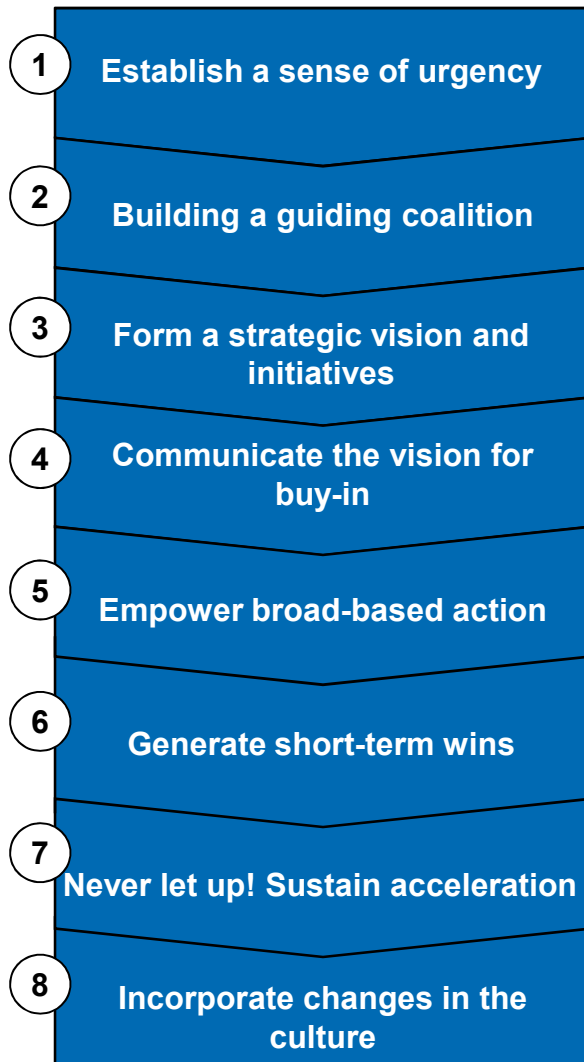


Eight steps of successful change according to Kotter (1995)

Videos:

- heart of change

4. Change management



- Present the competitive, market and crisis situation
- Explain the need for change and convince employees that maintaining the status quo is more dangerous than change
- Put together a team of managers and employees who have enough personal and structural power to lead change
- Present the desired change in the company as a target
- Define strategy for achieving the target image
- Communicate the vision and strategy in various ways (e.g. newsletter, meetings, townhall meetings, video of the management team)
- Leadership sets a good example
- Removing obstacles to change
- Change systems and structures that are contrary to the vision
- Promote risk-taking, new ideas and activities
- Plan and implement first short-term (performance) improvements
- Make visible and reward employees who have implemented or enabled these improvements
- Use credibility from initial successes to change further systems, structures and rules that do not fit the vision
- Recruit, promote and develop employees who are able to implement the vision
- Launch new projects that drive the vision
- Communicate the connection between new behavior and success
- Leadership development and training to ensure appropriate succession

Source: Kotter (1995)

1 A successful change process begins with establishing a sense of urgency

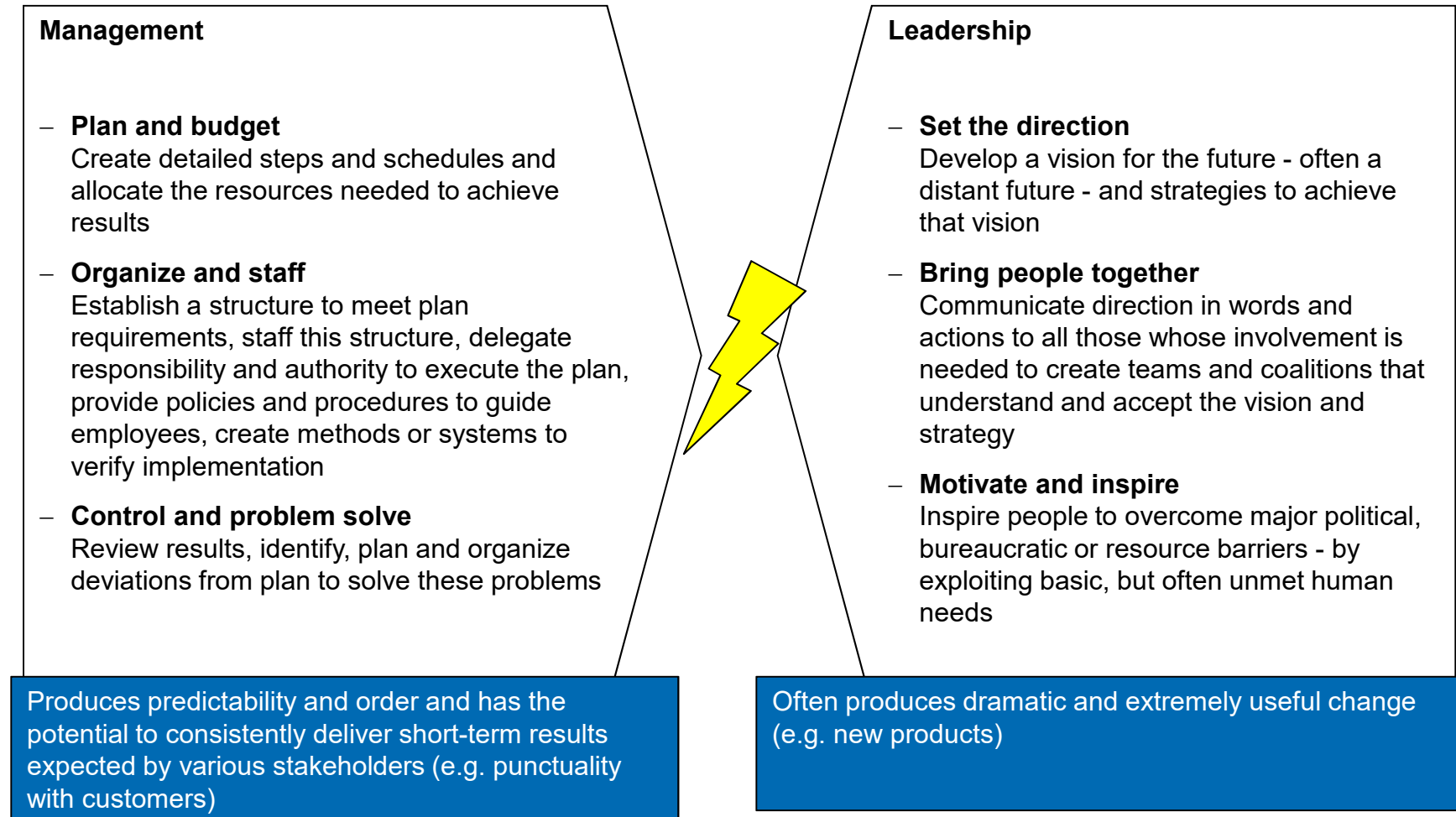
4. Change management

Ways to show the urgency of problems

- Causing a crisis - not correcting obvious mistakes, accepting losses and showing managers competitive disadvantages
- Fighting waste of resources - e.g. sale of company planes or luxury training centers
- Set hard-to-reach goals for turnover, profit, customer satisfaction, etc.
- Replace narrow functional goals for the performance of organizational units with broader, overall success-oriented goals
- Communicate statistics (e.g. financial or sales performance, customer satisfaction compared to competitors) to more employees
- Insist on regular communication with dissatisfied customers, unhappy suppliers and disappointed shareholders
- Hiring consultants or other measures to bring more relevant figures and "real" discussion to management meetings
- Position more "real" problem descriptions in the company newspaper/intranet or in management speeches and stop whitewashing
- Overwhelm employees with information about future opportunities, possible future returns and the current inability to address these opportunities

② With management you can create security and order, with leadership you can drive great developments and change

4. Change management

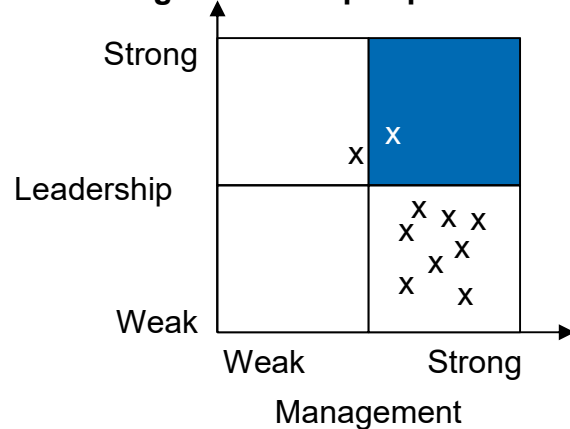


Source: Kotter (2012)

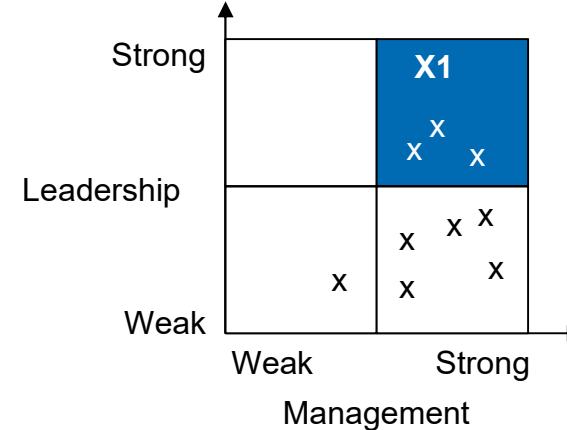
2 The right mix of management and leadership skills in the leadership team is necessary to drive change

4. Change management

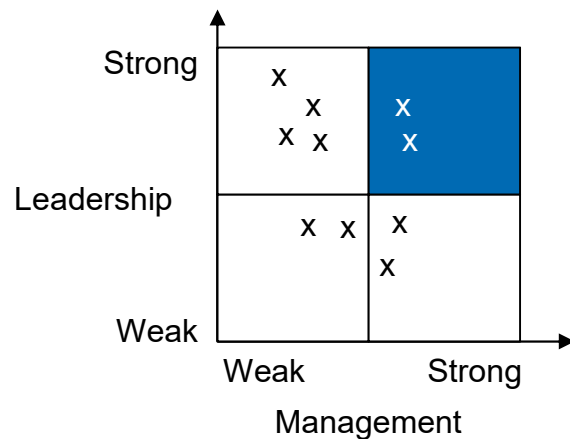
Not enough leadership expertise



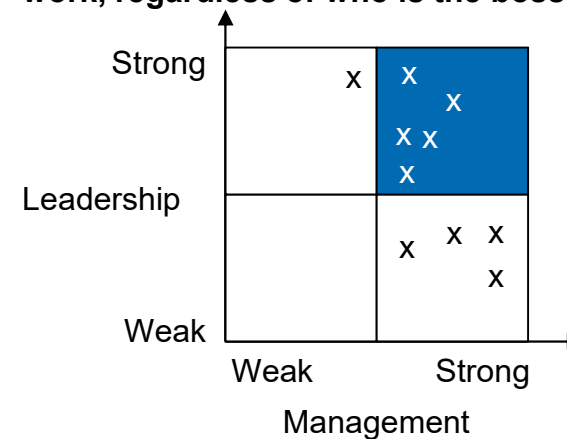
Can work if X1 is the boss and creates teamwork



Not enough management expertise



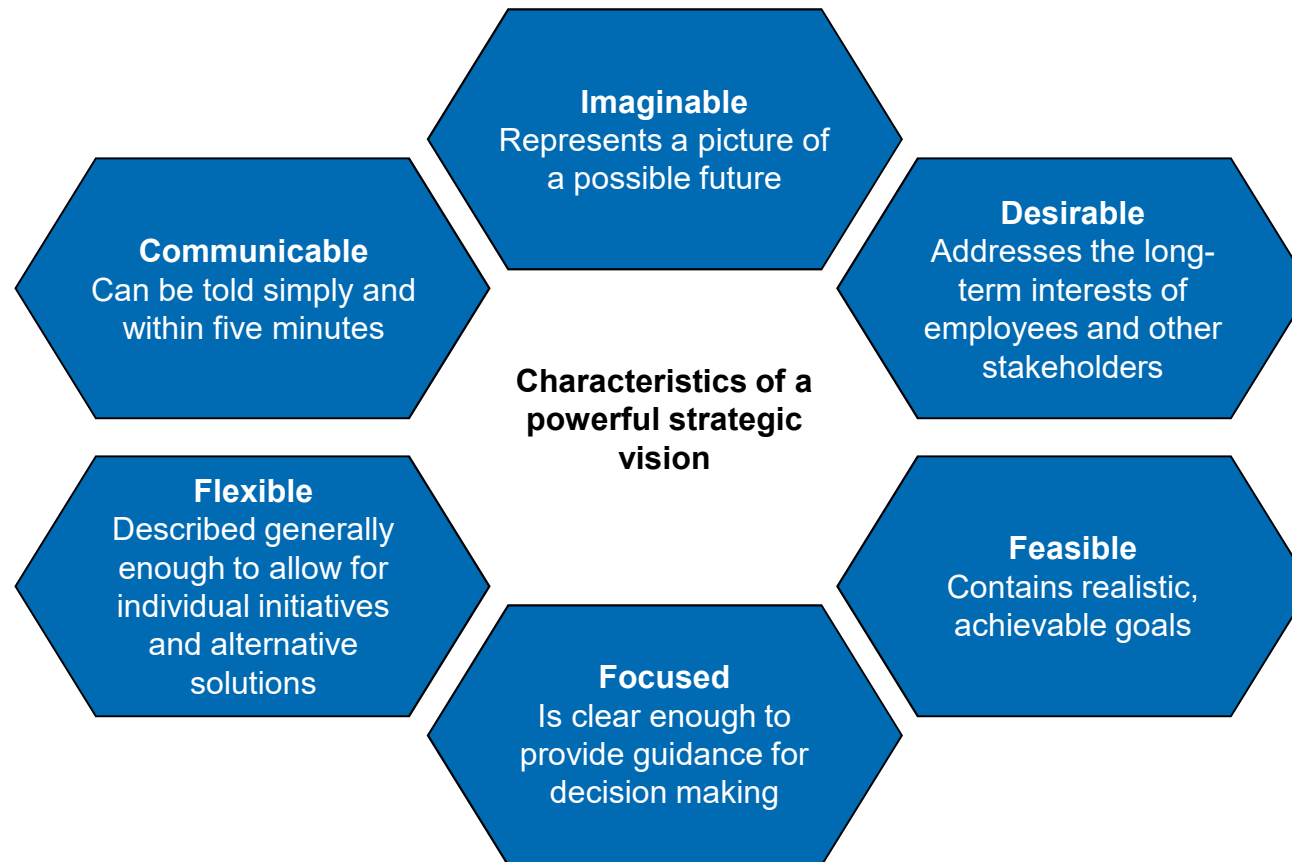
Will work well if there is good teamwork, regardless of who is the boss



Source: Kotter (2012)

3 What are the characteristics of a powerful strategic vision?

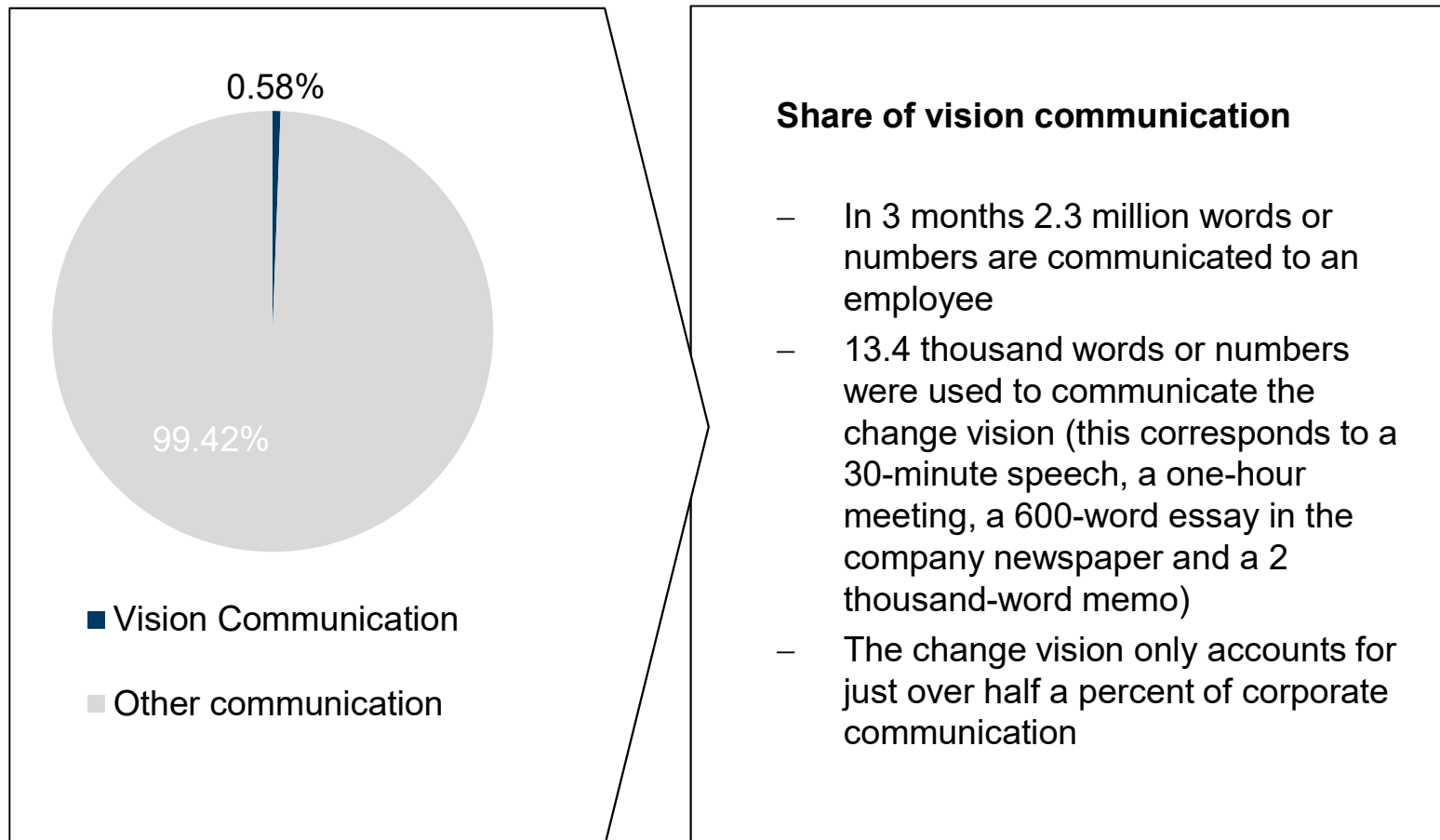
4. Change management



Source: Kotter (2012)

④ Typically, companies communicate too little about current change processes and the desired strategic vision

4. Change management



Source: Kotter (2012)

⑥ Collecting and communicating short-term wins is important for the further course and success of the change process

4. Change management

Characteristics of an effective win

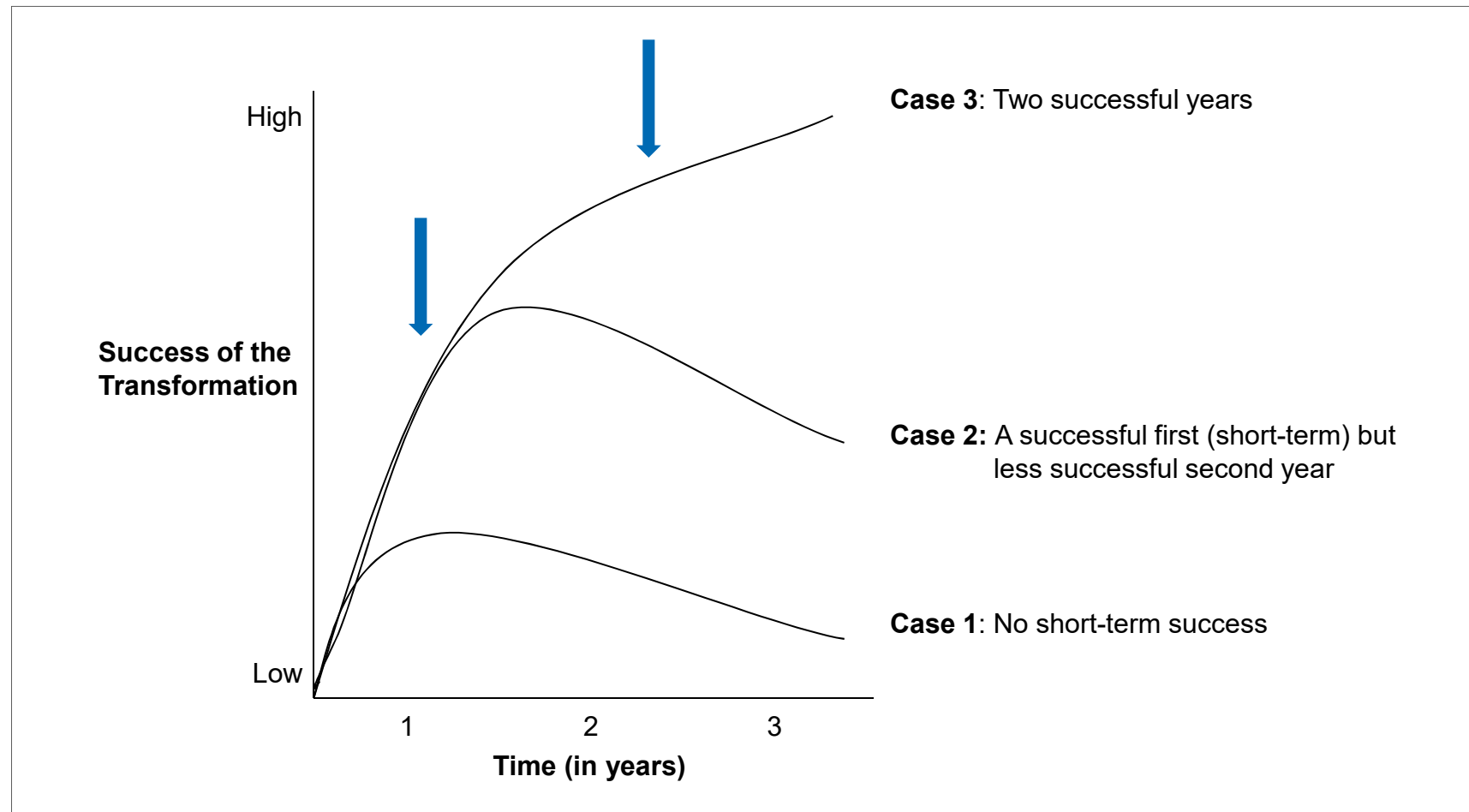
- **Visibility:** The result is visible to many employees and clearly recognizable as a success
- **Unambiguousness:** the result is clearly positive and is not open to discussion
- **Relevant in light of the opportunity before you:** the result is clearly visible as a result of the change

Positive aspects of short-term wins for the change process

- Proof that the sacrifices of change are worthwhile
- Reward for active supporters of the change
- Support for detailing the target vision
- Disempower critics and blockers of change
- Ensure the support of the top management
- Promote the momentum as a further motivation for change

⑥ Without short-term successes, the change process will hardly achieve lasting successes

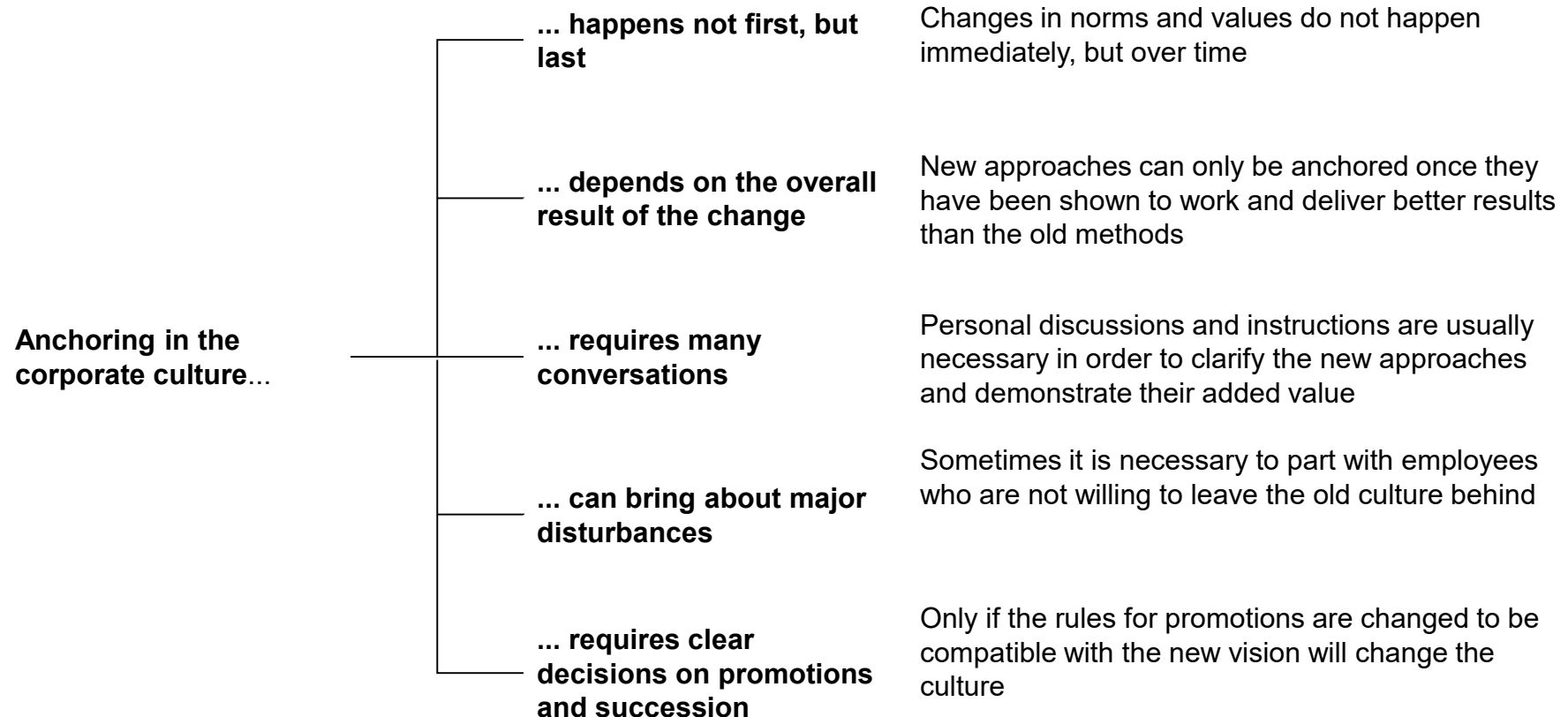
4. Change management



Source: Kotter (2012)

8 Aspects of anchoring a change in the corporate culture

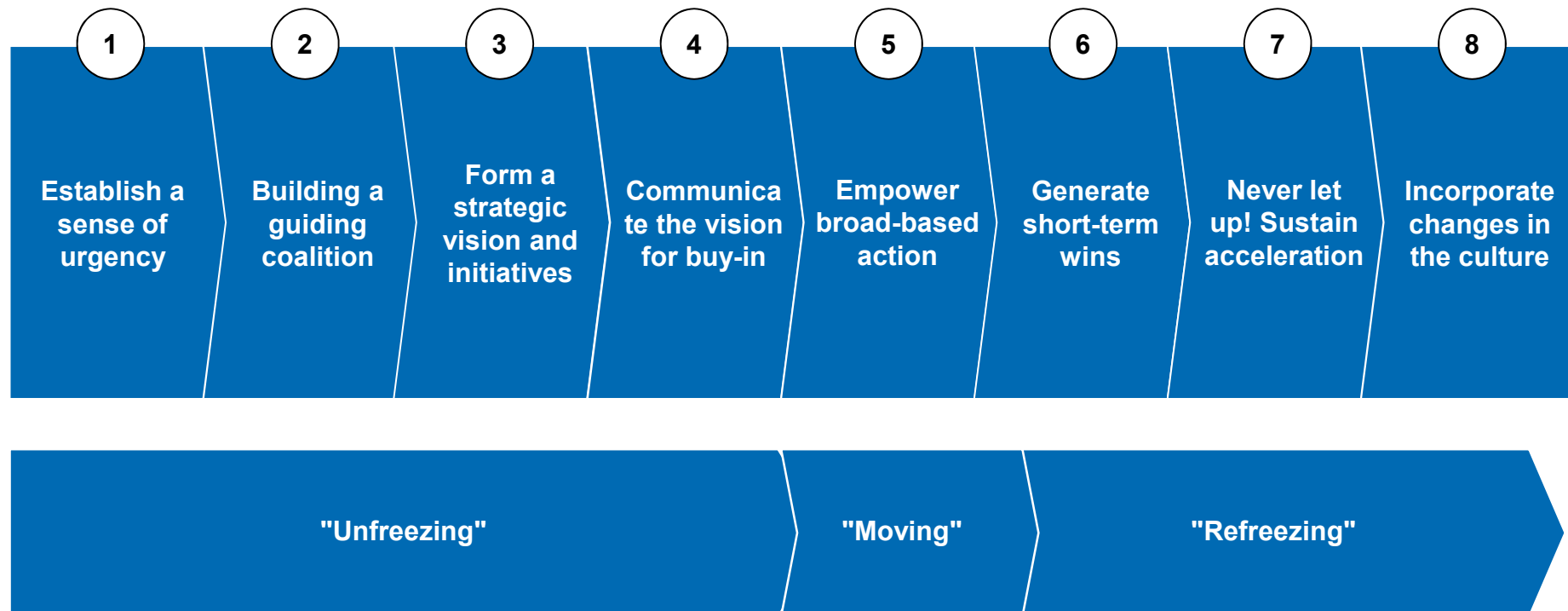
4. Change management



Source: Kotter (1995)

Connection between the models of Lewin (1947) and Kotter (1995)

4. Change management



Source: Kotter (1995); Lewin (1947)