



Organisational Forms to Leverage Knowledge

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Innovation would take place if we let people with different backgrounds work together and inspire each other

Lars Kolind, CEO, Oticon

Learning Outcomes

After completing this chapter

- You will know what are organisational challenges and approaches to find a balance between stability/renewal and competition/collaboration;
- You will be able to apply game theory to knowledge sharing behaviour;
- You will know the strengths and weaknesses of different organisational forms regarding knowledge flows
- You will be able to evaluate and determine an appropriate organisational form for a specific business setting
- You will be able to run an After Action Review;

3.1 Balancing Antagonisms

How can we create a boundaryless organisation where knowledge flows in and out, from top to bottom and bottom-up, where knowledge flows across units and «knowledge silos» do not exist? How can we create an agile organisation which learns quickly, innovates and performs its day to day routines in an effective manner?

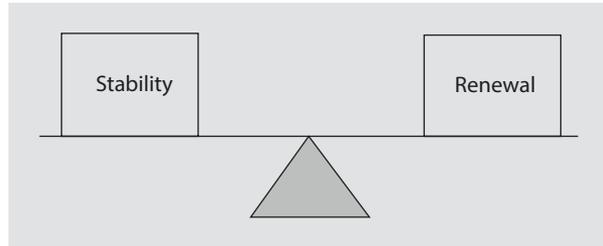
In this chapter we will deal with the challenges to find the right organisational forms to make a reality this vision.

The art of organising is related to balancing antagonisms: To be successful in knowledge competition organisations must learn to balance *stability and renewal* as well as *cooperation and competition*. An excess of stability can obstruct renewal. At the same time, excess renewal could mean that a regulated business process is no longer possible. This is seen in companies that have to struggle with «*the curse of high growth rates*». The same applies to the act of balancing cooperation and competition within and among companies. Excess competition – e.g. while selecting a supplier company – might bring high returns in a short term. However, this may result in extreme price wars, quality problems and cutting-off from knowledge sources. An excess of internal competition in companies limits knowledge exchange. Too much cooperation makes competitive knowledge accessible to competitors or obstructs cost-effective solutions because the similarities and teamwork are searched at every price (Hansen 2009). Stability and renewal as well as cooperation and competition are the keys to knowledge-based management of a company as we will see subsequently.

3.1.1 Stability Versus Renewal

In a highly global competitive environment companies need to address a few critical questions – How do companies balance the two conflicting factors of stability and renewal? How do companies enhance order and control while responding to challenges

■ Fig. 3.1 Balancing stability and renewal



and how do they renew themselves and learn new things? How can companies establish relatively stable general conditions that provide flexibility in organising and combining employees and resources? (Ciborra 1996, p. 113). On the one hand, organisations must constantly strive to be «different» by re-combining their resources. Knowledge represents a portfolio of options and a platform for future developments. The concept of «*platform organisation*» (Ciborra 1996; Kogut and Zander 1992) discussed below facilitates this perspective. On the other hand, companies must be in a position to enhance their operational efficiency, i.e. to use their competence and skill as optimally as possible in short-term competitive situations. How can companies balance these factors as shown in ■ Fig. 3.1?

In an **evolutionary perspective**,¹ a company accumulates knowledge over the course of its existence. This knowledge is a source of specific competence of the firm. In its development over time certain thinking patterns are adopted by the employees of the companies, certain behaviour is expected and practiced and particular decision processes are built into the operating procedures and inculcated in the minds of the employees. In this sense, these «*core competencies*» can become «*core rigidities*»: «Firms are stuck with what they have and have to live with what they lack» (Leonard-Barton 1992a, b; Burgelman 1994).

In successful cases, this accumulated knowledge enables the company to process its operative business effectively, strengthens the unique advantages of the company further and contributes to continuous and progressive development of knowledge. *Quality Management* is based on this type of stability focussing on processes and routines.

Renewal – the other side of the balance – implies an ability of the organisation to develop and change its resources and capabilities through learning and innovation. This includes continuous improvement processes as well as disruptive change challenging current wisdom and accepted patterns of action. As we will see in the Oticon case below, it is not easy to institutionalise a renewal process in organisations.

How can firms balance stability – exploiting current capabilities- and renewal – exploring fundamentally new competencies – in order to achieve long-term success? While earlier studies often regarded the trade-offs between these two activities as insurmountable, more recent research describes **ambidextrous organisations** (Tushman and O'Reilly 1996; Raisch et al. 2009) that are capable of simultaneously exploiting existing competencies and exploring new opportunities.

1 On evolutionary theory see Nelson and Winter (1982).

Definition

Organisational ambidexterity refers to an organisation's ability to be efficient in their management of today's business and also adaptable for coping with tomorrow's changing demands (Raisch and Birkinshaw 2008).

To compete, companies must continually pursue many types of innovation aimed at existing and new customers (O'Reilly and Tushman 2004):

- Incremental innovations = small improvements in existing products and operations
- «Architectural» innovations = technology or process advances to fundamentally change a component or element of the business
- Discontinuous innovation = radical advances that profoundly alter the basis for competition in an industry

It is not easy to combine these various types of innovation. Kodak for example has long time excelled at analog photography but hasn't been able to make the leap to digital cameras.

■ Table 3.1 shows that exploitative and explorative business develop different mind sets (tacit knowledge) thus making it so difficult to excel at both.

For discontinuous and sometimes also for architectural innovation it is therefore recommended to set up as an independent unit with its own culture, processes, and structure, but the unit is still integrated within the existing management hierarchy.

What does it take to become ambidextrous?

Based on a number of case studies O'Reilly and Tushman conclude that ambidextrous organisations need ambidextrous senior teams and managers – executives who have the ability to understand and be sensitive to the needs of very different kinds of

■ **Table 3.1** The scope of the ambidextrous organisation

Alignment of:	Exploitative business	Exploratory business
Strategic intent	Cost, profit	Innovation, growth
Critical tasks	Operations, efficiency, incremental innovation	Adaptability, new products, breakthrough innovation
Competencies	Operational	Entrepreneurial
Structure	Formal, mechanistic	Adaptive, loose
Controls, rewards	Margins, productivity	Milestones, growth
Culture	Efficiency, low risk, quality, customers	Risk taking, speed, flexibility, experimentation
Leadership role	Authoritative, top down	Visionary, involved

Adapted from O'Reilly and Tushman (2004), p. 80

businesses. Combining the attributes of rigorous cost cutters and free-thinking entrepreneurs while maintaining the objectivity required to make difficult trade-offs, such managers are a rare but essential breed. Organisational units should operate in a separated manner, but the senior team needs to be integrated.

Furthermore, a company's senior team must be committed to operating ambidextrously even if its members aren't ambidextrous themselves. Resistance at the top levels of an organisation can't be tolerated, which means that a shift to an ambidextrous organisation can be a wrenching experience.

The authors also have found that a clear and compelling vision, relentlessly communicated by a company's senior team, is crucial in building ambidextrous designs. These aspirations provide an overarching goal that permits exploitation and exploration to coexist. For example Ciba's «Healthy Eyes for Life» were compelling visions that underscored the strategic necessity of ambidexterity and the benefits for all employees, both those in the traditional units and those in the breakthrough initiatives. To maintain momentum and overcome inertia it is important to highlight the concrete accomplishments of the new approach.

Case Study

Oticon – The Spaghetti Organisation

Oticon, the Danish hearing aid technology company, was a world leader in behind the ear hearing aids but its market share began to decline, as people moved to «in the ear» models. Just as the company's market share had dropped from 15% to 7% and it was starting to lose money, Lars Kolind took over as CEO to turn its performance around.

A former management consultant and associate Professor at Copenhagen University, Kolind embarked on a classic turnaround strategy: he pared the company down, shed staff and improved efficiency. And he re-focused the business on its key markets. One year later, the strategy seemed to be working and Oticon returned to profit. But Kolind knew that the changes were not enough. «It was clear that we could not survive over the next 5 years without taking a radical step» he remembers. «Where was our competitive edge? Nowhere».

It was at that point that we reached a sort of breakpoint. I realised the competitive situation was extremely difficult because we were up against all the big boys you can imagine – Siemens, Philips, Sony, 3M, and AT&T. My analysis was that we could never beat them in financial resources; we could never beat them at marketing or at the brand level because they all had fantastic brands. We could never beat them at technology, so we had to find something that we could do in a unique fashion. That led me to believe that if we could design a uniquely innovative, fast moving, efficient organisation, then this is something they could never replicate.

Kolind's response to this problem was a radical new organisational model with no formal hierarchical reporting relationships, a resource allocation system built around self-organised project teams, and an entirely open-plan physical layout. He called it the spaghetti organisation, to symbolise the organic and non-formal structure he was trying to create.

In his concept of the perfect corporate organisation, Kolind placed the interaction, collaboration, and connectivity of people, customers, suppliers, and ideas at the company's heart. Kolind called it «a spaghetti organisation of rich strands in a chaotic network». The key characteristics of a spaghetti organisation are choice (staff initiate projects and assemble teams; individuals invited to join a project can decline); multiple roles (the project approach creates multi-disciplined individuals); and transparency (knowledge is shared throughout the organisation). The organisation is knowledge based and is driven internally by free market forces.

My thinking went like this. If Oticon was to compete with a serious competitor like Siemens, we had to do something radically different. You can't just do it 10% different. You have to do it radically different and use your imagination, gut feeling, whatever it is, and hope it will work. So I was aware that I couldn't simply read the same books as the MBAs at Siemens. I had to find something that was unique and better.

So how does the spaghetti organisation work? Any individual who comes up with a good idea is free to assemble a team and act as project leader. Each project, however, then has to compete with all the other projects trying to get off the ground at any time. In true Darwinian fashion, an employee must attract sufficient resources and support for his or her project or it will perish.

Key to freeing up the way people think and work is Oticon's mobile office system. Employees carry their office with them wherever they go at Oticon's headquarters. Desks are not allocated; instead workers use the nearest available workstation, rolling their personal «Rullemaries» (mobile carts) around the hardwood floor to wherever they need to be in the building.

The new way of working seems to have worked. During the following recession, Oticon's industry experienced some of the toughest trading conditions in its history. During those dark days, however, Oticon proved the exception to the rule. It published figures showing an increase of 100% on revenue and a ten-fold increase in profits in relation to figures of 5 years earlier.

But Kolind sensed that something wasn't right. It had been a hard year, with the company almost exclusively focused on developing and releasing a new line of digital hearing aids. The new products epitomised the breakthrough culture. The problem was that the temporary teams created to push them through had assumed an air of permanence.

The unorganised company was becoming dangerously organised. Kolind's solution was to «explode Oticon in a new direction». Projects were re-arranged geographically within the building. He described the result as «total chaos» – precisely what he was looking for.

When Lars Kolind stepped down from Oticon after 10 years as CEO he left it in a strong competitive position.

Source: «Rethinking management's first principles – Oticon»

New frontiers Tomorrow's management innovation today

► http://www.managementlab.org/files/u2/pdf/case%20studies/OticonCaseStudy_.pdf.

3.1.2 Competition Versus Cooperation

When should management, business units or research teams go for competition and when would collaboration be more effective? What does collaboration or competition mean for knowledge flows?

To answer these questions consider these two different organisational arrangements:

1. A firm creates profit centres in order to introduce competitive forces into the organisation. Profit centres might compete for clients and performance of profit centres is ranked so that managers compete for the best rank. They will focus on their individual bottom lines and avoid sharing best practices as each manager would like to stay at the top of the performance ranking and keep the profit centre's «secrets».
2. A big international firm promotes cross-unit collaboration. Leaders are encouraged to form cross-unit networks focused on areas of shared interest. Over time, this idea flowers into an unforeseen number of networks and sub-networks sharing best practices. But increasingly, the firm finds that people are flying around the world and are simply sharing ideas without always having a strong focus on the bottom line. With this example Hansen (2009, p.12) illustrate the «collaboration trap» that when leaders promote collaboration in their companies, they get more than they bargain for; people often overdo it.

The challenge to balance competition and cooperation is typical for a knowledge-based firm. Different branches of the same consulting firm or an insurance company like to compete with each other for the same customers. However, this competition should not result in loss of a customer because they cannot come to an agreement among themselves on who «shoots the bear». Competition must not lead to a conflicting situation wherein revenue targets of one branch inhibit allocation of right resources available in another branch.

Hansen advocates a «disciplined collaboration» and defines it as «*the leadership practice of properly assessing when to collaborate (and when not to) and instilling in people both the willingness and the ability to collaborate when required*» (Hansen 2009, p. 15).

To accomplish disciplined collaboration Hansen proposes three steps:

- *Step 1: Evaluate opportunities for collaboration.* Ask the question: What will we gain from collaboration and what is the cost of collaboration? Make sure that collaboration is not an end in itself.
- *Step 2: Spot barriers to collaboration.* What are the barriers blocking people from collaborating well? Particularly look out at the «not-invented-here» barrier, the «hoarding» barrier, the «search» barrier (people are not able to find what they are looking for) and the «transfer» barrier (people are not able to understand and transfer knowledge and practices to different contexts).
- *Step 3: Tailor solutions to tear down the barriers.* How to motivate for collaboration and develop the required competences? To overcome the barriers Hansen proposes three levers. The «unification lever» refers to compelling common goals and articulating a strong value of cross-company teamwork. The «people lever» refers to get the right people to collaborate on the right projects. The «network lever» focuses on interpersonal networks and less on formal hierarchies.

Collaboration takes many forms: Projects, networks, communities of practice, marketing teams, core service teams, research groups and specialised teams are gaining more and more importance for a systematic creation and transfer of knowledge. The functions of these collaborative forms include the identification, transfer and development of knowledge relevant to the business. For this purpose, teams involved in the competence network conduct benchmarking activities and meet periodically to discuss certain topics. They are the competent «drop-in centres» for queries. They coach and conduct projects and are responsible for creating and maintaining the contents of databases as well as Intranet.

Case Study

Creating Organisational Linkages – The Eureka Forbes Senate

When Eureka Forbes (EFL), a multi-product, multi-channel corporation and a leader in domestic and industrial water purification systems, vacuum cleaning and air purification solutions in India, was searching for a way to connect with all its employees, it found a model right in its backyard – in the Indian Parliament (Ghosh 2010). EFL decided to create a senate, a sort of a parallel governing body, which would have representatives from all Eureka Forbes' centres across the country. «The idea was to make sure each and every one of our employees has a voice,» says Marzin R Shroff, CEO, direct sales. «We wanted to tell them that they will be heard. The senate, as we see it, is an important empowerment initiative.»

At the heart of the set-up is the EuroSenate, a 14-member body of elected representatives – one each from Eureka Forbes' 14 strategic business units, or geographic zones. The representatives, called senators, are assisted by a three-member council, also elected from the SBU or the «constituency». The 42 councillors and the 14 senators report in to six governors, regional heads of the company. There is also a president, speaker and a Senate Administration Committee. «The senate has taken care of so many of our problems, both big and small,» says H R Ganesh, senator for the Karnataka region. «Many things were difficult to bring to the notice of the head office before. We didn't have an opportunity to meet the Directors either, and tell them about our problems. Now, as part of the senate, we get to interact with them at least once every three months.»

The senators and their councillors have a clear mandate. They are to be the emissaries of the head office in the zones, and a conduit between workers and the HQ. «They must have their ear to the ground, and their eyes on their teams,» says Shubha Ashraf, deputy general manager of the Knowledge Management team, which came up with the idea of the senate.

Source: Interview with Eureka Forbes.

Two-Person Knowledge-Sharing Dilemma²

The issue of collaboration versus competition (see ■ Fig. 3.2) has been explored by game theory. When would people be willing to share knowledge and when not?

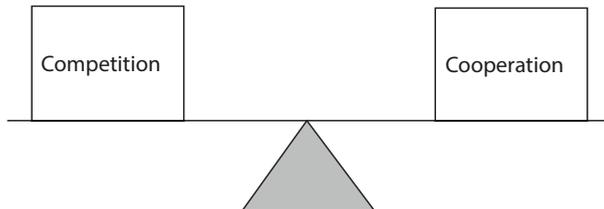
Knowledge sharing between individuals can possibly result in a benefit for both, but game-theoretically it might not be the equilibrium strategy. We analyse a situation with only two people and two possible actions. The action space (A) per player consists of the two possibilities: knowledge sharing (s) and knowledge hoarding (h).

There are four possible outcomes with the respective payoffs (see ■ Fig. 3.3):

- hs: Utility of hoarding while the partner shares his knowledge
- ss: Utility of mutual knowledge sharing
- hh: Utility of mutual knowledge hoarding
- sh: Utility of sharing while the partner is hoarding

The best situation for a player is to hoard the knowledge while the other player shares the knowledge (hs). The second best outcome is that both share their knowledge (ss). This difference between hs and ss comes from the cost of knowledge sharing and the benefit of being the only one who has this particular knowledge. The third best option is the mutual knowledge hoarding (hh). Therefore, both would be better off if they share

■ Fig. 3.2 Balancing competition and cooperation



2 Text based on ► http://www.diss.fu-berlin.de/diss/servlets/MCRFileNodeServlet/FUDISS_derivate_00000002325/03_chap3.pdf;jsessionid=DCC25A49443797BEC2C730833FD9884D?hosts=, p. 60–61.

		Player B	
		Knowledge hoarding	Knowledge sharing
Player A	Knowledge hoarding	hh	sh
	Knowledge sharing	hs	ss
		h	s
		h	s
		h	s
		h	s

■ Fig. 3.3 Payoff matrix of a two-person knowledge-sharing dilemma

mutually instead of mutual hoarding. The worst option is that the player spends the time and effort to share knowledge while the other player hoards his (sh). This leads to the following ranking of the payoffs: $hs > ss > hh > sh$.

We also assume a situation where the best collective strategy would be mutual knowledge sharing rather than a collusion of sharing and hoarding.

The ranking of the payoffs corresponds to the prisoner's dilemma game. In this situation, it is always individually best not to share the knowledge, independent of the choice of the other person, i.e. knowledge hoarding is a strictly dominant strategy. Consequently mutual hoarding is the equilibrium. Caused by the payoff structure, the players are trapped in a social dilemma. In a social dilemma, optimal individual behaviour has the effect that everybody is worse off than they would be otherwise. Individual rationality leads to collective irrationality. In a social dilemma there is at least one outcome in which every person would be better off than in the equilibrium.

This analysis helps to understand why knowledge sharing is not a dominant strategy in many organisations and hence the need to create convincing motives for cooperation.

From a market related game theory perspective, Nalebuff and Brandenburger have coined the term «*co-opetition*» (Nalebuff and Brandenburger 1996). Co-opetition is a business strategy based on a combination of cooperation and competition, derived from an understanding that business competitors can benefit when they work together. Companies participate in «*competitive collaboration*» in order to get access to knowledge and acquire knowledge collectively. They compete with each other in exploiting this knowledge.

The relation between automobile manufacturers and their suppliers is a good example of competition and cooperation from the knowledge perspective. While selecting the suppliers, the buyers exploit the competitive situation very well. However, they stick to the supplier for longer periods and develop competencies together with the suppliers (North 1997). Competition takes place increasingly at the level of clearly distinct end products and not at the component level or module level.

Benchmarking between competitors is another example of this strategy of competition and cooperation. In large companies, some business divisions cooperate through strategic alliances while some business divisions are strong competitors. If such an organ-

Criteria for knowledge sharing or hoarding	What do I gain if I share my knowledge?	What do I lose if I share my knowledge?
Reputation of "expert"		
Uniqueness of my knowledge		
Job security		
Trust in the organisation		
Value of my knowledge		
Incentives/ rewards/ punishment for (not) sharing		
Time and opportunities to acquire new knowledge		
Others:		

■ Fig. 3.4 Criteria to decide whether to share or not to share knowledge

isational design is well conceptualised, the competitive collaboration turns into a Plus Sum Game that strengthens the competitiveness of both the partners for a long time.

Cooperation need not always be planned and agreed formally at the management level. It can also take place informally. Thus, with an example of competing steel companies in the USA, Stadler and von Hippel (Stadler 1995; von Hippel 1987) could prove that employees handled information based on mutuality according to the «GIGI principle: give information, get information» ■ Fig. 3.4 summarizes criteria of people whether to share or not to share knowledge.

Balancing cooperation and competition requires choosing the right organisational setting. Before deciding on organisational structures it is advisable to make clear what are the guiding principles of a business:

- «**Success of a unit has a priority over success of a company**» This perspective emphasises competition as a driving force for success. It is assumed that entrepreneurs (or «intrapreneurs» in a company, e.g. a profit centre) act with a motive of optimising unit performance and are therefore interested in optimum use of the resources of their unit. A global control cannot assure this optimum utilisation. Company units that are operated in this manner must be exposed to internal and

external competition. Manufacturing plants compete with each other. If the profit objective is not achieved, the business unit is closed down. Profit incentives are dominant. Knowledge is transferred selectively considering the cost-benefit ratio. Often, in such a mindset, the entire company turns into a meaningless financial holding with individual «knowledge silos» that do not cooperate considering that «knowledge is power and must be concealed». Customer benefits and capacity use are suboptimal because units never or rarely work together. The customer does not get a comprehensive service or advice from one source.

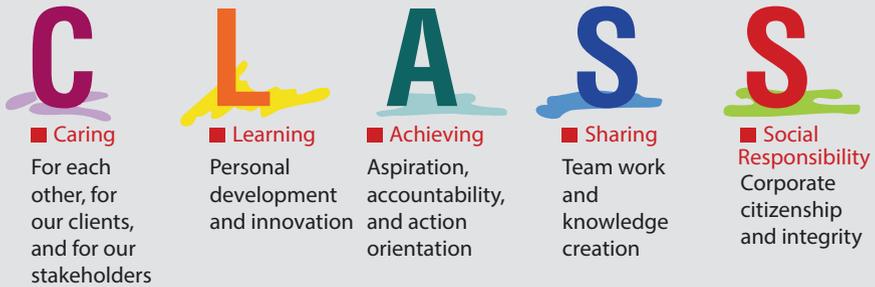
- **«Searching for synergies is the basis of success»** The synergy or cooperation theory assumes that the possible total performance of the company is higher than the sum of the individual performances of units. Search for synergies and cooperation avoids double work and enables a complete customer service cutting across all the functions of the company. Competitive advantages can be materialised depending on the size of the company and the variety of activities. On the negative side, search for synergy if not leveraged, can be an end in itself. Work groups, professional discussion groups etc. do not convert the transferred knowledge into business success adequately and can lead to long-term strategic disorientation.
- **«Segmenting with synergy brings lasting success»** Examples of successful companies show that neither too much segmentation nor too much search for synergy lead to the success of the company. Instead, it is necessary to find a *synthesis* between both guiding principles as «*segmenting with synergy*» (Goold and Campbell 1998). Businesses are tied together by strong shared values, aligned towards common goals and moral concepts of the entire company. They combine short-term success of the units with the long-term competence development of the entire company. This concept considers short-term as well as long-term competitiveness of the company. The flexibility of a small company is combined with the resources – especially the knowledge – of a big company. Such a company can offer complete and complex solutions that are difficult to imitate and can be redeemed for suitable prices. The restructuring of General Electric aimed at such segmentation with synergy. In his introduction to the annual report 1995 Jack Welch, the then Chief Executive Officer, General Electric, has expressed this as follows:
 - » What we wanted to built was a hybrid, an enterprise with the reach and resources of a big company – the body – but the thirst to learn, the compulsion to share and the bias for action – the soul – of a small company.

Case Study

Mini Case: Mindtree I

Full dependence on directed structures is not enough for the new era the Indian software company MindTree ► www.mindtree.com has prepared to meet. MindTree views a new era organisation as a set of interdependent, collaborating, interacting knowledge workers who are autonomous and who configure and reconfigure their people-networks dynamically to achieve a purpose determined by them in the fast-moving environment they work in.

As knowledge workers accomplish their work, they step across their task boundaries, collaborate, seek knowledge and so on, to accomplish the task not as originally perceived, but as the solution emerges. «*This creates a highly scalable and agile model of the organisation, and in the long run creates an organisation capable of self-transformation*» says Datta.



MindTree's vision reads as follows: «What brings MindTree Minds (what we call our employees) together in building an organisation that has a unique culture is our value system. Every MindTree Mind is driven by CLASS, the acronym for our core values of Caring, Learning, Achieving, Sharing, and Social Responsibility. Everything we are, everything we do, and everything we believe in revolves around our CLASS values and the distinct culture that we have built. The two main attributes that characterize our culture are high achievement orientation and high caring.»

Case Study

Allianz Group Business Services (AGBS) Encourages Knowledge Synergies

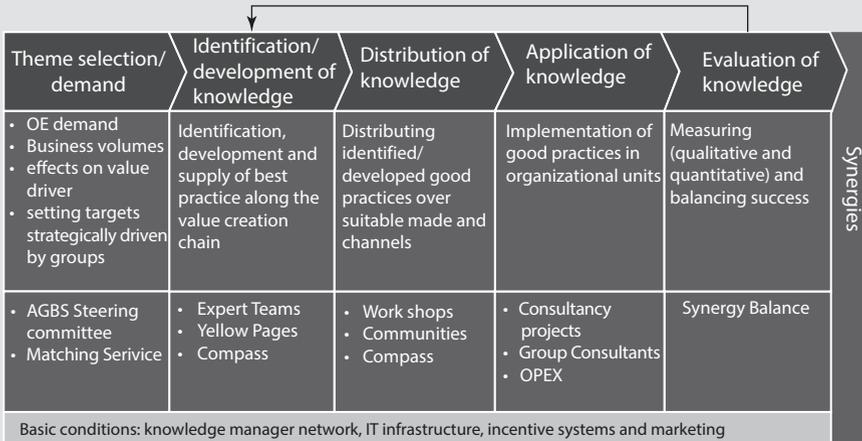
Allianz Insurance Group is made up of huge number of subsidiaries worldwide. These companies are operated as per the decentralised philosophy (business is local). However, the continuous utilisation of synergies within the global network of companies is a critical success factor of this business model. The prerequisite for this is a pragmatic knowledge identification and transfer process that is practiced and encouraged by the management and the employees in all the companies of the group.

AGBS is a unit in the Group Centre which facilitates the global process of knowledge transfer and provides suitable tools and methods. The following figure gives an overview of the approach of AGBS's knowledge management. First, priority topics are selected based on expected benefits. Secondly, best practices and expertise are identified and in a third step discussed and transferred by workshops, community interaction and an IT platform. It follows a localised implementation process as well as an evaluation. Results are made public via a «synergy balance sheet». The following arrangements are considered of particular importance for the success of the programme:

Expert teams: These are groups of five to eight members comprising international experts from different specialised fields. These groups are germ cells of new knowledge and work predominantly on strategic questions. Every expert team has a basic «mission» as well as an annual goal that is decided together by the expert team manager and AGBS. The expert teams share their knowledge and the outcome of their work with the practitioners around the world through online communities as well as in regular workshops. Furthermore, they document the developed knowledge in the «Expert Team Reports» that are provided in the communities and in compass with others.

Incentive systems: Knowledge management is also integrated in an established incentive system. Participation in the activities of knowledge management (e.g. expert team) is a criterion for achieving a certain level of management. This is documented in a policy in «Group HR Handbook». Furthermore, specific incentives were created for knowledge sellers and knowledge buyers, e.g. awards such as Knowledge Manager of the Year, Expert Team of the Year,

etc. Targets are set for knowledge management actors such as expert team managers. These target agreements can be considered according to their bonus relevance.



IT infrastructure: AGBS supports the knowledge transfer process using (web-based) IT infrastructure such as yellow pages; Compass database of «good practice»; Online communities, Communication platforms for communities of practice; Info miner, Intelligent search engine; Virtual project offices, Online team space for collaborations in projects. All the IT components are based on a uniform IT platform (Group Intranet) and linked with each other in such a way that usage barriers such as multiple logins or redundant data entries are avoided.

Synergy portal: There is a synergy portal for internal marketing. This portal provides access to the knowledge documents and experts as well as gives an overview of the knowledge management activities organised by AGBS (workshops, expert teams, projects etc.). Synergy Review, a quarterly magazine, presents the results and connects the community with the management.

Synergy balance: Cost and benefits of the described tools and methods are incorporated in the «Synergy Balance» that is created by AGBS on a quarterly basis. Benefits of projects are measured on the basis of calculated «Fair Values» and the benefits of knowledge management tools are measured on the basis of calculation of opportunity cost. Trends and developments are identified earlier thus enabling the company to react to the changes earlier and effectively. This reduces the «time to market» of new products. Increasing efficiency and effectiveness by using internal best practice as well as avoiding mistakes has positive impacts on the Economic Value Added (EVA).

Source: based on material provided by Allianz AGBS

3.2 Platforms for Knowledge Creation

Apart from reformulating the entire organisation of the company in order to convert the dialectics between renewal and stability, cooperation and competition into short-term and long-term business goals, there are approaches designed to maintain the existing organisational forms and also to institutionalise supplementary or parallel ad hoc organisational forms such as process and project organisation. Knowledge is linked to

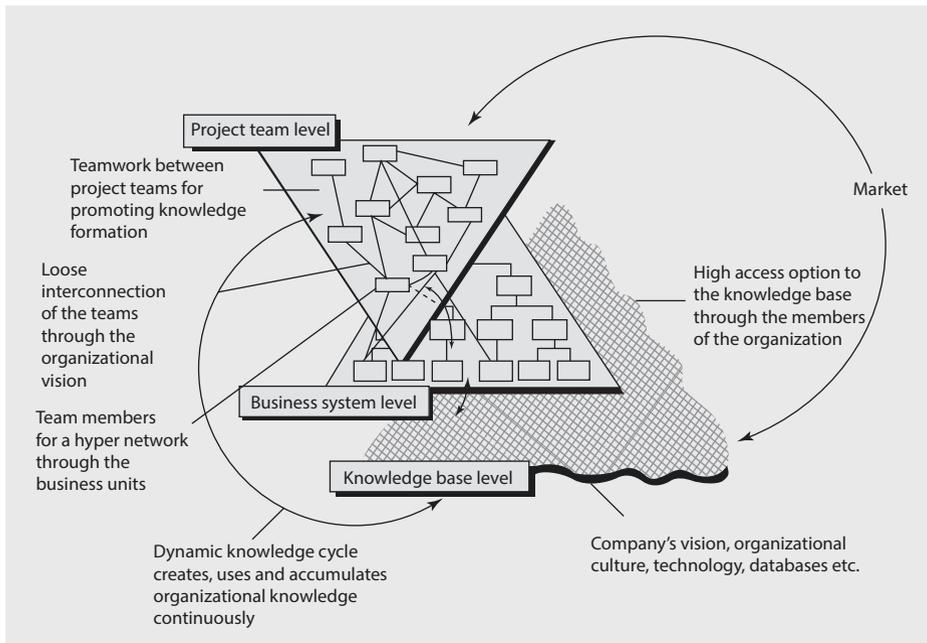
departments, projects and business processes. In most cases, it is not processed, shared and transferred beyond the limits of organisational entities systematically.

While the traditional organisation guarantees stability and short-term business results, the ad hoc forms create contexts for the renewal that can then be docked to the existing organisation. From a somewhat different viewpoint, the existing organisation turns into a platform that offers a certain framework, an infrastructure and a basic layout from which the new developments can «take off» and also land again accordingly.

Let us have a closer look at two of these approaches –the *hypertext organisation* as described by Nonaka and Takeuchi and the *platform organisation* as described by Ciborra.

3.2.1 The Hypertext Organisation

The model of the hypertext organisation (Nonaka and Takeuchi 1995, p. 169ff) assumes that a company can have a non-hierarchical and self-organised structure that cooperates with the hierarchical formal structure. While the latter ensures stability, the hypertext organisation equips the company with the strategic capability to acquire, recreate and use new knowledge continuously in a cyclic process. Like a hypertext, this organisation comprises of a number of interconnected levels or contexts, especially the levels of business systems, project teams and knowledge bases (see ■ Fig. 3.5).



■ Fig. 3.5 The hypertext organisation (Source: Nonaka and Takeuchi 1995, p.169)

- The operative business is conducted at the central *level of business system*. This can happen not only through a traditional bureaucratic structure but also through entrepreneurial processes meant for building an entrepreneurial corporation.
- At the *project team level*, a number of project teams are engaged in the development of new knowledge, e.g. development of a new product. The team members are recruited from various units of the business system and are allotted to the project team until the end of the project.
- At the *knowledge base level*, the knowledge created in the upper level is re-categorised and placed in a new context so that is available commonly in the company thereafter. The knowledge basis level does not exist as an independently organised unit. Instead, it gains its existence from the knowledge workers of a company and the corresponding systems for saving information or safeguarding knowledge.

The remarkable feature of the hypertext organisation is that three different levels or contexts co-exist in the same organisation. The process of knowledge creation is a dynamic cycle that is set in motion effortlessly by these three levels. The project team members who were selected from different functions and departments of the business system level perform knowledge-creating activities. Once the project team functions are completed, the members take to the knowledge level. They pass their knowledge on through internal seminars or workshops, make project reports or enter information in the company's information system. After re-categorising and re-contextualising, the project team members go to the business system level wherein they again dedicate themselves to the operative business until they are reallocated to another project team. According to Nonaka and Takeuchi, the feasibility of switching in and out of different knowledge contexts quickly and with flexibility and thus building a dynamic cycle of knowledge creation determines the organisational capability to create knowledge.

Case Study

Sharp – Hypertext in Research and Development

Since its inception in the 1912, Sharp has had a reputation of a «*new product*» company. The constant pursuit of creativity and originality is represented in its slogan «do not imitate». We find all the three levels of the hypertext organisation in Sharp's research and development.

- *Business system level*: The day-to-day business of the R&D is organised in the traditional hierarchical form. The central R&D is responsible for basic developments that take three or more years, the company's laboratories cover specific themes with a time frame of approximately one and a half to 3 years and the R&D in the business segments works based on product and process for a time frame of less than a year and a half. The R&D facility communicates hierarchically from the centre to the business segments. Conferences, meetings and workgroups coordinate the exchange of explicit knowledge of all the facilities.
- *Project team level*: New products are developed by «*Task Forces*» that operate quite independently and parallel to the R&D structure at the business system level. While new products are normally developed in the projects of the business segments, the strategically important development projects are allocated to the «*Urgent Project System*». Employees of these projects leave their position in the business segments and work

exclusively for the strategic project for a period of 1–2 years without any budget limitations enjoying the privileges of directors.

- *Knowledge basis level*: Sharp's knowledge base can be described by explicit knowledge in the field of optoelectronics and tacit knowledge that is symbolised by the «do not imitate» slogan. The knowledge generated at the business system level and project team level is re-categorised and placed in a new context with a view to develop optoelectronics systematically. The constant exchange within the business systems as well as with the project teams and process of storage and transfer of explicit knowledge revive the knowledge base. The tacit knowledge «do not imitate» is strengthened by frequent exchange and inner R&D culture.

Source: According to Nonaka and Takeuchi (1995), p. 181–190.

3.2.2 The Platform Organisation

Inspired by his Italian experience and a case study at Olivetti, Ciborra (1996) had suggested a meta-organisation in order to react adequately to surprises in unstable circumstances. Management assumes that managers direct their decisions towards clear goals and strategies based on a rational problem solving process. Ciborra contrasts this fiction of a systematic management process, with his view of management that is characterised by the French term «*Bricolage*» (repairing, tinkering or improvising like a jazz ensemble).

Similar to jazz ensemble, the employees in the company have learnt to play and improvise together in order to solve the arising problems quickly, respond to unexpected customer demands or implement and test new product ideas without long justification and approval processes. Ciborra cites Mary C. Bateson (1994):

- » Men and women confronting change are never fully prepared for the demand of the moment but they are strengthened to meet uncertainty if they can claim a history of improvisation and a habit of reflection.

Ciborra argues that in a fast changing environment, none of the organisational forms are in a position to optimise the use of resources. A «formless» chameleonic organisation that generates new forms through frequent recombination would be most suitable here. From the structural view, the platform is a result of the union of existing organisational mechanisms and forms selected and assembled together by the management according to subjective and situational plans and interpretations (Weick 1993).

The platform organisation is identified by its flexibility, mobility and continuous transformation that results from overlapping, intersecting and juxtaposing different organisation arrangements such as network, matrix or even hierarchy. A platform organisation appears fragmented and interwoven at the same time. However, it could be the only form that survives the high-tech industry wherein a monolithic and fixed company identity would not have been in the position to cope up with the fast technological changes. Unlike every traditional form of organisation, platform organisation features a collection of all the qualities of a clear, seemingly opposite as well as surprising coincidence. This platform contains an exciting mixture of prefabricated arrangements and interpretations as well as solutions and visions that are either found or provided incompletely or have not yet mate-

rialised. It is a model that completely changes our opinion about structural and permanent or subjective, informal and short-lived. It is the function of a platform organisation, to cope not only with the often sudden and radical changes to the products, markets and technologies but also with changes – to the identity of the business fields or industry segments – that are sensed by the organisation incidentally over time.

According to Ciborra, the ability to leave old identities and develop a new identity that is adapted to the respective technological phase represents a key to this fast sequence of unexpected and unplanned transformation processes.

The platform organisation is inspired by computer or car platforms on which a huge number of models are produced. Individual components of the organisational platforms can represent the organisational units, departments, functions and division. Every defined unit has a mission and eases the control at least at local level. The integration of different components is flexible. Units and organisations outside the limits of companies are also integrated forming an «eco-system» of partners. Common research and development projects and global alliances are built and disintegrated according to the requirements.

Thanks to the existence of platform standards, technologies are developed independent of products. Thus, technologies can be combined at «*last minute*» and bundled into specific products for which a market demand is identified or into products that react to the activities of competitors. The research and development must work closely with the marketing function in such an organisation in order to exploit the market opportunities quickly.

How does a platform organisation differ from a network? The platform organisation acts at two levels. Firstly, it works at a structural level wherein routines and transactions function like those in a network. Secondly, it acts at the higher level wherein the frequent structural changes are organised. The dynamic recombination of routines and transactions is important at this level and not the features of a specific organisational arrangement such as that of a network. *How to form a relatively stable environment wherein the employees and resources can be used with flexibility?* – This important question for high tech companies was answered by Olivetti in its own way: the formal structure changes frequently and abruptly while the informal networks remain relatively stable.

Case Study

Mini Case: WIPRO as a Platform Organisation

WIPRO was initially set up in 1945 with main product of producing sunflower Vanaspati oil and various soaps. At that time the company was called Western India Vegetable Products Limited with representative offices in Maharashtra and Madhya Pradesh states of India. During the 1970s and 1980s it shifted its focus and begin to look into business opportunities in IT and the computing industry which was at nascent stages in India at that time. WIPRO was the first company which marketed the first indigenous homemade PC from India in 1975.

In 1966 Azim Premji, still the majority shareholder in WIPRO, took over as the chairman of the company at the age of 21 and with the passage of time transformed it into one of the finest and largest IT outsourcing services provider of the world. It is now considered the world's largest independent R&D service provider and offers different technology driven services all over the globe with 46 development centres.

In the following section we shall have a look at selected organisational forms from the perspective of knowledge creation and knowledge transfer.

3.3 From «Infinitely Flat» to «Star Burst»

Commonly companies structure their organisation according to product groups, process investments, geographical necessities or functions in order to increase effectiveness and efficiency. These organisational forms follow the criteria of stability – especially that of control. Request for renewal, the demands of many employees for more freedom and creativity as well as the information and communication technology, have given rise to a complete range of new organisational forms. Four such ideal types can be described as follows (Quinn et al. 1996).

From the knowledge viewpoint, these forms of organisations – viz. «infinitely flat», «inverted», «star burst» and «spider» – are different from each other in the following aspects:

- *Localisation of knowledge*: Where can one actually find the deep knowledge that presents the core competencies of a company?
- *Localisation of «customisation»*: Where is knowledge converted into customer solutions?
- *Direction of the knowledge flow*: In which direction does the value-creating knowledge flow?
- *Method of leverage*: How does an organisation transform the knowledge from individual to collective knowledge?

All the aforementioned forms of organisation tend to delegate responsibility to the part where the company comes in contact with the customers. All the forms create a flat organisation and remove hierarchies. They all seek fast, adequate and individual customer communication. All these forms require that you overlook the traditional mindset about command lines, «one employee one boss» structure, centre being the leading power and management of tangible assets being a key to success. But each of these organisational forms varies significantly in terms of their purpose and management. Let us have a closer look at these different forms of organisation from the knowledge viewpoints. You can see the comparison of these organisational forms at the end of this chapter. Every type of organisation is described theoretically as well and is followed by a case study.

3.3.1 The Infinitely Flat Organisation: Effective Replication of Routines

The centre of this organisation stays in contact with infinite nodes, e.g. individual field staff, branch offices of franchise partners etc. The leading competence or the knowledge on how to create and operate a fast food chain or how to sell Tupperware and Avon cosmetics lies at the centre. The knowledge about the customers lies with the employees of the branches that work parallel with less direct communication. Thus, the centre is the source of information, coordinator, place of transfer of best practices and problem solver. It is the core of the growth process. In the market, new nodes, i.e. branch offices or franchise partners are constantly added to the centre. Furthermore, the centre con-

tinuously generates new products and services packages that are then provided to the nodes by means of intensive training and e-learning.

Such flat organisational structures are particularly effective when it is possible to break up the activities of the nodes in individual sections and to optimise these activities. This is the case with the recipes and the operating guidelines of a fast food chain or the basic components of financial transactions of financial brokers and banks. In the best case scenario, the training curve is accelerated through the information system across the company in such a way that employees with relatively few qualifications are capable of giving higher performance relatively quickly.

This reminds us of a «*Tayloristic*» division of work wherein the higher efficiency is linked to fast growth and a continuous innovation process. However, there is no traditional career path anymore in such infinitely flat organisations. Wage-incentive systems must contain a balance of qualitative and quantitative performance parameters. This type of infinitely flat organisation presents an option to create a «*highly intelligent*» organisation with employees having relatively less education and knowledge. It also gives an option to respond quickly to the market changes by being equipped with «*efficient market antennae*».

Case Study

Financial Service Provider: Replicating Financial Services

The operative business of a financial service provider is carried out by approximately 18,000 brokers in over 500 business units scattered over a wide region. The company offers custom-made solutions to its customers. The local brokers act as independent entrepreneurs. Generally, they are not those clever investment experts who have undergone long years of training. Yet, by means of information transfer using a widely developed information system, they are able to provide investment advice as well as detailed and precise information about huge volumes of complicated financial instruments. These brokers are supported by the centre wherein a few financial experts work with outstanding analytical skills. They cooperate closely with the other external specialists as well as the «inventors» of the investment model. They analyse the previously concluded business transactions and bring in their expert knowledge in the company's software model and databases. The on-site brokers have access to the detailed analysis of financial markets, economic trends etc. Thus, the centre breaks down the process of investment advice in individual replicable steps and provides them to the on-site broker. The electronic network of the company guarantees that the broker is always updated with the latest information. They are informed extensively by the centre about concluding business transactions, commercial guidelines, profit, conditions of commercial paper, investment options, fiscal considerations and new offers of commercial paper. The software of the company is available online and also serves as a medium of imparting fast training. Thus, it is ensured that all the brokers work as per valid rules, all the calculation and typing errors are eliminated to a large extent and the customers are supplied with the latest marketing information. In short, the entire knowledge is available to each and every broker. Ad hoc teams are built in case of huge and complicated projects with a purpose to pool the widely scattered talent temporarily in order to solve a particular customer problem. Thus, in 1 year, the brokers work together with different colleagues on various projects. Therefore, in order to develop the business, the infinitely flat organisation is supplemented by network structures wherein the reward is linked to the cooperation between development projects and customer projects. Those who do not work in a team or do not aim at customer satisfaction are penalised (see Quinn et al. 1996, S. 99ff.).

3.3.2 The Inverted Organisation: Support to Individual Expertise

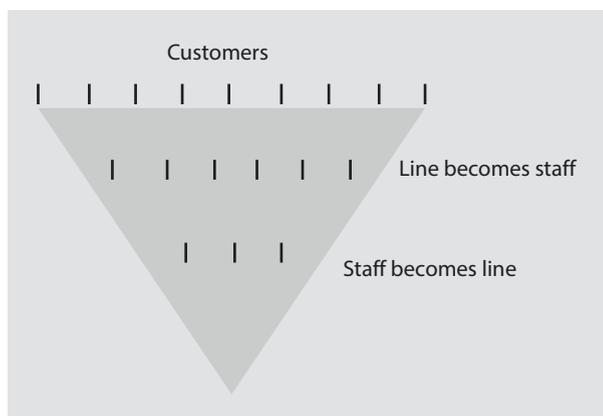
The traditional hierarchical pyramid, shown in ■ Fig. 3.6, is turned upside down in this organisational form. The core competencies of the company as well as the customer knowledge are found at the nodes and not at the centre. Examples of such organisations are hospitals, consultancy firms or engineering firms (here, the nodes are the doctors, the partners of the consultancy firm, the engineering experts, etc.).

Generally, in an inverted organisation, the exchange of knowledge between the individual nodes tends to happen informally while exchange of knowledge between a node and the centre is a formal process. This is distributive allocation of knowledge, i.e. the organisation offers logistic or administrative support of experts but it does not give instructions or control the business operations. The function of a line manager is restricted to overcoming the bottlenecks, developing the company culture, providing advice on request, starting exchange of experiences and cooperation as well as providing a range of services offered to the experts. Hierarchy can exist to a certain extent in order to ensure consistency in carrying out a task as per corresponding rules, e.g. statutory orders. In a way, the line management adopts the functions of the staff.

Inverted organisations function well if the employee handling the customer has more information and knowledge about the customer's problem and possible solutions than the centre and if experts are willing to learn jointly. Safeguarding effective knowledge transfer and competence development of the entire organisation (collective thinking) is a special challenge for such inverted organisations so that on the one hand knowledge is retained when a specialist or a team leaves the company and on the other hand it is possible to create new business fields.

Furthermore, the loss of formal authority can be traumatic for earlier management of the classical type. Specialists gladly ignore the rules and the norms of the company. As a result, a strong common value system and incentive system that honours not only the individual performance but also the contribution to the development of the entire company is necessary for the functioning of an inverted organisation. If this does not happen, the individual competence that is generally high cannot be converted into high competence of the entire company.

■ Fig. 3.6 The inverted organisation



Colleges are a good example of this scenario. Generally, the individual high-school teachers or institutes have high field-specific competence that is used only in rare cases through effective cooperation to increase the competence and the renewal ability of the entire entity.

Case Study

NovaCare – The Rehabilitation Service Provider

With the reform in the public health sectors worldwide, there is a search for new organisational structures. The service provider, NovaCare is an interesting benchmark for the organisation of paramedical occupations. NovaCare comprises over 5000 occupational therapists, speech therapists and physiotherapists who operate in a type of franchising system. These specialists offer their knowledge at more than 2000 locations all over the country. The centre undertakes the administrative and commercial functions of the therapists by signing contracts with rehabilitation services, retirement homes, etc., by undertaking the accounting as well as supporting the scheduling and reporting over the course of the therapy. Furthermore, vocational training is organised and the performance of the therapists is marketed in order to achieve stability and increase in the income.

NovaCare has saved a major part of the knowledge of its therapist in its software system. The information about patients, scheduling and invoicing is added through administrative procedures such as guidelines. The therapist must follow these procedures. From NovaNet, the company management can get information on trends or problems that would need consideration in the near future. NovaNet collects information about costs and service features from all the therapists, particularly effective treatments as well as information about changing medical care model in different areas. This information is very important for recruiting, training, motivating and further training of the therapists. NovaCare records the work of its therapists in 10-min blocks so that it is easier to record and analyse all the knowledge. This detailed information is saved in the database that can be used by anyone who is interested, e.g. care facilities, hospitals, rehabilitation clinics, health insurance companies, etc. NovaCare uses detailed reports of colleagues and patients in order to evaluate the performance of its therapists and to pay them according to the quality and scope of their service.

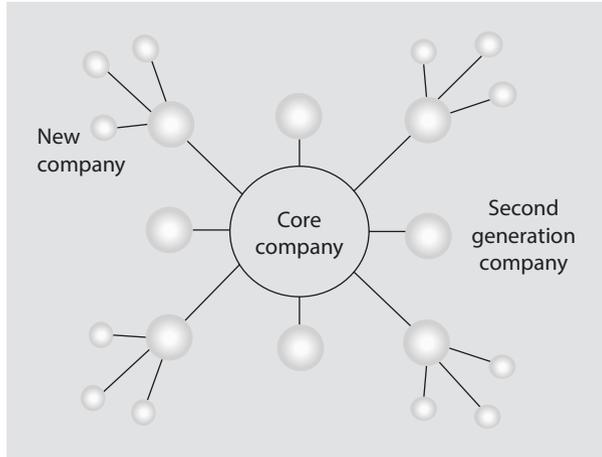
The therapists are independent, especially when it comes to treating a patient. The company's regional administrative offices responsible for accounting, marketing and logistics are primarily meant to support the therapists. Thus, the organisational structure is distributive. Logistics, analyses and administrative support are the function of the structure. These functions are carried out by qualified therapists (see Quinn et al. 1996, p. 191ff.).

3.3.3 The Starburst Organisation: The New Business Creator

Organisations that are depicted in the form of a *star burst* have specialised and value creating knowledge in the branches as well as at the centre. These companies continuously generate new business fields or companies that in turn build new companies. The branch operates largely independently in the market and raises its capital in the market.

In the analogy to financial holding, the star burst organisation is a «*knowledge holding*» wherein new companies are formed continuously based on the specialised competence. Examples of such companies are film studios, insurance companies or even software companies that open different markets and market niche with their firms

■ Fig. 3.7 The starburst organisation



with the help of a certain basic software. Large companies which embarked on implementation of ERP systems set up IT departments to support the company. When these developed expertise in implementation of IT solutions, the companies leveraged this expertise and created another company whose main business was IT solutions. There are a number of examples of these in India – L&T Infotech from Larsen & Toubro, an engineering company, 3i Infotech was promoted by ICICI Bank, India's largest private sector bank, and NSE.IT Limited, a 100% subsidiary of the National Stock Exchange of India Limited (NSEIL) which is a Vertical Specialist Enterprise, specialising in providing complete IT solutions to stock exchanges, clearing corporations, brokerage firms, insurance firms and other organisations in the financial sector.

The constant renewal and recombination of knowledge through cooperation is more important for these companies as compared to components of stabilisation.

Starburst organisations (■ Fig. 3.7) are particularly successful when they have expensive or complex know-how on the one hand and on the other hand operate in a business environment that changes quickly and for which entrepreneurship becomes essential.

In this way, it is possible to amortise expensive and specialised knowledge immediately in different markets. Thus, the company can penetrate the differentiated markets quickly with minimum equity and high competence. The centre designs the organisational culture, cultivates innovation and risk, sets priorities, selects key persons (an entrepreneur in a company or important know-how bearers) and procures resources more efficiently than the branch. However, the actual entrepreneurial activities take place in the branches that have extensive freedom in organising their business fields as long as such branches are commercially successful. A classical problem in this form of organisation is that, often the central management loses faith in the branches very quickly if the desired market results do not appear rapidly enough. Efforts are made to consolidate such branches thus disturbing its energy. Yet another problem arises when the branch develops a very high capital requirement that is not covered by the centre and capitalisation through the market is undesirable.

Case Study

3M – The Product Generator

The Minnesota Mining and Manufacturing Company (3M) is less known for a long-term strategically planned product development process than for its «bottom up» approach towards mobilising capabilities, inventive talent and organisational activities. 3M's obsession to generate new products was given a form by the «Eleventh Commandment» – «thou shall not kill ideas for new products». As opposed to the traditional decision process, if someone thinks that the idea is not good, the burden of proof is on the person who thinks that the idea is not good and not on the person who has proposed the idea. 3M researchers and developers enjoy a free time of up to 15% of their work time to pursue their own dreams and ideas («15-percent-rule»). The performance of every business unit is graded on whether at least 25% of their turnover is achieved with products that are younger than 5 years. In reality, the share of such products in the company's turnover has gone beyond 30%.

3M has announced that an individual inventor or entrepreneur can develop their ideas and establish new business units continuously under the slogan «grow and divide». This growth is supported by a categorisation of core technologies, range of technical forums, cross-functional teams and a fault tolerance. If a business idea fails, an inventor or entrepreneur shall have the guarantee of being transferred back to their old position. The company encourages creation of legends of successful inventors or entrepreneurs and motivates the others to imitate the same. Thus, stories of how Art Fry sang in the church choir and his makeshift bookmarks fell off his prayer book will be narrated again and again. He came up with the idea of developing the «Post-it» note, materialising this idea technically, overcoming opposition («we do not need anything like that») and making a successful business (see Nonaka and Takeuchi 1995).

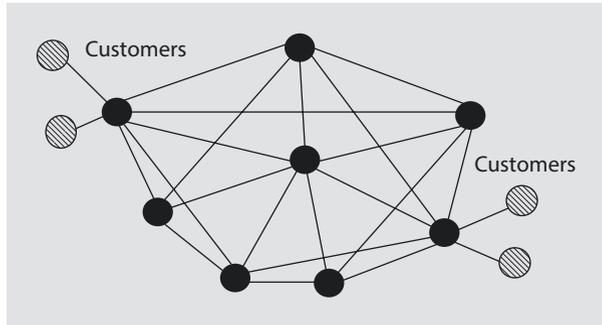
3.3.4 The Spider Organisation: Creating Value by Networks

The spider's web is a metaphor for an ideal type of network. Company networks are an organisational form of economic activities. Such organisational form binds the coordination potentials of market and hierarchy (organisation) with each other in an intelligent manner and is distinguished by cooperative – rather than competitive – and relatively stable relationships between more than two legally independent companies or company units that are financially more or less dependent. The nodes can be products, services or competence centres for specific technologies. They can bear regional responsibility, have a long-term existence or can be installed temporarily as projects. Knowledge is mobilised in the presence of projects or order situations – «*the spider starts running to hunt down the prey*». Knowledge flows within numerous nodes. Typically, the individual nodes work together only temporarily in order to develop specific customer solutions. See ■ Fig. 3.8.

Knowledge development is exponential. Very few nodes give rise to several combination options. Such project-related or order-related networks exist already since hundreds of years, e.g. universities or networks of trading groups. The advantage of the networks is that they can successfully facilitate high specialisation and handling of different geographical regions and simultaneously focus on a specific problem of a specific customer. Hence, the network model is also used in the management of international companies, e.g. in the form of model of a transnational corporation (Bartlett and Ghoshal 1989).

Although the network is good for a fast response and for ad hoc problem solutions, it poses difficulties in developing long-term business strategies. Competition between

■ Fig. 3.8 The spider organisation



individual nodes can obstruct the distribution of knowledge. Networks function properly only if there is an open culture and a willingness to cooperate. The grading systems must rate the networks based on their individual success and their contribution to the total success of the organisation or other network nodes. Common interests of the members of a network, a common value system or intersecting value system and profit – all of which is achieved by teamwork – is essential for functioning of every network. According to Quinn (1996, p. 22) the following must be considered for an *effective network management*:

- Networks must overlap each other in order to increase exchange of information and the process of learning.
- Hierarchical structures should remain undefined deliberately.
- Network purposes (project purposes) should be set and strengthened continuously.
- Too much elaboration should be avoided in case of rules meant for appropriation of funds or distribution of profit to individual nodes.
- Continuous mechanisms must be developed in order to provide the nodes with latest information about the external business environment.
- Customers as well as the colleagues should evaluate the performance of the nodes.
- The members of the nodes should be rewarded with individual and group incentives for their teamwork.

Case Study

The Indian Youth Climate Network (IYCN)

The Indian Youth Climate Network (IYCN) is a network uniting Indian youth and youth oriented organisations who are concerned about climate change and environmental issues. Since it was founded in 2008 it has grown rapidly and has today offices in six locations, with sub groups in 18 different states reaching out to thousands of youth in colleges, schools, corporations and institutions.

IYCN works on three levels – as a network of people, as a network of partners and support-groups, and as a provider of services and projects. By working in this way the organisation is able to do a wide range of activities to achieve its aims of generating awareness about and establish consensus on what role India should play in the global debate on climate change. IYCN also addresses national issues related to the environment and climate change. The three strategies IYCN uses to achieve this are awareness campaigns, policy advocacy and results oriented projects. Through these three platforms IYCN organises a range of different activities such as Youth summits and solutions fairs, Environmental Audits for corporations, ongoing campaigns, policy tracking, advisory work and giving young people a voice in the international climate change debate by sending youth delegations to international conventions.

Source: ► www.iycn.in.

Generally, we find that more of these ideal types of organisational forms co-exist in real organisations. For instance, the reservation system of one airline and the respective operative systems are linked but are designed in a completely different manner in their organisation. The reservation service is a spider's web, the flight operations are infinitely flat, the financial administration is conservative and hierarchical, the maintenance and ground service is decentralised and hierarchical and the training and advanced training are organised functionally. Thus, different organisational structures and contexts can co-exist in one company as long as it makes sense for the functions that are to be completed.

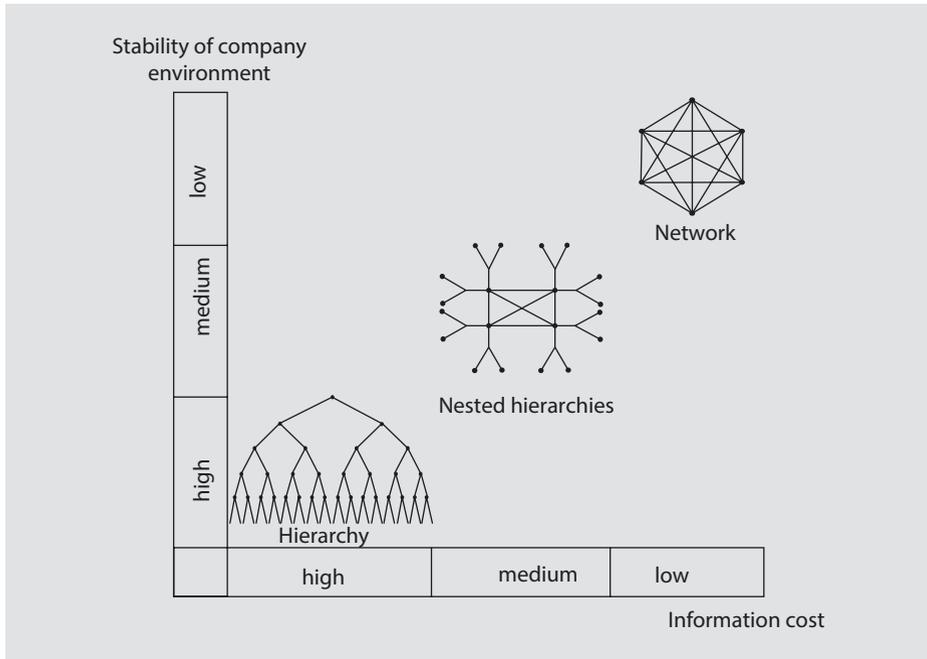
3.4 Overcoming Deficiencies of the Multidivisional Organisation

3.4.1 Independence Versus Integration

In the last 50 years, enterprises, particularly the big ones, across the world have focused largely on independent and mostly product-related divisions or segments. These enterprises were and are still successful in markets and company environments that are relatively stable. Multidivisional companies are best equipped to react to *linear and incremental changes* in the company environment. However, an organisation with a constantly improved organisational processes and rules of conduct – wherein everything is governed – has become an Achilles' heel of the company in a changing competitive environment. Such an environment requires acting under turbulent changes that are often unpredictable and are of discontinuous type (Ghoshal and Bartlett 1995). A multidivisional company is poorly equipped for strategic renewal and largely incapable of developing new business fields within the company. Growth in such a company is mostly restricted to existing business fields by means of economies of scale, economies of scope or by huge financial power. New activities tend to be launched by acquisition of smaller create companies.

The independent nature of individual business units create obstacles in the path towards success in a knowledge competition wherein products and services bundle different competencies of a company and create value for customers in an integrated manner. The premise of independence is preventing the companies from integrating their diverse research, development, production and marketing resources into a coherent system for value delivery. The multidivisional company is built on the assumption of horizontal independence and vertical dependence and in its pure form does not have any effective mechanism for managing the interdependencies. Horizontal interdependence is not a part of the mindset of this form of organisation.

Ghoshal and Bartlett (1995, p. 143–144) argue that the strength of the multidivisional companies in a linear and increasingly changing competitive environment is a result of efficient ways of processing information and knowledge development derived from such processing. In such companies, information processing is structured according to business unit level, divisional level and corporate level. Business units deliver data. This data is analysed and organised into business-relevant information at the business unit level and division level. The entire company (corporate staff groups) combines



■ Fig. 3.9 Evaluation of forms of organisation as per stability of the company environment and information costs (Source: Klodt et al. 1997, p. 73)

information from different sources for the purpose of generating value. The company management absorbs and institutionalises this knowledge in order to derive «*wisdom*» that becomes a part of the accepted perspective and standards of a company. Mechanisms and routines of budgeting, planning and control represent the dominating strength of divisionalised company through efficient work allocation and specialisation in procurement, analysis and interpretation of data in the stages of information, knowledge and «*wisdom*». The hierarchical multidivisional company is well-equipped if the information cost is high and the company environment is stable (Klodt et al. 1997, p. 70ff), as shown in ■ Fig. 3.9. Organisational knowledge is generated and used increasingly for improving the operating process of existing activities.

However, these companies lack the antithesis of this sequential and incremental knowledge-building process that is necessary for strategic renewal. Multidivisional companies do not have a process that is capable of challenging institutionalised wisdom, overturning existing knowledge bases and re-configuring the sources of data. Companies become immobilised in the absence of these challenges. Too many «sacred cows» hinder the action-oriented and anticipation process beyond the boundaries of divisions.

This criticism of Ghoshal and Bartlett is shared by another management researcher, particularly from the viewpoint of multinational companies. In contrast to M-form (m = multidivisional), Hedlund (1994) proposed a new form of organisation called N-form (n = new) that is better at dealing with wide variation and fast changes in knowledge inside the companies. Instead of bringing information to a given decision

point, the decisions should be shifted to where the knowledge is available. Let us have a look at the concept of firm that is more capable of renewal as compared to the traditional multidivisional organisation.

3.4.2 The Entrepreneurial Corporation

Ghoshal and Bartlett (1995) have developed an organisational form called as «*Entrepreneurial Corporation*».

The entrepreneurial corporation contains three processes – entrepreneurial process, renewal process and integration process that links the earlier two processes. These processes are given a definite form by the *front line entrepreneurs, corporate leaders and the senior level coaches* (see Fig. 3.10).

While the processes described below and the tasks of the actors are commonly found in all companies, the type of implementation is completely different in each case.

- The entrepreneurial process represents search for business opportunities and externally-focused ability of the organisation to create new business fields
- The integration process allows the entrepreneurial corporation to link and leverage its dispersed resources to build a successful company
- The renewal process maintains the capacity of entrepreneurial corporation to challenge its own beliefs and practices and to continuously revitalise itself so as to develop an enduring institution.

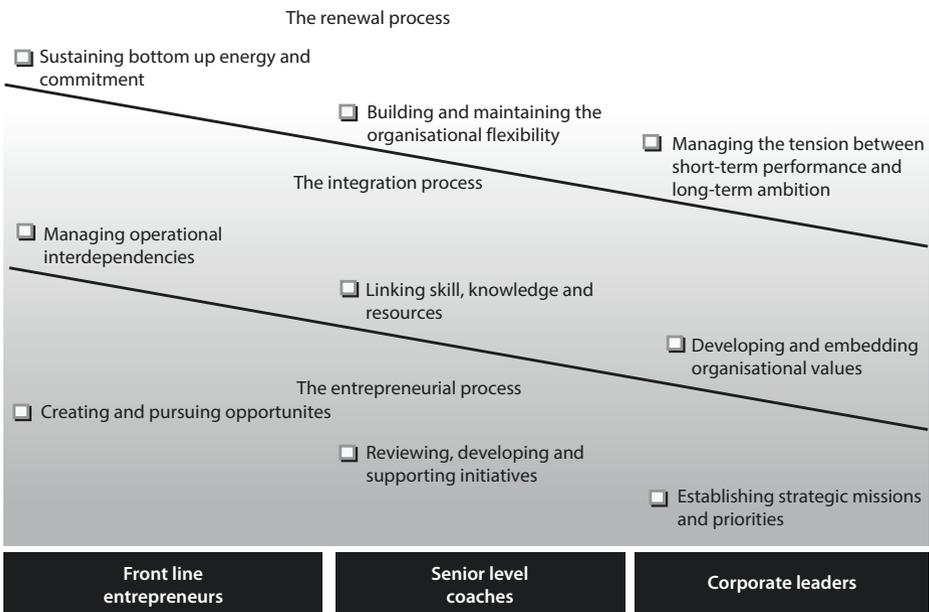


Fig. 3.10 The processes and roles in an entrepreneurial corporation (Source: Ghoshal and Bartlett 1995, p. 153)

Each of these processes requires certain organisational infrastructures and mechanisms (Bartlett and Ghoshal 1993) that we shall see in detail subsequently.

Case Study

Mini Case: Mindtree II

MindTree, a mid-sized Indian IT services company is known for its knowledge management practices, its collaborative communities, and its strong culture and values. At MindTree, innovation, knowledge sharing, and collaboration is a way of life. It extends through all three of their DNA elements, beginning with imagination (idea), extending into action (implementation), and culminating in joy (new product or service). The company strongly believes that the human ability to create new knowledge and lead with ideas is central to personal as well as business success.

MindTree's knowledge management function enables the organisation to harness the knowledge and ideas of its people, resulting in innovation, better service delivery and organisational learning. MindTree's approach to knowledge management is holistic and focused on building a knowledge ecosystem which MindTree defines as four spaces within which its people interact to create value: physical space, virtual space, social space, and mind space. The key thrust areas of knowledge management in MindTree are innovation, collaboration and reuse. This has all been realised by deploying multiple platforms that impact people's behaviour, creativity, and productivity.³

The Entrepreneurial Process

- » The entrepreneurial corporation is a company built around a core entrepreneurial process that drives everybody and everything, the company does. (Ghoshal and Bartlett 1995, p. 145)

An entrepreneurial process requires a close interplay among three management roles. The frontline entrepreneurs are the spearheads of the company. It is their responsibility to create and pursue new growth opportunities. The coaches in the middle and senior management positions play a pivotal role in reviewing. They develop and support the initiatives of the entrepreneurs. The corporate leaders at the top of the organisation establish the company's overall strategic mission that sets the boundary for entrepreneurial initiatives and also sets the highly demanding performance standards that these initiatives must meet. We can find four attributes in companies that have institutionalised a successful entrepreneurial process:

- Firstly, the organisations are built around relatively small units. Matsushita launched a new company for every new product according to the «one product – one division» concept. ABB is known as a network of 1300 separate companies with an average of 200 employees per company. One can observe the same practice in many companies. To build such small units, these companies have abandoned the notion of functionally complete strategic business units that had all the key resources so as to be in full control of their performance. Instead, they have structured incomplete «performance units» that are interdependent and must use each

3 ► <http://www.mindtree.com/about-us/knowledge-ecosystem/our-knowledge-ecosystem>

other's resources to achieve their own goals. From the viewpoint of creation and transfer of knowledge, this is an important observation because the basis of knowledge integration is laid after considering the business objectives. We shall come back to this aspect when dealing with the integration process.

- Secondly, in every stage from the initial idea to product development, prototyping, market testing and commercialisation, it is necessary to compile and propose a specific budget. The necessary resources are allocated in multiple stages (*multistage resource allocation process*) instead of committing to clearly articulated long-term plan right from the beginning. Thus, at 3M, any employee can propose to a business idea and a single coherent sentence can often suffice as a starting plan.
- Thirdly, the highly structured and rigorously implemented financial control system ensures that the failures are detected immediately, risks are minimised and successful businesses are encouraged accordingly.
- Fourthly, successful entrepreneurial corporations have a clearly articulated and widely shared understanding of which activities are meant for the company and which results should be expected in which time horizon. The actual boundaries that are to be borne in mind by the entrepreneur can be formulated considering either the technology or specific customer groups. These boundaries serve as a guideline for the entrepreneurs to focus their own creative energy.

The Integration Process

The entrepreneurial process alone is not sufficient for an entrepreneurial corporation that threatens to fall apart or is not in the position to offer complete customer solution if the integration processes is underdeveloped. In the absence of such an integration process, decentralised entrepreneurship may lead to some temporary performance improvement as the existing slack is harnessed, but long-term development of new capabilities or businesses is neglected. The integration process in companies has three components:

- *Value-based integration* that should be achieved by the company management along with the coaches. It is necessary to develop a company culture wherein qualities such as teamwork, openness to problems and solutions of others and being supportive and helpful are accepted as values of the business (see the case study of Kao). This works in an entrepreneurial corporation only when charismatic management sets an example by following these values and demands the same from the employees and when the incentive systems are directed towards the success of a unit and overall success of the company.
- *Knowledge-based integration* of a company involves effective transfer of knowledge – be it customer knowledge, be it best practices or be it medium-term and long-term creation of competencies.
- *Operative integration* aims at managing interdependence and potentials of the operative business. One such function involves offering solutions to key customers. Yet another function involves letting a number of entrepreneurs carry out business – e.g. huge projects – together. Operative integration can also mean organising the purchasing process in such a manner that it is possible to increase the purchasing

power and reduce price due to high purchase volumes. In the integration process, coaches play an important role in knowledge transfer.

They co-ordinate teamwork and show who knows what in the company, gather initiatives of entrepreneurs in order to be in a position to offer complete solutions. Enterprise level programmes such as cross-functional projects or total quality management, can contribute in sustaining a target-oriented coaching process which gives comparable and measurable results. Furthermore, the integration process in a company can be given a specific form through company-wide benchmarking and evolving a common learning process resulting from such benchmarking.

The Renewal Process

While the integration process links and leverages the existing competencies of the organisation, the renewal process questions the strategies and their underlying assumptions continuously and inspires in achieving new competencies in order to be prepared for the competition in the future. In any large organisation, there is a need for a structured learning environment which facilitates continuous learning so as to enable the people to reach out to end users. This requires content to be prepared as new systems come on board and processes keep changing. A renewal process comprises of two symbiotic components:

- *Rationalisation and restructuring* of existing business units to achieve continuous improvement in operational performance.
- The second part of renewal process is *revitalisation*. This involves the creation of new competencies and new businesses, challenging and changing the existing rules of the game and leap frogging of competition through «quantum leaps».

The renewal process is built on the premise of «*business not as usual*». The renewal process lays emphasis on the significant symbiosis between the present and the future. There is no long-term success without short-term performance just as short-term results mean little unless they contribute to building long-term vision of the company.

In the renewal process, it is the task of the company management to maintain a balance between short-term success and long-term vision and the competence required for this purpose. Finally, the capability of a company to continuously renew itself depends on the ability of its front line managers to motivate their employees for continuous rationalisation and revitalisation. The improvement suggestions and new ideas are brought in by the sales person, the operator in the plant or the research and development engineers. They are not willing to accept the possibility that the company may not be in the position to implement these ideas or present clearly in the short-term why this or any suggestion cannot be implemented in its existing form.

Coaches are the motivators of the renewal process just as the trainer of a team who urges, motivates and communicates vision to the team members. Simultaneous and equal development of all the three processes is crucial for the success of entrepreneurial corporation. An entrepreneurial process without integration will give as few results as an integration process that is not led by clear business objectives of entrepreneurial process. We have explained this model of entrepreneurial corporation in such a manner that it provides a basis for our concrete suggestions on implementation of knowledge management in later chapters.

Case Study

KAO – Creative in Japan

KAO is known as one of the most creative companies in Japan. The traditional soap manufacturer has expanded successfully in the field of hygiene and cosmetic products. The core of its innovative ability is an entrepreneurial process with small, functional and incomplete units, aggressive goals, rigorous financial discipline and a structured product development process supported by a flexible and multi-staged resource allocation system. Furthermore, the strategic missions are clearly defined in order to use basic technologies to develop products with increased customer network.

This entrepreneurial process is incorporated in a value system that is built on the values of Buddhism and in an open information exchange that is supported by personal meetings and teamwork as well as by a highly developed information system. Dr. Yoshio Maruta, Former Chairman, KAO describes the concept behind this entrepreneurial process as «biological self-control». The value system of KAO aims at harmony and social integration following the «everyone is equal» spirit. These values of equality and free information exchange are continuously observed by Dr. Maruta and other members of top management and are anchored deeply in organisational routines.

A large part of the work of the top management functions in «Decision Spaces» where everyone participates in the discussion and the decision-making process. Furthermore, the company has an extensive system of function-related and cross-business meetings for exchanging ideas and encouraging shared development of new initiatives and projects. The «open space meetings» that allow the participation of people from any part of the organisations takes place every week in different business units. The «total creative revolution project» is an institutionalised coaching process that constantly pulls together teams and task forces from different parts of the company to perform specific tasks in order to find creative solutions for a problem or identify new business potentials. This total creative revolution aims at achieving innovation through shared learning process. The senior managers are formally expected to be priests – those who facilitate the process of shared learning.

KAO is an example of a successful entrepreneurial corporation that developed itself very fast from a traditional soap manufacturer to a leader provider in the wide field of hygiene and cosmetic products.

Sources: Ghoshal and Bartlett (1995), p. 148ff; Graham and Pizzo (1996), p. 342.

3.5 Knowledge Alliances

Organizations take different forms of long term cooperation in order to form a cartel, to distribute risks, pool complementary resources together and overcome market barriers together.

- » A **strategic knowledge alliance** is an agreement of two companies/institutions or independent business units of a company for common use and development of knowledge resources.

Knowledge alliance can contain cross-shareholding (joint ventures). It can be almost permanent or designed as a project over a course of time. Experts (research and development employees) can be brought together in a new independent organisational unit or they can collaborate from their respective units towards the goals of the alliance. In many cases, such knowledge alliances are also referred to as networks that cooperate through multiple nodes or «knowledge ecosystems (Valkokari 2015).

Knowledge creation and transfer in alliances is influenced by three criteria: the organisational level, positioning of the alliance in the value-creation chain and its (organisational) form. Contrary to the narrow definition of alliance as a basic agreement of a number of companies, we think that an alliance is also possible within a company. In a company, wherein the business units operate independently, alliances of business units are as significant as the alliances across companies.

However, there are indeed a lot of differences in creation and transfer of knowledge. *Intra-organisational alliances* operate in an environment that is characterised by a common corporate guiding principle, a company culture and an incentive system that is consistent in positive case and combines the result of the units as well as the entire company. In case of *inter-organisational alliances*, it is necessary to «tolerate» different organisational identities, guiding principles and incentive systems. If employees of a company have a certain tacit knowledge on how development work takes place, how new business fields are generated or which behaviour is desirable, this tacit knowledge of an employee of one company can be at odds with the tacit knowledge of an employee of another company.

Therefore, the process of converting tacit knowledge into explicit knowledge across the company is important for the functioning of knowledge alliances. On the other hand, it is possible for business units operating in similar markets but belonging to different companies to have built similar identities and feel closer to the business units of the alliance partners than those of their own company. This is applicable particularly when companies are structured as finance holdings with individual business units that do not have common interests pertaining to technology, products or market. Yet another influential factor in the creation and transfer of knowledge is the positioning of the alliance based on the value creation chain. Alliances can be horizontal and vertical.

In *Vertical alliances* partners complement each other in the value creation chain. This applies for example to supply chains. The same applies to logistics alliances in which the manufacturing or the trading companies work on a long-term basis with the forwarding agents that undertake the distribution and some parts of order processing (Bowersox 1990). In such a relation, each partner keeps the knowledge necessary for his part of the value creating chain secret. The commonly created knowledge refers to the standardisation as well as documentation of processes considering overall quality management, continuous improvement and exchange of best practices resulting in increased efficiency of the entire value chain.

Withdrawal of a partner from an alliance can break the entire value chain. The alliance loses the knowledge of the withdrawing alliance partner because it is generally not recorded jointly in the alliance related knowledge documentation system. Thus, withdrawal of a logistics partner can result in loss of important customer information. Vehicle manufacturing companies are increasingly wondering whether a reduction in the value creation of up to 20% of the vehicle value would lead to a loss of critical knowledge in the company.

Horizontal alliances are characterised by cooperation of the partners belonging to the same level of the value creation chain. Prominent representatives of a horizontal alliance are the development partnerships between companies that are not linked otherwise and could even be competitors. In the automotive industry, such development partnerships can be seen between Renault and Volvo or Daimler Benz and Mitsubishi in order to bolster engine development. High cost of developing new memory chips can be financed only through the alliance of multiple companies. The success

or failure of such an alliance can be determined by the capability to integrate highly qualified experts of both the companies in a functional team as well as creation of an open cooperation within the framework of the alliance between the companies that are possibly strong competitors in other fields. Furthermore, it must be ensured that the cooperation within the alliance does not lead to a knowledge-flow to the third party.

3

■ Open Versus Closed Alliances

The form of alliance is important to the alliance partner while creating and transferring the knowledge. Based on the classification of networks (Richter and Wakuta 1993), we can classify the form of alliances as open, permeable and closed.

- **Open alliances** aim for a short-term opportunistic cooperation with the changing partner constellation in order to acquire projects of higher volume. In such an alliance, the knowledge transfer and creation takes place depending on the opportunity and in accordance with a specific purpose. Only a little collective learning takes place. The alliance partners open up only to an extent that appears to be necessary for the momentary situation. However, by means of such ad hoc alliances, different partners bring in new knowledge that contributes to the transparency in knowledge about markets, competitors and potential partners.
- Contrary to the open alliance, the **closed alliances** are characterised by stable partner constellations. Partners are under the obligation to cooperate only within the alliance and have a share in each other's company capital. A typical example of a closed alliance is the Japanese Keiretsu with clear division of roles, long-term arrangement, a Keiretsu culture and identity and common tacit knowledge. However, the know-how lying beyond the experience horizon and the competencies of the partner are not used because of this stability.
- The **permeable alliance** represents the combination of open and closed alliance forms. Permeable alliance contains a relatively stable partner constellation wherein the partners can belong to multiple alliances and thus transfer knowledge across the boundaries of an alliance. Examples of permeable alliance are the distributing companies that develop product components jointly with the competing buyers [purchasing companies]. These components are then used in the end products that compete in the market. Ideally, permeable networks combine the stability of an alliance that is necessary for mid-term creation and transfer of knowledge with the option to transfer new know-how into the alliance. Thus, permeable alliances are the best structures if we consider the viewpoint of creation and transfer of knowledge. However, there is a risk of knowledge being transferred outside the alliance undesirably because knowledge is safeguarded only to a certain extent in permeable alliances.

3.6 Groups as Knowledge-Promoting Forms of Organisations

Group structures have a special meaning in the process of creation and transfer of knowledge, especially while converting the individual knowledge into collective knowledge. In many cases, groups build the smallest organisational unit that then operate in the above mentioned structural model at the department level of a business unit or the entire company. We can consider groups as formal or informal alliances of the employees.

The significance of groups in solving problems and in decentralised creation of knowledge has become popular under *Total Quality Management*. The group performance is also considered as crucial for the «*Lean Production*» (Womack et al. 1990). Ultimately, the success of a group-based organisational structure is determined not only by the ability of the individual groups and their members to solve the problem but also by the knowledge transfer across groups. While the work groups undertake the operative business – e.g. the final assembly of a vehicle or guiding specific customer groups – in the long run, they increasingly have the task of reflecting upon their activities and improving their own activities continuously. Thus, quality circles are small groups created for longer periods. The members of these groups have a common experience background. They get together voluntarily at regular intervals in order to analyse the problems of separate work segments under the guidance of a trained moderator, they process and present solution proposals with the help of specially learnt techniques of problem-solving and creativity, convert the suggestions independently as much as possible and take up the verification process.

The Emotional Intelligence of Groups

Groups have an IQ which is a result of the talent and capabilities of all the participants. The efficiency in the functioning of a group depends on the «level» of this IQ. The average «IQ» has turned out to be the most important element of group intelligence in the emotional sense and not in terms of academic performance. Social harmony is decisive for a high group IQ. The difference in the performance of two equally talented and competent groups could be explained by the harmony or the lack thereof within these groups. Even if one talented member of a group contributes to the total performance of the group, other competent members of the group cannot reap the benefits if there are major conflicts within the group. One particularly talented member contributes to the total performance of a harmonic group.

The members cannot give their best in a group wherein emotional and social tensions are high because of fear, anger, rivalries or resentment. As opposed to this, if there is harmony in a group, it can reap the biggest possible benefits from the capabilities of its most creative and most talented members. Thus, knowledge does not have a mere cognitive component. The collective ability to solve a problem influences the emotional intelligence radically.

Source: According to Goleman (1997), p. 205, 206.

A group-related activity can be restricted temporally as in the case of *learning centres* wherein the workers meet in the premises close to the respective production plant at regular intervals with a purpose to share their experiences, enhance their basic knowledge and to improve and combine the communication and teamwork under the guidance of moderators.

However, like the *quality circle*, it is equally important that the results of individual groups are disclosed and provided to the other groups as well so that each group does not have to «*reinvent the wheels*».

Ad hoc problem solution groups are also arranged quite often under the workout approach of General Electric. The main activity here is to include various perspectives

and interests in a problem solving process. External factors such as customers, suppliers or the administration are equally integrated in the internal problem solving processes like various business segments and company levels.

Yet another more strategically oriented type of groups is the *technology group* that deals with new upcoming technologies and looks around for their possible application in the company. Such groups are in a way binoculars or antennae of the company for learning and testing the new upcoming technologies to find out how these technologies can be introduced and implemented in the company.

Apart from these formal groups, there are a number of informal groups in the company that arise from the common leisure activities, training and advanced training, past teamwork etc. These informal groups often outlive a formal group culture and are profitable for the transfer of knowledge. An example of such group are «Communities of Practice» (see ► Sect. 4.5).

Evaluation of Organisational Forms In the following ■ Table 3.2 the above discussed organisational forms are evaluated according to their capacity for renewal versus stability and competition versus collaboration. The dominant form of knowledge creation and transfer is described.

■ Table 3.2 Forms of organisations from the viewpoint of knowledge-oriented management of a company

Organizational form	Stability	Renewal	Competition	Cooperation	Knowledge creation and transfer
Infinitely flat	Knowledge passed over in replicable routines	Growth by replication	«Grazing» interlocking customer groups	While replicating business units, not otherwise	Efficient codification and replication of existing knowledge
Inverted	Through logistic support	Rather incidental, depends on individual initiative	Dependent on positioning of knowledge bearers	Rather low	Overall value and incentive system is needed to convert individual knowledge into collective competence
Star burst	Low	Continuous generation of new business units	Competition for ideas, competition for searching suitable entrepreneurs	Rather low	Branches acquire (pull) knowledge. Systematic creation and transfer of knowledge between the branches is problematic

■ Table 3.2 (continued)

Organizational form	Stability	Renewal	Competition	Cooperation	Knowledge creation and transfer
Network	Routines supplemented by ad hoc teamwork	Can be planned and controlled up to a limit	Takes a backseat in presence of cooperation	Between many nodes (formal, informal)	Large number of contacts promote knowledge transfer; targeted knowledge creation is problematic under optimum resource utilization
Multidivisional	High	Incremental, else by acquisition of know-how	High	Low	Operation use of knowledge divisions, less knowledge creation across boundaries of divisions
Entrepreneurial	Through comprehensive processes	From the company	High using «entrepreneurial process»	High using «integration process»	Good combination of all the criteria
Hyper-text	At business system level	By cooperation of project teams and business systems	Competition for expert	In projects	Through knowledge basis level
Platform	Low	Continuous and chaotic to an extent	Only short-term/medium-term success is ensured	Occasional, coincidental to some extent	Rather intuitive, mostly through alliances
Alliance	(Rather low) depending on the duration and purposes of alliance	Especially in R&D alliances	Simultaneous competition to some extent and cooperation in defined areas		Overall knowledge creation and conversion is problematic in the specific contexts of alliance partners

3.7 Key Insights of Chapter 3

- Organisations need to balance stability and renewal as well as collaboration and competition. Creation and transfer of knowledge is best supported by organisational forms that accentuate cooperation and renewal.
- The concept of «disciplined collaboration» is an effective way to harvest synergies oriented towards clear business related goals.
- In ■ Table 3.2 we have juxtaposed the above-mentioned organisational forms under the criteria of «stability versus renewal», «competition versus cooperation» and «knowledge creation and transfer».
- An entrepreneurial corporation is one that can fulfil the requirements of stability as well as renewal, competition and cooperation very well.
- Fast growth in new business units is achieved effectively from the star burst organisation.
- The «infinitely flat organisation» is suitable for growth by replication (increase in the number of franchise partners or business locations).
- The concept of platform organisation is suitable for the turbulent and chaotic conditions found particularly in «high-tech» industries.
- Networks are being used increasingly in order to bring independent organisations as well as units of a company in contact with each other.
- The inverted form of organisation is particularly suitable when highly qualified experts render services widely and independent of each other and one wants a logical support or bundling of their services in form of a complete service.

3.8 Questions

1. What does «co-opetition» mean? And how is it related to knowledge sharing?
2. Provide examples of situations where «disciplined collaboration» makes sense.
3. What distinguishes an «entrepreneurial corporation» from a classical «multidivisional firm»?
4. Which organisational form would you recommend for a consulting firm? Discuss advantages and disadvantages of such an organisation.
5. What is a hypertext organisation? What would it mean in practice to implement this organisational concept?

3.9 Assignments

1. Organising for innovation

You are hired as a trainee for the organisational development unit of a big firm which operates in a highly innovative industry.

You are asked to propose organisational forms which could increase innovativeness. Discuss various organisational forms (Pros and cons) and prepare a short presentation for a board meeting.

2. Franchising in small business «Mary's cup cakes»

You have opened a shop, a friend has designed it nicely for you and you are successfully baking and selling a variety of cup cakes.

As you have little capital but are convinced that your business idea would be ideal for franchising, you want to transfer your business concept and know-how to franchising partners. What are the steps for transferring your knowledge? Which type of organisation would you have in mind?

3.10 KM-Tool: After Action Review (AAR)

? What is an After Action Review?

An After Action Review (AAR) is a simple process used by a team to capture the lessons learned from past successes and failures, with the goal of improving future performance. It is an opportunity for a team to reflect on a project, activity, event or task so that they can do better the next time. It can also be employed in the course of a project to learn while doing. AARs should be carried out with an open spirit and no intention to blame.

? Why use it:

- The AAR is the basis for learning from project success and failures. It is the starting point for improvements in future projects.
- Team members can identify strengths and weaknesses and determine how to improve performance in the future by focusing on the desired outcome and describing specific observations.
- The project team can document the lessons learned and make it available to the rest of the organisation to improve decision-making.

? How to apply it?

1. Hold the AAR immediately whilst all of the participants are still available, and their memories are fresh. Learning can then be applied right away, even on the next day.
2. Create the right climate. The ideal climate for an AAR to be successful is one of openness and commitment to learning. Everyone should participate in an atmosphere free from the concept of seniority or rank. AARs are learning events rather than critiques. They certainly should not be treated as personal performance evaluations.
3. Appoint a facilitator. The facilitator of an AAR is not there to «have» answers, but to help the team to «learn» answers. People must be drawn out, both for their own learning and the group's learning.
4. Ask «what was supposed to happen?» The facilitator should start by dividing the event into discrete activities, each of which had (or should have had) an identifiable objective and plan of action. The discussion begins with the first activity: «What was supposed to happen?»
5. Ask «what actually happened?» This means the team must understand and agree facts about what happened. Remember, though, that the aim is to identify a problem not a culprit.

6. Now compare the plan with reality. The real learning begins as the team of teams compares the plan to what actually happened in reality and determines «Why were there differences?» and «What did we learn?» Identify and discuss successes and shortfalls. Put in place action plans to sustain the successes and to improve upon the shortfalls.
7. Record the key points. Recording the key elements of an AAR clarifies what happened and compares it to what was supposed to happen. It facilitates sharing of learning experiences within the team and provides the basis for a broader learning programme in the organisation.

	Title of the project or plan
	Object
	Description of experiences
	what went well?
	what went wrong?
	which lessons can be learned?

Source/link: ► www.kstoolkit.org/After+Action+Review, ► www.skyrme.com/tools/index.htm.

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