INTRODUCTION

“Business capabilities can help to uncover redundancies - saving potentials often range from 15 to 20%.”

In the digital age the role of technology shifts from supporting processes of the business strategy to the key factory of strategy execution itself. Information Technology helps that customers receive their shirt ordered online the next day, it helps that they can read their newspaper during their commute on an iPad and that the invoices for these services are processed without friction. As a result, the challenge how to bridge the gap between strategy and execution in IT becomes much more pressing.

Organizations speaking many languages often cause this gap. They speak of missions, strategies, goals, processes, and projects. The CEO speaks of “making mobile first a priority,” Marketing of “increasing the share of wallet with millennials” and IT of “load balancing the Linux server cluster.” Which one is the right language? Business capabilities have the potential to serve as this universal language. If properly used they can help save money, decrease risk and enable growth. McKinsey found in a study\(^1\) that redundant IT support of the same capability in organizations bears saving potentials of 15 - 20%. But not only redundancy does cost real money. KPMG\(^2\) puts a bill of €590,000 on every single IT incident. Capabilities-driven thinking helps executives to understand and mitigate technology risks better.

Business capabilities form a crucial part of great IT strategies: They specify how we are going to win and how IT is helping along the way.

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\(^1\) McKinsey, 2008, IT Architecture: Cutting Cost and Complexity

\(^2\) KPMG, 2015, Technology Risk Radar 2nd Edition
UNDERSTANDING BUSINESS CAPABILITIES

“Business capabilities define what your business does and what it needs to do to win”

Business capabilities encapsulate what a business is doing right now and what it needs to do in order to meet current and future challenges. They define “what” a business does, rather than “how” it does it (which is described by processes). Most modern companies might have goals around having a competitive workforce. To “recruit talented employees” is one business capability necessary to achieve this goal. “Recruit talented employees,” tells us what we need to do, but leaves it open how to do it. There could be a Human Resources process from attracting employees via a recruiting website to interviewing candidates to the administration of hiring. Or everything could be outsourced to a third party.

More abstractly, Gartner defines business capability modeling as “a technique for the representation of an organization’s business anchor model, independent of the organization’s structure, processes, people or domains.” Business capabilities help to abstract from the organization’s fast moving parts. We can imagine them as the sum of people, processes, and technology needed to achieve a certain goal. If we come back to the above example, “Recruit great employees” comprises the people (HR Team), the process (e.g., attract, screen, interview, hire) and technology (e.g., online assessment center, digital personnel file) into one capability of the organization.

Adequately defined business capabilities are fairly stable over time. While the way we recruit has changed quite a bit over the last 10 years, the necessary basic capabilities remain the same. When we speak about fairly stable, we should emphasize the word fairly. In the digital age it is not uncommon that entire business models change. Amazon started as an online book retailer and developed into one of the world’s largest marketplaces, hosts over 4,000 titles on Amazon Prime, and offers top-tier cloud storage. Still, capabilities are constant enough to build a plan around them.

WHY BUSINESS CAPABILITIES MAKE LIFE EASIER

“Business capabilities help to identify redundancies in IT, to spot risks and to develop innovative technology solutions”

The ultimate goal of a business capability-driven IT strategy is to deliver tangible results. Let us look at three examples:

Example 1: Merger Management

Imagine that a multinational insurance company has recently acquired a local insurance player and a massive project team has been set up to integrate both companies. One of the big challenges they face is integrating and consolidating applications. The team has to decide which applications can be used in the future and which ones will be phased out. What makes the task a difficult one is that organizational structure and processes differ strongly between the two companies. Rather than getting lost in the details of processes or the uncertainties of
organizational charts, a target business capability model helps to structure the whole merger. By mapping the applications of both organizations to the new capability model, it can be decided which applications are kept and which are discontinued.

But this application of business capabilities is not restricted to merger activities. Very often in large companies with multiple business units and legal organizations, the starting situation is not much different from a merger. Business capabilities can serve as the structuring element to uncover redundancies in IT. McKinsey estimates the saving potential to be 15 - 20%. In many industries, the cost of IT can make up 5% or more. This means that for a company with €1 billion revenue, there is an opportunity to save €5 million year in, year out. A business capability model helps to discuss the areas of strategic invest or divest.

**Example 2: IT Risk Management**

Recently, the awareness of technology risks has seen an increase, be it due to new external regulations or security breaches. CIOs see themselves faced with questions like the following: Do my applications meet the regulatory standards? Which applications support critical business activities? What does it mean if a certain application fails? A study by KPMG has shown that attention to technology risks pays off. The consultants estimate that each IT incident (outage) costs on average €590,000.

Balancing the need to reduce these risks and maintaining or even decreasing costs longs for an integrated approach. By linking business capabilities to applications that again are linked to technology components, a strategic risk assessment can be conducted. With the right information in place, a CIO can deliver a statement such as: “We cannot accept the risk of an end-of-live server cluster because it provides the infrastructure for our online booking system that is crucial to our capability to sell directly to customers. Selling direct to customers has highest strategic priority due to its financial impact.”

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**Example of a risk dependency map: Tracing of failure of an IT component to the affected business capabilities and indicating potential financial damage**

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4 McKinsey, 2008, IT Architecture: Cutting Cost and Complexity  
5 KPMG, 2015, Technology Risk Radar 2nd Edition
Example 3: Innovation Management

The use of business capabilities should not stay restricted to a pure bottom-line focus. They are also a great help in structuring thoughts on how to transform business and IT. In the digital age, companies need to investigate capability by capability and think about how they can transform them. A trade fair organizer could look at its “Manage Pricing” capability. In the past it might have followed a simple per square meter pricing. In the future, IT could enable a pricing model based on auctioning of leads.

We will come back to some of these examples in the last section and make some suggestion on how to do this in practice.

Three main characteristics of Business Capabilities
In a nutshell business capabilities are well suited for these kind of exercises due to three main characteristics:

1. Firstly, they are the most stable reference for planning in organizations. As the basic capabilities a business needs to achieve its goals only change in times of major transformations (e.g., shift in business model or merger) they are well suited for executing the IT strategy. Strategy statements are often abstract. Processes tend to get very detailed, and projects are quickly moving.

2. Secondly, business capabilities make the strategy much more tangible. They resonate well with executives and at the same time are easily understood by employees in IT. “Pricing & Yield Management,” “Booking Platform Management,” and “Promotions & Loyalty Management,” are much more concrete than the strategy statement of a hotel chain CEO to “Better utilize existing capacities.”

3. And lastly, business capabilities - if properly defined - can help to overcome organizational silos. Especially in larger companies, the same capability might be needed in multiple places in the company. While it can make perfect sense that three business units all do their own recruitment, it could pay off to think about the best possible technical support from a capability perspective (Recruit great employees) rather than from an organizational (find employees for business unit A) perspective.

IN FOUR STEPS TO YOUR BUSINESS CAPABILITY MODEL

1 - Understand the needs

“Know where your company is heading and how IT can help.”

“Would you tell me, please, which way I ought to go from here?” “That depends a good deal on where you want to get to,” said the Cat. “I don’t much care where-” said Alice. “Then it doesn’t matter which way you go,” said the Cat. An important function of business capabilities is to make the strategy executable. If IT does not know where the business is heading, it is impossible to do the right things. Therefore, it is a good start to review your company’s strategy and goal documents or even better involve people that define the strategy, like the strategy or corporate development department. If there is no formal strategy defined, it is plain obvious what the most important goals are at this point, or it is worth to start a discussion with executives on their key priorities. Consider the strategy as one input when taking the next step to defining your business capabilities.
on the highest level.

2 - Define your business capabilities

“Business capability syntax: When in doubt, go for breadth rather than depth.”

As a next step, start thinking about the major capabilities that your business needs to operate. On the first level (level 1) there should be only a few critical ones. An analysis of the top 100 LeanIX workspaces shows that companies typically use around 7 - 10 capabilities on the highest level. You can build them by thinking both from top-down (what does the company want to achieve) and from bottom-up (what organization, processes and people are in place).

If you start from an organizational chart or process model, resist the temptation to just copy these. Ask yourself frequently if the capabilities describe the “what” rather than the “how.” Also abstract from the organizational level. Reorganizations happen quite frequently and should not impact your model. This mostly applies to larger companies. For smaller companies the organizational setup can be quite similar to the capabilities of the business.

The highest level capabilities should be a complete description of your business. Good capabilities do not overlap; they are mutually exclusive. A good test is to check whether you can assign your level 2 capabilities without any ambiguity. Or, as a thought experiment, try to imagine if you could outsource the different capabilities. Once you have completed the first level, depending on your organization, it can make sense to drill down one level. On the deeper level, all capabilities should once again completely describe their parent capability and be without overlap. But before drilling down, reflect on whether this is really needed.

A large multinational LeanIX customer in the technology industry with revenues of €1.5 billion has restricted its business capabilities to just 12 top-level capabilities. Following a lightweight approach, 70% of LeanIX workspaces show models that have only one or two levels of business capabilities. While more levels can help to get a better structure, it comes at the cost of increased complexity. As a rule of thumb: When in doubt, go for breadth rather than depth.
3 - Assess your capabilities

"Not all business capabilities are equal in terms of value for the customer and financial impact."

Not all capabilities are of equal importance. As a basis for later analysis and planning, it helps to assess capabilities according to defined criteria. The assessment could be as simple as "This capability has importance". Other models, such as one by Accelare, distinguish business capabilities by two dimensions: value for the customer and financial impact. In modern Enterprise Architecture solutions like LeanIX customers can easily implement this model by assigning tags to their business capabilities.

![Business capability matrix](image)

4 - Link capabilities to applications

"The link between business capabilities and applications creates a bridge between business and IT."

Applications, in contrast to IT components, are always linkable to a specific business purpose. Business users work with them in order to create value. Therefore, applications are the perfect transit between business architecture and technology architecture. Link your applications on the lowest level to the business capability they support. Modern Enterprise Architecture solutions like LeanIX make this an easy task and provide best-practice visualizations. A great way to get a complete overview is to depict business capabilities as nested boxes that contain the assigned applications.

![Business capability model](image)
During this exercise you should already notice whether the new model serves as a good structuring element: If you have only one application assigned per capability you may have overdone it – this is no meaningful clustering that can help your analyses. If on the other side you find all your applications in just few business capability boxes, you might want to further detail your business capabilities in order to conduct meaningful analyses. The average LeanIX workspace shows around seven applications assigned to a business capability on the lowest level. This seems a good trade-off between structure and simplicity.

<table>
<thead>
<tr>
<th>What is the right depth for a business capability model?</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1 LEVEL</td>
<td>19%</td>
</tr>
<tr>
<td>2 LEVELS</td>
<td>51%</td>
</tr>
<tr>
<td>3 LEVELS</td>
<td>18%</td>
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<tr>
<td>4 LEVELS</td>
<td>6%</td>
</tr>
<tr>
<td>5 LEVELS</td>
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Despite the fact that business capabilities are rather stable in nature, they still can change from time to time. Therefore the business capability model should serve as a starting point and should be iteratively improved and adapted, if required.

**BREATH LIFE INTO YOUR MODEL: SHOW IT AT EVERY OPPORTUNITY**

The work does not stop at defining the model. The goal of business capabilities is that they become a commonly used basis for discussion and planning. To increase chances that this happens, clearly assigned responsibilities are a good starting point. Next, every opportunity should be taken to anchor the model in your organization’s processes and governance. The model should serve as basis for any discussion on strategic priorities related to IT, it should be considered in planning and budgeting processes.

You should not be held back if formal adoption of the model at an organizational level is slow. Even if you are a lone wolf, become active. Print your organization’s business capability heat map in poster size and put it on the walls. Refer to it, when you discuss how IT links to business. Take the model to meetings with executives to familiarize them with the thinking. If you use a modern Enterprise Architecture tool like LeanIX, make it a habit on a regular basis to look at standard reports, such as heat maps or application matrices in meetings.

Despite the fact that business capabilities are rather stable in nature, they still can change from time to time. Therefore the business capability model should serve as a starting point and should be iteratively improved and adapted, if required.
Logistics companies are facing an environment of intense competition with differentiation mainly via price. This leads to a strong bottom-line focus and IT costs are always a welcome target for potential savings. Slash and burn policies have put logistic companies' IT in a position, where innovation becomes hardly possible. Business capability-driven analyses can support a smarter way of deciding on IT investments.

A logistics company has decided to align its IT investments with the strategic priorities. In a project the business capabilities were defined and assessed based on their financial impact and value they provide for customers. The IT board decided that cost savings for the next year will only be foreseen for business capabilities that are classified as “Business Necessity.” In preparation, the team creates a heat map that is filtered by the affected capabilities and depicts with a color code the cost of associated applications. In the resulting report, the Audit/Assurance/Legal capability sticks out as it seems to absorb a lot of IT investment. As a next step, the project team further investigates the affected applications and underlying infrastructure. They come up with a list of potential activities, such as reconciling SLAs, switching to SaaS solutions and more. The business capability analysis helps them to focus their activities.
Technology risk analysis

A large insurance company has operations in more than 25 countries. The organization’s technology is located throughout the world supporting global lines of business. IT includes in-house development teams, support back offices as well as various outsourcing partners. In the past various attempts to come to a feasible risk assessment have failed. Past incidents and related outages have caused severe financial damage. Regulations put additional urgency on the topic. Besides these demands, the IT should also increase its flexibility. At this point, an integrated approach is needed. The CIO decides to establish a capability-based risk assessment.

![leanIX heat map report indicating cost of applications](image)

A risk cartography is developed that shows relations between IT components (technology layer) via applications (information layer) to business capabilities (business layer). These pictures help to illustrate complex dependencies and ensure that the problem is tackled from a holistic perspective. Looking at the risk cartography, risks can be identified from the infrastructure level and can be traced up to the severity of implications for the business. Combined with further information about technology life-cycles and technical fit an assessment is conducted on which risks to accept and which to mitigate. Based on that information the team suggests an investment in outdated technologies.

![leanIX visualizer report showing risk dependency from IT component over application to business capability](image)
IT consolidation

A multinational player in the automotive supply industry has recently acquired a hidden champion constructing manufacturing robots. The integration of IT systems had been postponed during the hectic acquisition phase. In the current situation many processes and IT systems are redundant. As the merger needs to leverage synergies, a program is set up to consolidate applications.

The project team starts by mapping the capabilities of the acquired company to their existing model. While doing this analysis it is becoming apparent that some new capabilities need to be added, however, especially for support functions, the capabilities are to a great extent very similar. In particular, the HR capability promises a lot of potential for consolidation.

The team maps countries, HR capabilities and supporting applications in one matrix view. Together with the information on how well these applications support the business, they come up with a first shortlist of which applications of the formerly two companies to keep and which to phase out.

LeanIX application matrix report showing the relation between user group, application and business capabilities. Colors indicate the functional fit.
SUMMARY

Business capabilities have the potential to serve as the common language between business and IT. Properly defined, they can help to save money, decrease risk and enable growth. Consulting firms have found that the reduction of redundant IT support for capabilities has a savings potential of 15 - 20%. IT risks are estimated to cost companies €590,000 per incident.

Business capabilities encapsulate what a business is doing right now and what it needs to be doing in order to meet current and future challenges. They make life easier, as they are fairly stable over time, are much more tangible than strategy and have the potential to overcome organizational silos.

Companies can define their business capability model in four steps: understand needs, define capabilities, assess capabilities and create the link to applications. Best practices show that business capability models of companies with a lean philosophy have around 10 top level capabilities and two levels of depth.

The resulting model can be used to support analyses to align IT investments to strategy, to draw technology risk maps and consolidate IT applications. LeanIX supports these analyses with out-of-the-box best practice reports.

Click to receive your free template: “Business Capability Map”