

# Chapter 3

## A Resource-Based Model of Organizational Resilience

Stefan Tengblad

**Abstract** This chapter presents a three-dimensional resource-based model of organizational resilience. The first dimension is financial resources, i.e. economic assets, earnings capacity and intangibilities. The second dimension is technical resources which include products, services, production and supply chains as well as know-how in areas such as innovation, information systems, management of human resources and commerce. The third and final dimension is social resources which relate to various kinds of relations to stakeholders: employees, customers, suppliers, owners, creditors, etc. The importance of a constructive followership is stressed. In the end of the chapter, it is discussed how these three dimensions interact with each other. Therefore it is a need of taking a holistic perspective in decision-making and the ability to act swift, agile and imaginatively for preventing crises and to exploit opportunities.

**Keywords** Financial resources • Technical resources • Social resources • Followership • Agility

As defined and discussed in Chapters 1 and 2, organizational resilience is the power over time to retain a selected variation among users and customers by operating in a reliable, efficient, and flexible (change-competent) way. The way in which organizations develop this capability is the subject of this chapter.

The chapter begins with a conceptual model of financial, technical, and social resources. Table 3.1 presents these resources with their five sub-resources, all of which are mutually influential, and the building blocks of the resilient capabilities. (Chapter 14 summarizes the relationship among resources, capabilities, and processes for organizational resilience).

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S. Tengblad (✉)  
University of Skövde, Skövde, Sweden  
e-mail: stefan.tengblad@his.se

**Table 3.1** A resource-based model of organizational resilience

Financial resources	Technical resources	Social resources
Ability to pay (liquid assets)	Products and services	Followership and relationships with unions
Creditworthiness (financial balance)	Production technology and work organisation	Customer relationships
Earnings capacity (cash flow and profitability)	Logistics and supply chains	Relationships with suppliers and partners
Financial contracts and economic rights	Information systems	Relationships with owners and other financiers
Intangible assets (e.g., patents and goodwill)	Technical know-how and innovation	Relationships with other stakeholders

**Table 3.2** Financial resources for organizational resilience

Financial resources
Ability to pay (liquid assets)
Creditworthiness (financial balance)
Earnings capacity (cash flow and profitability)
Financial contracts and economic rights
Intangible assets (e.g., patents and goodwill)

### 3.1 Financial Resources

Companies use their financial resources to create economic value and to satisfy financial obligations to external/internal parties such as employees, lenders, and shareholders. Financial resources consist of assets with calculable market value (e.g., cash, payment claims, and financial and real estate investments) and of assets with earning and cash-generating power (e.g., factories, machinery, and inventories). Table 3.2 presents these financial resources.

#### 3.1.1 Ability to Pay (*Liquid Assets*)

Companies meet their immediate financial obligations with liquid assets (e.g., bank deposits and proceeds from the sale of relatively liquid investments such as company shares and bonds). Such assets, which provide a safety buffer against unexpected expenses or declining revenues, give a company financial flexibility, especially if the company plans a major investment or acquisition. The build-up of such assets is the result of continued profitability and the retention of earnings.

### ***3.1.2 Creditworthiness (Financial Balance)***

Companies' creditworthiness, which influences whether they can borrow in the financial markets, is primarily based on the evaluation of their ability to fulfil credit conditions even in harsh times. Creditworthiness is largely a function of the relationship between a company's assets and its liabilities. If a company's assets (at book value) are double its liabilities, owners' equity is equal to its liabilities, and then the company's equity ratio (the percentage of assets financed by owners' equity) is 50%. Owners' equity, of course, is neither an asset nor a liability; it is merely the arithmetic calculation of how much assets exceed liabilities. In the unfortunate situation when a company's liabilities exceed its assets, owners' equity is a negative number. In this situation, unless the company can recapitalise with the issuance of new shares or obtain debt relief (by reducing or renegotiating its delinquent debts), generally the company faces bankruptcy.

Outsiders' evaluations of a company's credit history, ratings, and reputation as well as of the industry risk level determine its creditworthiness. Much of this evaluation depends on a company's ability to finance its growth and expansion from its own (retained) earnings rather than from loans and shareholder capital injections. Chapter 7 explores this concept of financial balance in more detail.

### ***3.1.3 Earnings Capacity (Cash Flow and Profitability)***

Companies' earning capacity derives from two financial resources: cash flow and profitability. Cash flow is a liquidity calculation that measures the relationship between cash revenues (inflow) and cash expenses (outflow): here we refer only to cash flow from operations. A company's profitability is a calculation that measures the difference between these operating revenues and expenses or, in another calculation, how operating assets change relative to operating liabilities. If the results of the calculations are positive (i.e., revenues exceed expenses, and the increase in operational assets exceeds the increase in operational liabilities) then the company is making a profit from its operations. The more positive this calculation is, the greater the company's profitability.

In the long run companies typically need an annual return on equity between 5–10% to remain financially stable. However, fast-growing companies often require a higher return because a considerable amount of capital is always tied up in the expansion. Such companies are likely to have negative overall cash flows even though ROE remains satisfactory. Such companies usually need to increase their capital base through new loans and emissions even if they have a good profitability.

### ***3.1.4 Financial Contracts and Economic Rights***

Companies' financial positions also derive from their financial contracts and their economic rights. An easily understood example of the value of a financial contract is the player contract between a football club and a player. A club's current, long-term contract with a star player increases in value if other clubs seek to buy out that contract. On the other hand, as the contract reaches maturity date or if the player is injured, for example, the contract value decreases. For players who are not stars and are not highly sought after, their contracts inevitably decrease in value over time.

Another example of a financial contract is an option contract that gives its owner (in this discussion, a company) the right to buy or sell an asset at a predetermined price. The value of such a contract depends on the current market price of the asset relative to the exercise price of the option. In most countries, publicly traded option contracts are regulated by law.

### ***3.1.5 Intangible Assets (e.g., Patents and Goodwill)***

Companies' intangible assets are quite different from their financial assets (such as shares and bonds) and their tangible assets (such as property, plant, and equipment, and inventories). Intangible assets, which are nonmonetary and nonphysical, include company reputation, patents, trademarks, copyrights, mailing lists, and more. Many of these assets are listed at very minimal amounts on the balance sheet while others, such as intellectual property, do not appear on the balance sheet. However, "goodwill" (the premium price paid by a company over the fair market value of an acquired company's assets less liabilities) is on the balance sheet. Because the calculation of goodwill is subjective, under current accounting rules "goodwill" is tested annually for impairment.

Because the value of most intangible assets (goodwill is the exception) is underreported or not reported, companies' accounting records often fail to reflect their true value. This is the case even though companies refer to their intangible assets when they apply for loans.

## **3.2 Technical Resources**

Companies use their technical resources in their operations to create and maintain profitability, viability, and sustainability. Such resources—some tangible, some intangible—usually have financial value, but it is their use in everyday operations that creates value. They include not only the products and services that are the reason for a company's existence but also its technological developments and

**Table 3.3** Technical resources for organizational resilience

Technical resources
Products and services
Production technology and work organisation
Logistics and supply chains
Information systems
Technical know-how and innovation

processes originating in management science and engineering. Communication networks, logistics systems, supply chains, and production systems that create and distribute goods and services are examples. The concept of technical resources, which is considerably broader than that envisioned by the technical sciences, includes commercial, administrative and social technologies (for instance, accounting, marketing, sales, Corporate Social Responsibility, and Human Resource Management). Such technical resources are based in knowledge, primarily as “know-how” or the results of “know-how”. More specifically, in business slang, technical resources reflect the “can-do” company spirit that gets things done. Table 3.3 presents these technical resources.

### 3.2.1 *Products and Services*

Companies produce products and/or services intended to satisfy market demand. Quite simply, that is why companies exist. Although varying in quality, price, and customer appeal and satisfaction, many companies’ products and services are similar to those of other companies. Competitive advantage is, in part, the result of adding some distinguishing feature to products and services (cf. Porter 1990). Differentiation in such elements as design, add-on features, and safety features as well as customer service and support can strengthen a company’s organizational resilience. For example, a diner who orders a sirloin steak dinner at a Michelin-starred restaurant will expect to pay more for the meal than if the steak dinner were eaten at the local pub. The quality of the steak may not differ hugely, but the service, the ambience, and the taste and presentation of the side dishes will certainly differ.

### 3.2.2 *Production Technology and Work Organisation*

Companies’ success depends in part on their ability to offer products and services that can be sold at competitive prices, quality and service delivery. Such success cannot be achieved without the appropriate means for producing goods and services. Production technology is in this sense a much wider concept than manufacturing technology. Production technology includes the processes and work organisation

related to goods/services, marketing, and delivery as well as maintenance, construction, and monitoring. In addition, research/development groups and academic institutions have production technologies and work organizations of their own.

Although production processes vary industry-to-industry and company-to-company, still there are similarities in the quest for efficient production methods, regular maintenance and repair routines, and adequate staffing levels on the factory floor. In the administrative offices, the quest is for smooth recruiting and training processes, functional paperwork flows, and proper financial planning and monitoring. Moreover, coherence between technology and work organisation is needed so that the employees' competences, motivation, and innovation capacities are used to full advantage. As digitalization increases, computers and robots will take a large proportion of human work and it may be the case that human-robot interaction and robot to robot interaction will be an important issue for organizations to master.

### ***3.2.3 Logistics and Supply Chains***

Companies depend on other companies for the products and services they cannot produce themselves. An automobile manufacturer, for example, depends on suppliers for many components including sheet metal, tires, windows, electrical systems, interior designs, and finishes. In addition, the automobile manufacturer purchases machinery, tools, office supplies, computers and printers, office furniture, and more. Electricity, water, oil, etc. are also purchased. Therefore, it is absolutely essential to establish and maintain effective logistics systems for the delivery of such products and services (Palin 2015). For some products, the supply chain may be very long indeed when suppliers are in other geographic regions or other countries. Miscommunications, manufacturing delays, misunderstandings about a supplier's capability, and transportation problems are more common than not. The organizationally resilient company manages this large and complex puzzle of purchase and delivery so that operations run smoothly. Chapter 8 describes the role of the supply chain in organizational resilience.

### ***3.2.4 Information Systems***

Companies require information systems that provide employees with the information they need to perform their jobs. The systems must also facilitate sending information internally from employees to managers, company leaders, and boards of directors as well as externally from company to customers, suppliers, shareholders, lenders, and government agencies. The essence of a good information system is its ability to collect information efficiently, to communicate it clearly on a timely basis, and to interact with other information systems (Koh et al. 2006). The importance of accurate and timely information is of extra importance when crises occur which can require daily assessments (Siemieniuch et al. 2015).

In the modern economy, we now have a multitude of electronic information systems such as email programmes, accounting software programmes, production control systems, scheduling devices, and web-based order and payment systems. These systems are critical elements in the operations of a company's various processes including scheduling meetings where managers and employees can discuss problems and make decisions. Companies risk production, customer, and financial difficulties when their information systems do not collect and disseminate essential communications. An area of increasing importance for organizations is cybersecurity, which is defined as the security for preventing theft of vital information and digital property and for protecting IT systems from malicious software and hacker attacks, which in the worst case can have a devastating impact on organizations (Gordon and Loeb 2006).

### ***3.2.5 Technical Know-How and Innovation***

Companies' growth and success depend partially on their technical know-how and innovation. This is true even for small, service companies. Competitors are always thinking ahead so companies must keep pace. Without adequate technical know-how and value-creating innovation, a company will fall behind its competitors as it loses customers, reputation, and money. Knowledge of the world, of customers' preferences and behaviours, of efficient production processes, of technological developments, and of business management is essential if a company is to offer innovative products and services. For that reason, the organizationally resilient company employs knowledgeable and skilled people. Innovation can also refer to changes in organizational practices (i.e., ingenious solutions to technical problems and efficient coordination routines).

The modern organisation often requires a great deal of technical know-how. Among the many areas where know-how is essential are engineering, accounting, financial controls, human resource management, purchasing, marketing, sales, communication systems, and legal matters.

In the wake of the Volkswagen emissions scandal it is worth noting that high technical know-how can be very risky if the know-how is used in unethical and irresponsible ways. External actors (customers, shareholders, authorities, etc.) place considerable trust in the expectation that companies will behave ethically. When companies break this trust, they incur severe damage to their reputations as consumers and society lose confidence in them.

## **3.3 Social Resources**

Companies use their social resources as they interact with their internal and external environments—in short, with all their various stakeholders as they seek and acquire technical and financial resources. To be organizationally resilient, a company must

**Table 3.4** Social resources for organizational resilience

Social resources
Followership and relationships with unions
Relationships with customers
Relationships with suppliers and partners
Relationships with owners and financiers
Relationships with other stakeholders

develop mutually trusting relationships with committed coworkers, loyal customers, reliable suppliers/partners, supportive owners, and various other stakeholders. Table 3.4 presents these social resources.

### 3.3.1 *Followership and Relationships with Unions*

Employees and managers (here referred to as coworkers) are key resources for creating and maintaining organizational resilience. For instance, the technical resources described above require dedicated groups of coworkers so that the resources are used to their fullest capacity. The economic consequences of negative coworker behaviours and attitudes can be enormous. These include shirking, irresponsibility, embezzlement and other dishonest acts, arrogance, negligence, and other unacceptable behaviours. The importance of trust is of immense importance. As Siemienluch et al. (2015: 192) put it:

What binds a company together is not its technical quality and expertise, nor is it the professionalism of its management, important though these things are; the glue is the organisational and human quality of trust.

In the book, we use the concept of followership to refer to coworker behaviours and attitudes such as work engagement, responsibility, cooperation, and trustworthiness (in particular, see Chap. 9). Because managers report to a higher authority, they are also followers. They need to develop their ability to follow because their followership has a large impact on the way the organisation develops and combines its resilience resources. One common problem in managerial followership, however, is a lack of sincerity in communications; important problems may be hidden and/or inferior decisions are accepted passively without critical discussion (Tengblad 2004; Wilkinson 1998).

Followership implies there is, or at least there should be, a reciprocal relationship between leaders and their followers. Furthermore, followership means that followers have an important role as co-producers of leadership and co-creators of workplace conditions (Hollander 1992; Van Vugt 2006). Ideally, coworkers should be as committed to the good of the organisation as to the advancement of their personal interests. Moreover, a positive followership atmosphere requires mature leaders. These leaders delegate tasks, assign responsibilities, follow-up on these tasks/responsibilities, and provide feedback and encouragement as they pursue the



shared company goals. Several chapters in this book explore the followership concept in greater detail (see Chaps. 9, 10, and 11).

The management–labour relationship is inevitably adversarial, more so at some companies than at others. However, a company strengthens its organizational resilience if it builds a mutually respectful relationship with its unions. A cooperative and productive relationship between management and labour can be a valuable resource, especially in worst-case scenarios when staff is reduced.

### ***3.3.2 Relationships with Customers***

Companies must, of course, have strong customer relationships. Today unhappy consumers vent their wrath in the public forum of the Internet on the many corporate complaint websites. Dissatisfied customers rage against every actual and perceived blunder by the airlines, railways, telecommunication companies, insurance firms, and banks, to mention only a few industries. Therefore the organizationally resilient company puts a great deal of time and effort into establishing and maintaining good relationships with its customers. The first task is to offer high-quality products and services that perform as advertised so that customers think they have received value for the price paid. The second task, responding promptly and sensitively to customers' requirements and grievances, requires companies to understand their customers and their expectations (Simon and Jonason 2013). A company will grow when customer satisfaction ripples through the consuming public. Some companies even create very loyal followers who cannot imagine abandoning a favourite brand. An example is Apple with its "halo effect." Apple's devoted fans (especially of computers) are generally inclined to purchase other Apple products.

In a certain sense, customers are owners of company brands. This is true despite all the analysis and planning companies put into "brand management". For example, Adam Opel AG, the German manufacturer of Opel-branded passenger cars, may try to position itself as a luxury car manufacturer by offering premium models aimed at BMW and Audi customers. However, customers really determine the position of Opel cars based on their perceptions of the cars' styling, appeal, and technology (Hatch and Schultz 2008). Repositioning a brand, ultimately, is better achieved through good customer relationships in which promises are kept and expectations are met rather than with large-scale and expensive marketing programmes (see Chap. 11 for a description of brand repositioning).

### ***3.3.3 Relationships with Suppliers and Partners***

Companies recognize that good relationships with their suppliers (and partners) are valuable resources. In addition to fulfilling contractual terms about products and

services, established suppliers often give purchase discounts, offer reasonable credit terms, and take care to meet delivery deadlines. The quality of a company's products and services depends to a great extent on the quality of the components its suppliers provide. Dissatisfied customers rarely look to suppliers when there are problems; quite naturally, they assume all responsibility lies with the company that sold them the product or service (e.g., shoes, clothes, cars). There is considerable risk of reputation damage for a company whose suppliers do not behave responsibly. Nike and Adidas, the sporting goods retailers, learned this lesson the hard way when facts about their suppliers' use of child labour, their unfair employee treatment, and their hazardous work environments were revealed. Chapter 5 presents another example in its description of how British Petroleum's poor supplier communications and collaboration worsened the Gulf of Mexico oil spill disaster.

### ***3.3.4 Relationships with Owners and Financiers***

Companies also depend on good relationships with their owners and financiers. Unhappy owners can replace company management or sell the company to competitors, thereby ending the company as a legally independent entity. Some owners, who take a rather short-term perspective, even see companies as cash cows that exist to provide them with large annual dividends (see, e.g., Chap. 4). In good company-owner relationships, however, company owners can be a powerful resource in their support of management's new strategies and new investments.

Companies need good relationships with commercial banks and other credit institutions for the normal borrowing activity that, for many companies, is part of everyday business. However, in tense borrower-lender situations, when it is a struggle to meet debt obligations, a company may need to borrow more money or arrange loan restructuring. In such difficult times, a company's history of its banking relationships is crucially important. The company then needs to be seen as a reliable borrower, capable of meeting all its financial obligations.

### ***3.3.5 Relationships with Other Stakeholders***

Companies should establish good relationships with the wider community. This group includes government agencies, commercial and non-commercial neighbours, the media, and not-for-profit organizations. Poor relationships with members of this group can have grave consequences for a company. Governments make and enforce laws that directly affect how companies do business. The others have the power to influence company image, erect barriers to expansion, turn away customers, damage borrowing relationships, and provoke employee discontent.

A now classic example of damage to company image was the fate of British Petroleum (BP) following the oil spill in the Gulf of Mexico when the media and

the community directed its anger at the company (see Chap. 5). In the general crisis of confidence that followed that grim event, BP lost half its share price, which was disproportionate to the actual economic damage to the company.

Good relations between a company and its external stakeholders and the surrounding community can lead to the development of a certain spirit best described as the community's concern for the well-being of the company. Examples of this spirit are presented in Chap. 9 on the "Floby Spirit" and in Chap. 13 on the "Peddler Spirit". Both chapters describe the community work ethic of loyalty and diligence demonstrated by coworkers.

### 3.4 The Connections Among the Resources: An Example

Although the organizational resilience model—the three main resources and their sub-resources—is fairly complex in its holistic conception, nevertheless it simplifies the reality that companies (and other organizations) face. The intention of the model is to specify which kind of resources a company needs to develop and display and how these resources relate to each other. Consider the following fictitious, although possible, example.

A SME manufacturer implements a new production technology based on much more standardised processes that are intended to improve production efficiency (i.e., a change in a technical resource). However, after the new process is implemented, many experienced co-workers find the new process not only monotonous but also inadequate. Because they feel less empowered (i.e., a decline in a social resource), the co-workers are less committed to their work and to customer service. Some skilled co-workers even take jobs with the company's competitors. Of course, their departure means the company loses know-how and skills (i.e., a loss of a technical resource). Within a few months customer satisfaction and loyalty began to deteriorate (i.e., a social resource). Customer relationships deteriorate (i.e., a decline in a social resource) and delivery problems increase (i.e., damage to a technical resource). As customers begin to switch to other companies, revenues and profit decrease (i.e., a decline in a financial resource).

Following these events, the company realises it needs to make another investment that will improve the new production process (i.e., a second change in a technical resource). However, the shareholders decline to make additional capital contributions, and the bank is reluctant to make additional loans given the company's poor economic outlook (i.e., deteriorations in economic resources). At this point, a company partner gets cold feet and takes steps to sell its company shares (i.e., a deterioration in a social resource). The company, now forced to finance the additional investment itself, faces a liquidity crisis that is only exacerbated by a major customer's failure to make timely payments because of its own financial troubles. Next, the company has difficulty paying its suppliers (which impairs relations with key suppliers). The company now experiences increasing pressure from its bank as well as its suppliers.

What is to be done? Should the owners try to sell the company? Should they try to raise capital through a new share issue? Is it possible to restructure the bank loans? If any of these stopgap measures appear to work, are the co-workers content to remain at a company with such a dubious past and even more dubious future? A simple change in a production process has led the company to the verge of bankruptcy.

This example shows that a change in one resource can influence other resources, directly and indirectly, and, as in this example, can even lead to unexpected outcomes of great magnitude. Positive results from changes in resources, of course, are also possible. In our example, if the new production process had reduced costs significantly, and management had taken early measures to support coworker relationships, perhaps customer relationships might not have deteriorated. Then, without the threat of insolvency and the liquidity crisis, the company might have raised the needed funds from its owners and bankers.

The BP Deepwater Horizon disaster and the Volkswagen emissions scandal exemplify the interrelationship of financial, technical, and social resources. Both BP's and Volkswagen's irresponsible use of their technical resources resulted in major negative effects on their social resources (loss of reputation and trust) as well as on their financial resources (loss of goodwill and fines and other costs).

The strength of this model is its holistic understanding of the complex resource base an organisation requires for its development and resiliency. While most management models focus on much narrower aspects, this model takes a more analytic and multidimensional perspective and can be used for reflexive inquiry that leads to learning and a broader understanding by participants (cf. Stacey 2012).

### **3.5 External Factors for Resource Development**

The resources in the organizational resilience model are described in terms of current conditions. For example, the model does not include potential relationships with future customers or projections of future revenues/profits. The model is applied to a company or an organisation at a particular time in the same way that a balance sheet presents the financial assets and liabilities at the report date.

Companies can create (or strengthen) their resources in various ways. For example, using financial resources to make various investments can create other tangible and intangible assets, such as new products, improved production facilities, better customer relationships, and monetary surpluses. Alternatively, companies can change the mix of their different resources so that resources are combined in new ways. For example, financial and technical resources can support social resources so that expensive assets are used more productively (e.g., previously vacant warehouses adapted for storage; underemployed coworkers assigned more meaningful work).

Misallocation of resources, where one resource is emphasized at the expense of others, may also create problems. Many companies spend enormous sums for administrative activities such as data collection, internal controls, and coordination efforts that might have been better spent on meeting customer demands and developing product/service innovations. In such situations, despite large-scale production and dominant market positions, large companies with millions of employees often find, in times of economic crisis, they are administratively

**Table 3.5** External influences on organizational resilience

External resources for resilience
Natural resources and other raw materials
Labour
Economic ecosystems
Transportation/communication networks
Social capital

top-heavy because they have prioritized internal control activities over meeting customers' demands.

In this context, it is also of interest to address the other influences on a company's use of its resources that provide organizational resilience. No company operates in a vacuum. Frequently, organizational resilience depends on the availability and cost of raw materials, a competent labour force, and assorted other external factors. Five of these factors are described next: natural resources and other raw materials; labour; economic ecosystems; transportation/communication networks; and social capital. These factors are the ingredients or the building blocks that support the financial, technical, and social resources that in turn provide organizational resilience (Table 3.5).

### ***3.5.1 Natural Resources and Other Raw Materials***

Many companies are involved in extracting or refining various natural resources or in growing and processing other raw materials. As an example, the food and agriculture industry supplies the world with grains, milk, fruits, vegetables, poultry, meat, etc. Private farmers, farm co-operatives, and giant agricultural companies need dependable markets for the sale of their products and reliable supplier relationships for the purchase of fertilizers, fuel, machinery, seeds, and chemicals, as well as the purchase/rental of grazing land and storage facilities.

There are many other examples. Mining companies have mines and quarries with high-grade ores. Textile and clothing companies require raw cotton and wool, dyes, and energy. Paper companies use wood fibre and chemicals. The sources of such raw materials are unevenly distributed worldwide. Therefore, because such materials vary in quality and in ease of acquisition and transportation, many companies have competitive advantages over other companies in the same industry sector.

### ***3.5.2 Labour***

Companies clearly need to develop and maintain good working relationships with their coworkers, whether they are full-time employees or temporary employees hired for special projects and defined time periods. To perform their work, coworkers often need on-the-job training, which can be expensive and time-consuming. For most

skilled tasks and complicated, specialized work, coworkers (e.g., accountants, financial analysts, engineers, and human relations experts) must be highly educated and often highly experienced. Companies whose worksites are in areas distant from major population areas often have difficulty in hiring such people.

Another problem (or perhaps it is an opportunity) is that labour costs vary greatly across the world. These variances only partly reflect real differences in people's productivity. For this reason, many companies retain their headquarters in their home country or in low tax countries and locate their manufacturing facilities elsewhere. In this way, companies acquire cheap, unskilled labour abroad and retain the managerial activities of purchasing, research, etc., at home. Sometimes the benefits of cheap labour, however, become a problem when labourers' substandard wages and working conditions receive public attention. Problems with quality and coordination can also offset large differences in labour costs.

### ***3.5.3 Economic Ecosystems***

In addition to proximity to areas with natural resources, raw materials, and labour, organizationally resilient companies benefit from business-friendly environments. These so-called economic ecosystems generally have a network of financial and business experts (e.g., bankers, consultants, and venture capitalists) and often have a business cluster identity from the concentration of interconnected businesses (see Chap. 12). Such networks and clusters are typically found in or near national and regional centres where there is a large consumer public, a good infrastructure of services and facilities, government agencies, and not-for-profit organizations. It is worth to mention here that a location within major population areas is not an advantage for many companies. Wages and facilities are more expensive at such places and employee commitment may be lower compared to more rural areas. A good combination for a smaller industrial firm could be a location 1–2 hours driving time from a major population and transportation hub. It can be worth mentioning that the world's by far largest private employer, WalMart originates from Bentonville in Oklahoma, and there are many similar cases (VW, IKEA, Nestlé).

### ***3.5.4 Transportation/Communication Networks***

With the rapid globalisation of the world's markets in the late twentieth century and early twenty-first century, companies are increasingly dependent on the availability of first-class transportation/communication networks. Companies that buy and sell goods require excellent transportation networks. These networks are usually identified as their production and supply chains (see Chap. 8). Companies that transport large products such as automobiles or bulk cargo such as grains are best located

near ports and/or railways. Steel mills, for example, which receive raw iron ore and coal and ship finished slabs and ingots, are preferably located near deepwater ports.

Companies also benefit from well-maintained motorways and efficient rail systems because coworkers can live some distance from work, often in more desirable communities than their places of employment. Companies also need access to national or international airports and to high-speed Internet infrastructures. It is difficult for a company to be organizationally resilient without such transportation/communication networks.

### **3.5.5 Social Capital**

Companies benefit from what sociologists identify as the social capital of a community (Putnam 2011). Social capital is the sum of a society's values, relationships, and economic, political, and social norms. These include its labour force, its legal, social, and political institutions, its entrepreneurial spirit, and its tolerance for differences, all of which underpin and sustain society (see Chaps. 11 and 13).

At the company level, such social capital can support coworker empowerment, managerial openness to new ideas, relationships of trust (company and coworker, company and supplier, and company and customer) and productive management-labour relations. It is essential that company owners and managers embody and promote this spirit of "better together". Without the cooperation, reciprocity, and harmony of these social networks, communities and their companies are less likely to develop economically.

## **3.6 Resilience for (Fast) Adaptability**

Access to these resources by itself is no guarantee of a company's profitability and sustainability. A key aspect of the organizational resilience model is the integration of the various resources. Thus, a company's relationships with its owners and its customers (i.e., social resources) influence (in a somewhat simplified way) its product/service development (i.e., technical resources) and its profitability (i.e., financial resources). For example, product development should recognize customer preferences, processes, and innovations should be promoted, transportation/communication networks should be developed, and coworkers should be actively engaged in solving the inevitable "teething problems" in the early stages of system and product development.

The organizationally resilient company combines its resources effectively and efficiently. Additionally, it is often necessary to change and reconfigure how the resources are used. Organizationally resilient companies can make such adaptations quickly. Companies that are burdened by resources that they use only marginally, or not at all, lack this adaptability. It is poor strategic policy to tie up capital in

unused assets that could have been used to pay down debt or to make new investments in more productive assets.

Similarly, it is poor management policy to build customer relationships by predatory pricing, to support coworker relationships with non-market (i.e., excessive) salaries, or to overpay suppliers for goods and services. Such short-term policies rarely support long-term strategies. It is a real challenge for an organisation to use its resources in a reliable, efficient and adaptive way. Often the challenge involves personnel and departments. For example, sales personnel may want to give discounts to promote sales even though the practice may reduce profit. Or managers in production may request more people instead of dealing with problems of weak productivity. Or the IT department may request a larger budget for the purchase of costly IT systems with only meagre effects on overall efficiency. These are only a few of many such demands. Management is in a tricky position. Agreeing to these demands often implies acceptance of low efficiency. An effective allocation of resources should create a certain pressure on departments to make improvements. However, there is also a risk that too tight resource allocation will result in resource depletion.

The real company challenge is to act flexibly and imaginatively, as customer preferences and demands change, in the production of products and services that can be sold at competitive yet profitable prices. The art of organizational resilience is deciding which combination of, and emphasis on, resources works; because experience is the best teacher, the challenge is to generate organisation learning based on experience.

### 3.7 Discussion Questions

1. Analyse an organisation you are quite familiar with in terms of the resources for the resilience model. In your analysis, discuss which resources in the model seem most important for this company, and whether and why the company should focus on other resources as well.
2. Discuss the linkage between financial, technical, and social resources in terms of specific business activities (or business sectors) you are acquainted with. In your answer, explain how a change in resource emphasis can influence the use of other resources.
3. Which practical measures can a company (or other organisation) take that will improve its use of financial, technical, and social resources as a whole?

#### Author Biography

**Stefan Tengblad** is Professor of Business Administration at the University of Skövde, Sweden. He has written and edited various books and articles on managerial work, leadership, and followership. Among his edited books are *The Work of Managers* and *The Art of Science*. He is the leader of the research specialization centre Enterprises for the Future at the University of Skövde.