

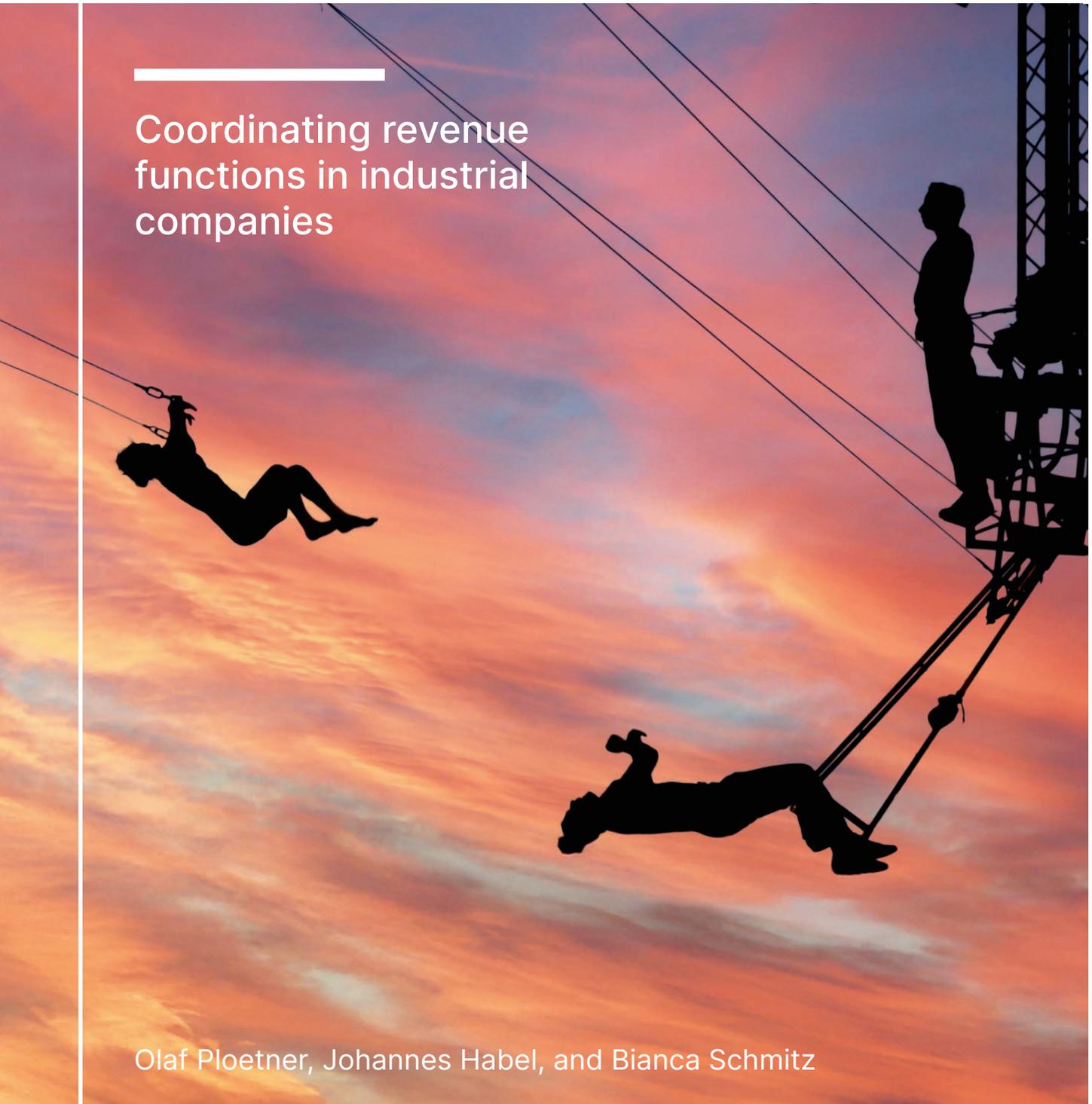
# REALIGNING SALES

FOR THE SOLUTION ECONOMY

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Coordinating revenue  
functions in industrial  
companies

Olaf Ploetner, Johannes Habel, and Bianca Schmitz



# INDUSTRIAL COMPANIES BROADEN THEIR PORTFOLIOS BY INTRODUCING INNOVATIVE BUSINESS MODELS

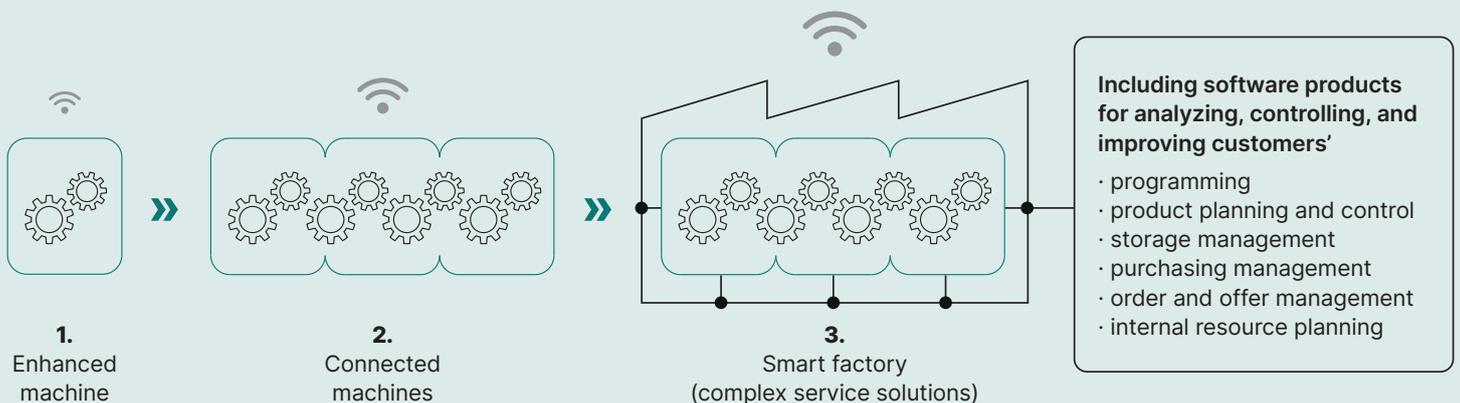
**T**rumpf, a traditional manufacturer of sheet metal processing machines, offers its customers the optimization of all production processes, including comprehensive consulting services and software products; Trumpf calls this a “smart factory.” Even though the company is experiencing increasing pressure from new competitors in its traditional machine business, it is recording strong growth in the smart factory sector.

Daimler Truck AG, a traditional truck manufacturer, has started to offer its customers far more than just vehicles. In addition to its well-known maintenance and financing services, customers now have a range of new service offers at their disposal that optimize the use and costs of their vehicles. Fleetboard is one of them – a software platform for truck fleet operators to intelligently coordinate their drivers, orders, and fleets.

Siemens Smart Infrastructure is another example of a B2B company expanding its product range with innovative services and software-based products. As a traditional supplier of building technology, it no longer just sells related products, but also manages more than 1,000 office buildings worldwide for a Swiss bank using the most modern software technology.

We call such offerings – combining traditional industrial products with innovative software and services – complex service solutions (CSS).

Fig. 1:  
Development of Trumpf from a traditional machine producer to a supplier of complex service solutions



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# CSS – AN OPTION TO FIGHT LOW-COST COMPETITION IN GLOBAL MARKETS

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## Complex service solutions:

- » combine hardware (HW), software (SW), and services
- » are strongly adapted to customers' needs
- » provide considerable economic value to customers

### *The reason behind the strategic move of traditional industrial companies to CSS is as follows:*

**First**, they are driving for stronger sales growth.

**Second**, they want to stabilize their revenue streams by increasing the proportion of services in their portfolios and thus become more crisis-proof. (The financial markets also favor this development.)

**Third** – the decisive reason for most industrial companies – they want to use CSS to fend off competitors that have only been active in traditional product markets.

New competitors mostly come from emerging markets, are significantly less expensive, and aim to make inroads into premium markets in the long run. For them, it will be difficult to market their products to customers who have previously purchased CSS from established suppliers. Ownership structures for CSS components, issues concerning technical compatibility, and complicated warranty agreements mean that they have little chance of placing their products. For example, if Siemens manages the building technology for 1,000 office buildings of a Swiss bank worldwide, a manufacturer of air conditioning systems can no longer sell its products

directly to the Swiss bank. It must also clarify this with Siemens beforehand.

Just like Trumpf, most industrial companies enter the CSS business in phases. Digital offerings are added to complement their traditional hardware-based product portfolios. The software products are developed in-house or obtained through the acquisition of smaller companies. The expansion of the product range is usually accompanied by the development of a comprehensive ecosystem in which new partners and suppliers are found whose offerings are necessary for the completion of CSS projects.

CSS are often launched with innovative pricing concepts that make at least a portion of the payment dependent on the economic success that the project generates for the customer after implementation. This is known as performance-based pricing. In this way, the customer is sharing some of the risk of their investment with the supplier.

Compared with traditional pricing, this shifts cash flows to later periods. For the supplier, performance-based pricing increases the need for financial resources when entering CSS markets. It also means that, in addition to the challenges posed by the novelty of the offering and the complexity of the projects, the supplier of CSS faces the risk of revenue shortfalls if the project does not deliver the expected results for the customer.

This makes it all the more important for an industrial company to be well prepared when it starts the strategic shift to offering CSS. The organization must be structured appropriately and must have the right employees on board. However, in business practice, the establishment of internal structures often lags behind strategic decisions. This leads to failures when entering CSS markets, which can result in the abandonment of this promising strategic option.

In the following, we take a closer look at the challenges, the necessary organizational changes, and the required development of competencies for CSS suppliers in B2B markets. Our focus is on traditionally product-oriented industrial companies introducing CSS.

# TRADITIONAL SALES OVERWHELMED BY STRATEGIC CHANGES TO CSS

In traditional industrial companies, the sales department is responsible for bringing the offerings to the market. In international companies, sales employees work in the regional subsidiaries, where the customers are located. Often these employees, referred to as “sales representatives / managers” or “account managers,” are expected to be familiar with their market and to build and maintain customer relationships. They should identify requirements, prepare and negotiate offers, and, if necessary, initiate internal ordering processes. Their colleagues from the after-sales service department are usually responsible for installing the products at the customer’s company. In addition, they are in charge of repairs and maintenance at the customer’s premises.

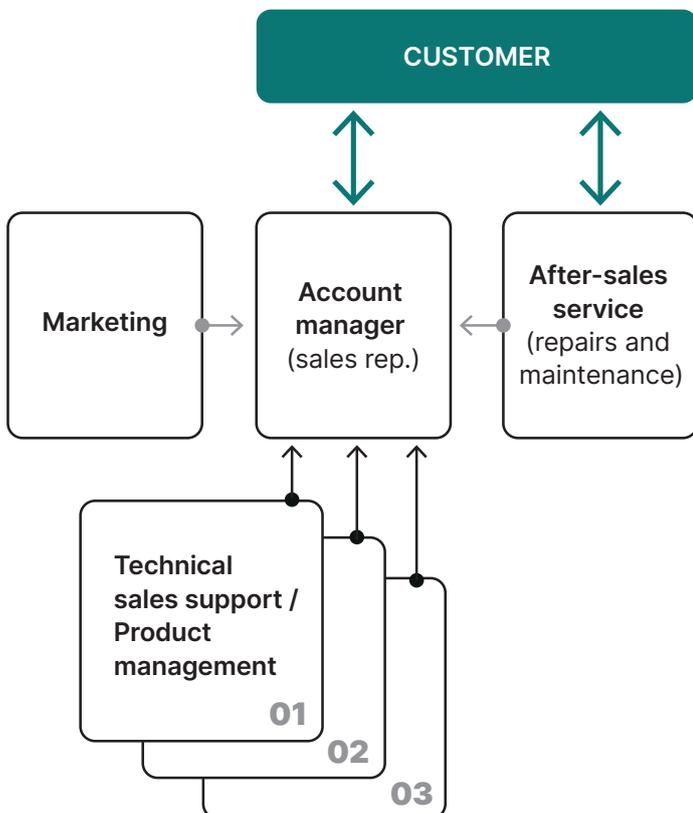


Fig. 2:  
Traditional revenue generation structure for industrial companies

For technical questions, sales employees can usually call on internal product specialists to support them, particularly during the preparation of an offer. These technical experts are assigned to organizational units known as “technical sales support,” sometimes also referred to as “product management.” When analyzing the market, sales staff may also call on information systems employees and colleagues in the head office who monitor market developments across countries and whose organizational unit is known as “marketing.”

Although there may be variations in the organizational model shown in Figure 2, the effectiveness of its basic structure has proven itself in most companies for organizing the revenue generation process for industrial goods. However, this structure reaches its limits when an industrial company extends its range of products to CSS. There are five main differences between these types of business:

**1.** For a supplier of CSS, selecting the right potential customers is more essential than in the traditional product business. One of the reasons is that, for customer-specific solutions, the preparation of offers requires more resources. A strong sales effort only makes sense if there is a high probability of an order. Therefore, unlike in a traditional product business, a “hit rate” of only 10 to 20 percent is unacceptable for CSS.

To increase the likelihood of success, the supplier must determine in advance whether a certain business opportunity is viable. This also applies after the order is placed because CSS builds long-term customer relationships, and the revenue effects for the supplier often only materialize after some time. It is essential to find out early on whether the customer is likely to succeed in their market and if they are equipped to effectively apply the supplied solution.

**2.** CSS are tailored to the specific needs of a customer and are based on their objectives, current processes, as well as the developments in their markets. Therefore, CSS suppliers require a deep understanding of a customer's specific needs. They should know the major cost drivers, the companies in the customer's industry that are considered benchmarks for efficiency in particular processes, the developments occurring among the customer's competitors, and the regulatory frameworks they operate within. Sales staff at traditional industrial companies rarely bother with these questions.

**3.** Unlike manufacturing a single industrial product, the creation of CSS requires close cooperation between supplier and customer. This process of co-creation calls for special organizational and social skills.

**4.** In order to translate customer requirements into proposed solutions, a suitable combination of numerous hardware and software products and services must be put together. In addition, the offered combination must not only be advantageous for the customer, but also profitable for the supplier in the long term. Therefore, the supplier needs broader technical and commercial expertise than with traditional industrial goods.

**5.** With traditional industrial products, sales representatives have little to do with their colleagues in production; these functions operate relatively independently of each other. With CSS, however, new insights sometimes emerge during

the implementation phase at the customer's site, making it necessary to revise the previously planned solution. This need for change is reinforced by technical product developments that arise during the implementation phase. This results in the potential for new sales during the implementation or "production" of CSS. In this respect, CSS can be seen as a sequence of transactional loops in which the functions of sales and delivery are intertwined, as shown in Figure 3.

Even after a project has been implemented, the intensive collaboration between supplier and customer continues with CSS. This is especially true if the payment of the supplier is tied to performance-based pricing concepts, that is, linked to the effective use or output of the delivered solution. On the one hand, the supplier should ensure that operations run smoothly and efficiently through the proactive maintenance of all products, training of the customer's staff, and close coordination with the customer's management. On the other hand, this close involvement in the customer's activities gives the supplier insights that lead to further upselling opportunities.

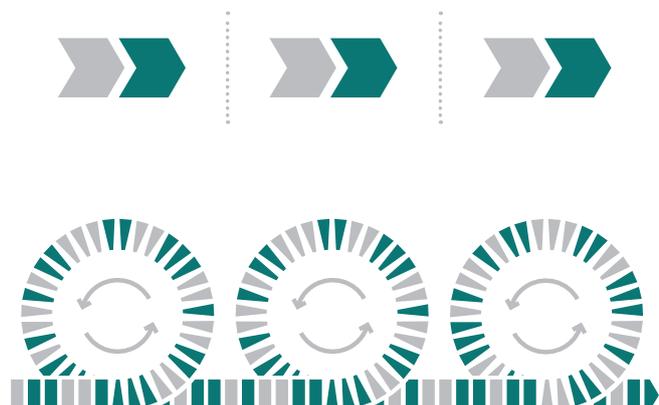
With the addition of CSS to the product portfolio and the new tasks associated with this, it is obvious that sales managers in traditional industrial companies are overwhelmed, at least as long as the existing task profiles are not adjusted. To be effective, implementing CSS must be accompanied by changes in processes and reorganizing the sales and customer teams.

Fig. 3:  
Transactional loops of CSS

Sales and delivery activities  
in traditional product business

Sales ●  
Delivery ●

Sales and delivery activities  
in CSS projects



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# NEW OFFERINGS REQUIRE FRAGMENTATION OF THE REVENUE GENERATION PROCESS

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For CSS new task profiles must be developed and translated into organizational roles. This often generates greater fragmentation among personnel.

Roles can be defined very differently within a company. Even if some companies share a similar understanding of certain role profiles, there is a wide variety of terms used to describe them. In the following, we present six roles that have turned into practice at several companies and make sense from an academic perspective. We structure these roles based on nine phases of cooperation with the customer.

Different roles should not be equated with different employees. One person can take on multiple roles, and one role can be performed by multiple people.

## INDUSTRY ANALYST

Conducting market analyses is nothing new for industrial companies. However, as a rule, it is just the company's own industry that is examined. With CSS, though, it is crucial that a supplier is also familiar with the industry in which their customers are active. Industry analysts are thus responsible for:

- » the systematic analysis of customer industries
- » the application-oriented processing of this information (key figures among other items)

If customers of a CSS supplier operate in different industries, the analysis process will be comprehensive. Daimler Truck AG customers providing services that

include package delivery are engaged in a different industry than those that transport hazardous goods.

## BUSINESS DEVELOPMENT REPRESENTATIVE (BDR)

The task of the BDR is to establish initial contact with potential customers. BDRs are not supposed to sell anything, but merely clarify whether the companies contacted have a general need for the supplier's CSS. The tasks of the BDR include:

- » analyzing the challenges faced by the customer that could be overcome with the supplier's CSS
- » acquiring the names and contact details of key decision-makers

The customer information obtained by BDRs forms the primary basis for customer selection and the prioritization of subsequent acquisition measures, although this is usually not the responsibility of a BDR.

The task of proactively identifying new customers is separated because employees involved in the later sales stages are too valuable or costly. As a result, entry-level, lower-paid staff often become BDRs, for whom this position is typically the first step in a sales career. This is especially true for technology companies in the United States, where such organizations established this role years ago.

## BUSINESS CONSULTANT

The role of the business consultant is of paramount importance for the successful marketing of CSS. It includes the following tasks:

- » recording and evaluating the customer's current processes in cooperation with the customer's employees
- » deriving the specific solution requirements
- » developing the basic structure of a solution
- » presenting the results in a way that convinces the customer to make a purchase

The task of analyzing the customer's current processes requires both specialist knowledge and a high level of social competency. In the customer's company, trust must be built up relatively quickly, even though it is not readily offered to outsiders. In addition, a business consultant must be able to integrate diverse, sometimes even contradictory, information from the customer's company into a coherent overall picture, as employees often perceive process flows and the associated challenges differently.

The presentation to the customer is usually accompanied by a business case, in which the economic benefits for the customer are calculated and explained. In view of the long-term impacts of CSS and the large number of success and risk factors, this calculation is demanding and requires that the business consultant has in-depth financial knowledge. This is all the more important if the business consultant is also responsible for calculating the profitability of the solution for their own company. However, with many CSS suppliers, the latter is not the responsibility of the business consultant, but of the controlling department.

## SOLUTIONS ENGINEER

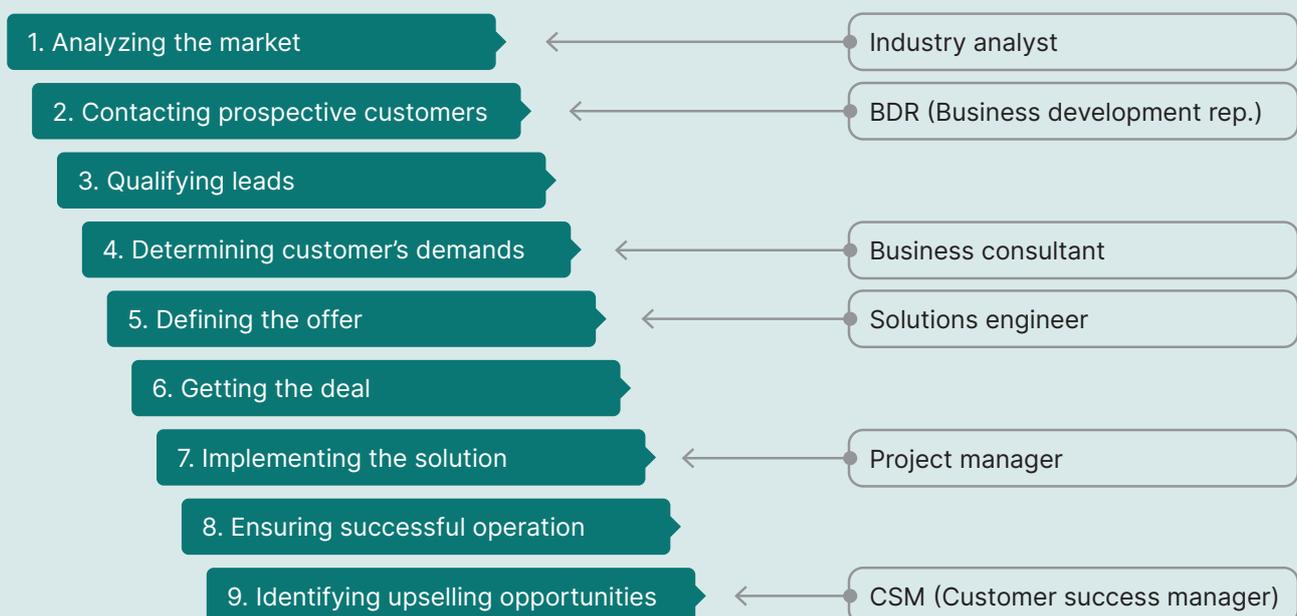
While the business consultant focuses on process analysis and commercial requirements when selling

CSS, the solutions engineer works primarily on the solution's technical design. They are a technical expert, similar to the technical sales support or product manager in traditional product sales, but their range of knowledge goes beyond that of a single product. Their expertise lies in knowing the characteristics of different HW and SW products and orchestrating their successful interaction from a technical perspective. The solutions engineer has the task of defining:

- » which product elements a solution must include
- » how they are technically designed and connected to the other elements involved
- » which services are necessary and when, in order to be able to operate the solution for as long as possible without disruption

This requires close cooperation with the business consultant and technical product experts back in the office. In addition, the solutions engineer is in direct contact with the customer company's technical experts in order to adapt the solution to their specific demands in the best possible way.

Fig. 4:  
New roles in the process  
of revenue generation



## PROJECT MANAGER

Once the acquisition has been successfully completed, the project manager is responsible for implementing CSS. If the solutions engineer is seen as the architect of a solution, the role of the project manager would be that of the building contractor. In principle, this task also exists in the traditional product business, for example when a machine is installed and put into operation at the customer's premises. But with CSS, the project scope is considerably larger due to the number of product elements and the variety of services to be provided.

The project manager:

- » creates and continually updates a project plan, including coordination with the parties involved
- » implements the project plan (many activities are not necessarily carried out by the supplier but the customer's employees and possibly third parties; this is referred to as a co-creation process)

In addition, the project manager is involved in sales-related tasks. These include:

- » preparing quotations, possibly also negotiating with the customer (which they often expect, much like a patient who prefers to talk to the attending physician before their operation rather than a sales representative)
- » understanding the financial implications of customer-initiated changes to requirements during the implementation phase and conveying them to the customer

## CUSTOMER SUCCESS MANAGER (CSM)

Similar to the BDR, the role of the CSM was introduced a few years ago by large software companies. Since then, the term has found its way into numerous industrial companies. CSMs are responsible for ensuring that a solution is applied successfully in the customer's company. Especially in the case of software companies, it is possible that their products are purchased but not installed or used properly, which significantly reduces the chances for follow-up transactions with the customer. Accordingly, a CSM must:

- » develop the customer's skills for working with CSS
- » strengthen the customer's motivation to work with CSS and minimize resistance
- » provide their own company with feedback on the customer's use of the solution and tips for future optimization
- » provide information about upselling opportunities and encourage the customer to make purchases

There are different opinions in academia and in practice on incentivizing a CSM. Some argue that the CSM is particularly suitable for initiating follow-up transactions due to their close proximity to the customer, that this opportunity must be exploited, and that the CSM should be motivated by incentives. Others are of the opinion that a relationship of trust between the CSM and the customer's employees is significantly jeopardized if the latter are aware that the CSM is incentivized based on sales.

# NEW ROLES AND MORE INTERFACES AMPLIFY CHALLENGES OF COOPERATION

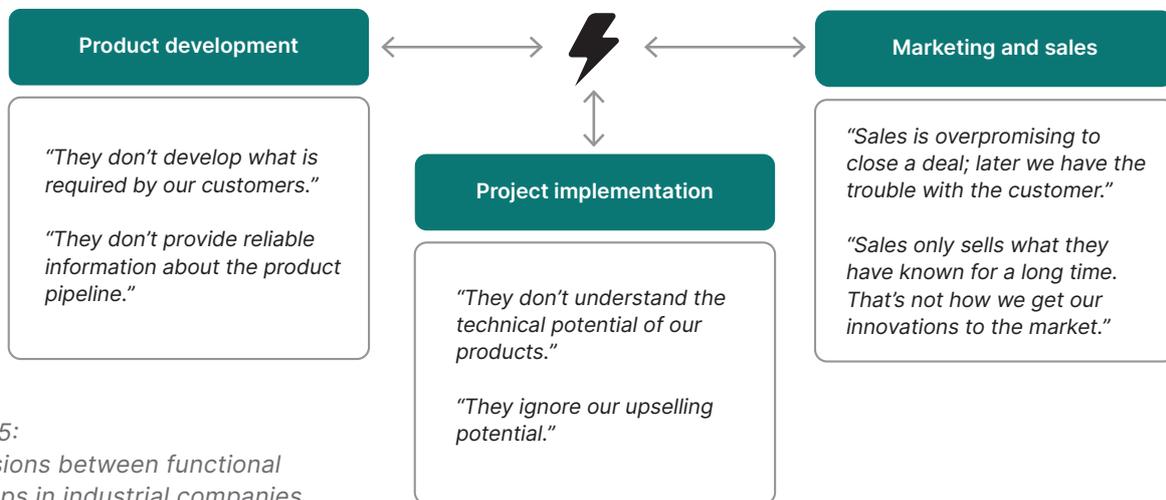


Fig. 5:  
Tensions between functional groups in industrial companies

If a process is fragmented in terms of personnel, organizational interfaces arise between employees. This is all the more true when processes are not only linear, but also run in ongoing transactional loops in which sales and delivery activities are intertwined. In general, organizational interfaces harbor the risk of inefficiencies.

Given the many interfaces and the long duration of a CSS project, these inefficiencies can occur in a wide variety of places. However, as part of a research project conducted by the BTM Center, the following two issues occur particularly often in industrial companies entering the CSS market:

- » marketing communication and sales make promises that cannot be kept
- » people in delivery functions ignore the upselling potential that arises from new insights gained during the implementation phase

Figure 5 highlights additional tensions that people in key functions in CSS projects experience with other groups.

In cases where the technical and formal requirements for cooperation between different functions are given,

the challenges for their cooperation can be caused by a lack of motivation and a lack of capabilities.

Particularly in traditional industrial companies, a lack of motivation might exist due to resentment between different functional groups. In this context, managers often talk about "silo thinking."

Deficits in capabilities are due to a lack of knowledge. Information might not be understood or be misunderstood. While employees with sales-oriented roles might know more about the demand side, their colleagues in delivery have more knowledge about supply-related aspects. Often, employees in one group are unable to fully and correctly understand information coming from the other group's area.

To a certain extent, traditional account managers could be used to overcome communication deficits because they are accustomed to bridging knowledge gaps between their company's colleagues and the customer's employees. However, given the complexities of CSS projects and their technical dimensions, such a coordination role quickly reaches its limits. Therefore, more far-reaching organizational changes are necessary to ensure cross-functional cooperation, which is particularly important for CSS.

Instead of being separated by organizational silos, employees involved in a CSS project should work together in cross-functional and agile project teams. This will overcome the silo thinking of functional groups and improve the understanding of work that lies outside one's own functional domain.

This also means that key decisions within these teams are coordinated between members. Therefore, some CSS suppliers have moved to a system whereby contractual agreements with customers must be signed by the employees responsible for sales activities and those in charge of implementation.

In order to align the motivations of the different team members, it is advantageous to give everyone the same criteria for incentives, preferably based on the long-term success of the project and milestones along the way.

Figure 6 shows the organizational approach of a company that has been successfully implementing CSS projects for several years. The project-related core functions of sales and delivery are integrated into one organizational group here.

However, not all of the roles listed above are embedded in the project teams. Market research

## BUILDING CROSS-FUNCTIONAL TEAMS

and industry specialists are managed in a central department, as are technical product specialists and project controlling. Furthermore, this company only employs account managers for large customers with whom several CSS projects are carried out in different countries.

From the perspective of optimized integration, it is ideal when the functions of sales and delivery are conducted by one person. This approach is common among many consulting firms. However, this does not mean that this person has to do everything themselves, but that they at least control all project-related processes and take responsibility for them. In the practice of industrial companies, however, this is an exception, mainly because the requirements relating to professional skills, mental strength, and flexibility are very high for such managers. As a consequence, these managers are difficult to find and expensive.

Fig. 6: Segment-based CSS project teams

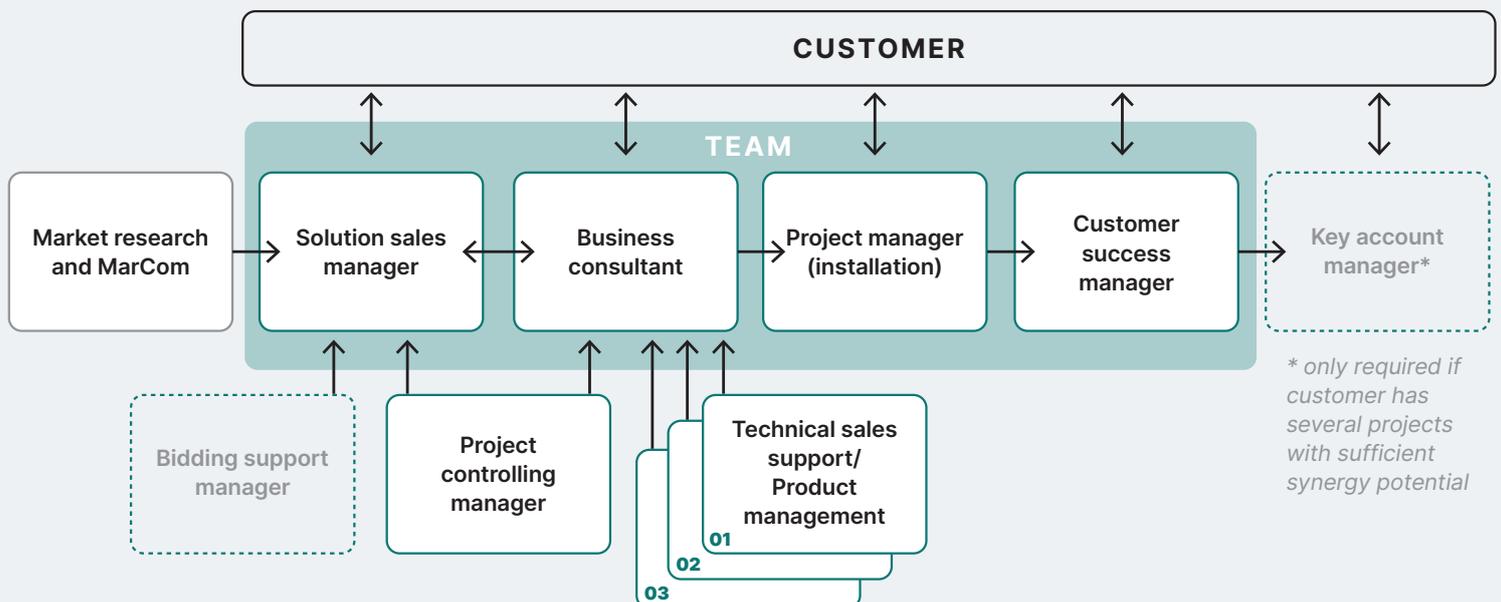




Fig. 7: Segment-based CSS project teams

## ALIGNING ORGANIZATIONAL STRUCTURES

When cross-functional teams work with customers on CSS projects over a longer period of time, they learn a lot about that company and the specifics of its industry. This knowledge represents a key competitive advantage for future CSS projects. It therefore makes sense for the supplier to reassign these teams to projects in the same industry. This creates groups within a CSS supplier that specialize in specific industries or customer segments.

This kind of segment-oriented logic should be the basis for CSS business entities (see Figure 7). It would mean setting them up differently than how it is done in the usual product areas of industrial companies, where functions such as development, production, sales, and after-sales services dominate the organizational structure. However, this is not the only difference.

CSS is a different type of business in many respects, and if a traditional industrial company wants to be successful in CSS markets, it needs different targets, competitive strategies, and management approaches. Therefore, it makes sense to allow CSS to grow within separate, cross-functional, relatively independent business entities.

This follows the logic of “exploitation” and “exploration”: Traditional industrial businesses should strive for efficiency improvements, whereas new businesses should focus on generating innovative revenue opportunities.

To do both, supplier companies need an “ambidextrous organization” that offers enough freedom for new businesses to develop. However, in many industrial companies, the limits to the organizational freedom of CSS business entities are reached when it comes to the question of whether CSS projects must use products of their parent company or if competitors’ products may be used as well. Here, a balance should be struck between the CSS teams’ consulting credibility and the synergy effects for the suppliers’ corporation as a whole.

# DEVELOPING NEW COMPETENCIES GLOBALLY

It has become clear that a CSS supplier must have a broad range of competencies in order to successfully sell and implement CSS projects. These can be divided into three areas:

- » technological competencies (incl. knowledge about HW & SW products and their interfaces)
- » business competencies (incl. know-how about industry specifics, project management, finance, and accounting)
- » social competencies (incl. skills for consultative selling, negotiation, and C-level communication)

These areas of expertise must be determined individually for each company. For managers of these companies, it is advantageous to master as many of the required skills as possible. This improves their credibility as well as their scope of applicability. In addition to determining the required competencies,

globally active CSS suppliers must have a plan for how to distribute these competencies worldwide. Figure 8 illustrates the approach of a CSS supplier (whose customers all operate in the same industry) that has structured its global distribution of competencies in accordance with the complexity of the projects.

Depending on the regional requirements, this company trains specialists for less complex projects locally. Experts whose support is required for the smaller number of major complex projects worldwide are sent to the respective country for the specific phase of their assignment.

These experts do not need to be based at headquarters. In principle, it is also possible to rotate them between regional subsidiaries; internal billing arrangements here should offer advantages for all parties involved.

To make the regional exchange of team members successful, it is important that headquarters and all subsidiaries involved have the same understanding of the roles and task profiles of the employees in question. Especially when subsidiaries work relatively independently and are located in different language areas, consistency in terminology should not be taken for granted.



Fig. 8: Global distribution of competencies for CSS projects

# HR DEVELOPMENT REQUIRED TO PREPARE ORGANIZATIONAL CHANGES

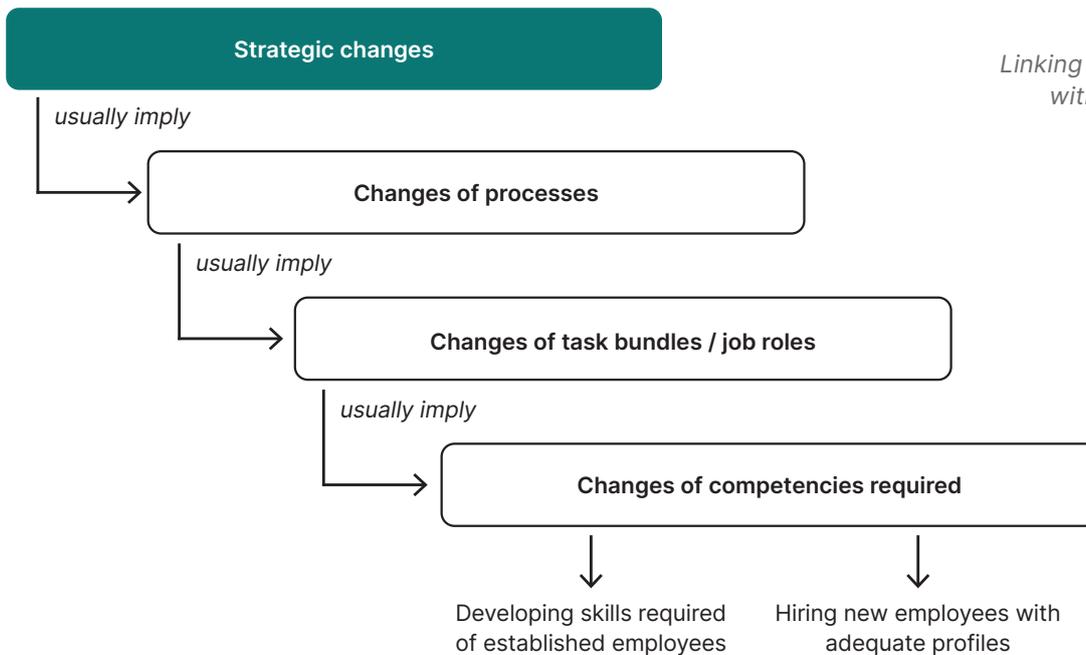


Fig. 9:  
Linking strategic changes  
with HR development

In addition to determining the necessary competencies, a supplier must analyze which are already available and which need to be developed. Once the objectives have been established, a plan must be produced to close existing gaps. This can be achieved by developing competencies among existing employees, whereby the measures are defined on an individual basis.

Training is a classic tool here. Another way is to introduce employees to other tasks “on the job.” This can be achieved by forming cross-functional teams, in which employees focused on delivery activities and colleagues focused on sales activities learn from each other. In practice, most companies prefer moving employees with a background in delivery into sales tasks rather than trying to build delivery-related competencies in sales people. If the development of required competencies for existing employees does

not work or takes too much time, the competency gaps must be closed by hiring new employees.

HR is typically responsible for tracking the required and current competencies across the company and for planning employee development or recruitment as needed. Figure 9 shows the connection between the strategic development of the service portfolio and the development of competencies in the workforce.

The logic flow of this figure seems obvious. This makes it all the more surprising that industrial companies introducing CSS rarely work through these stages systematically. At some industrial companies, HR departments are not even aware of the strategic developments and their consequences for internal processes. This all but guarantees failure, because the key ingredient for success in CSS depends on having the right people.

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# ABOUT THE BTM CENTER

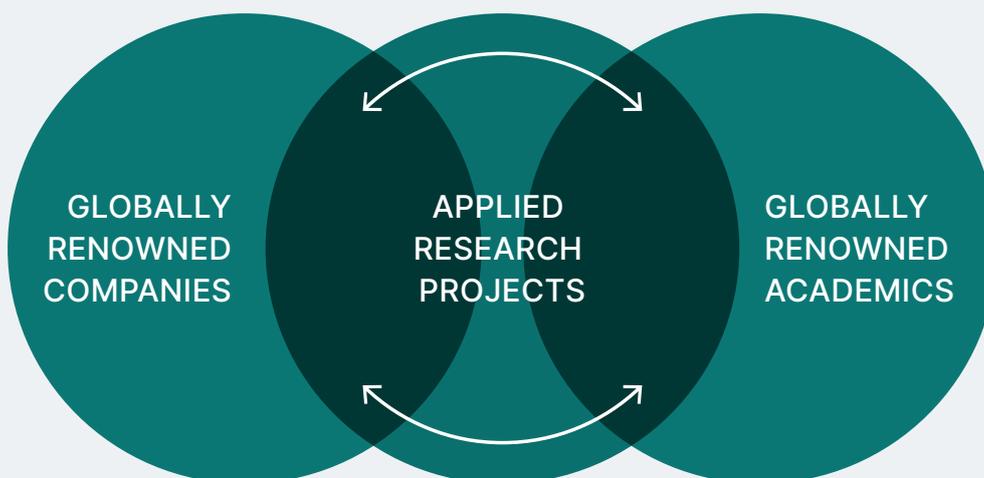
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The Bringing Technology to Market (BTM) Center focuses on the business challenges facing industrial companies in global markets and develops the strategies that will help them gain a competitive advantage. It is a major industry platform where business expertise and field-based research connect to produce the results that shape B2B best-practices and create an enduring impact.

The BTM Center profits from an exclusive network of managerial and academic experts who regularly meet in a confidential environment to discuss the most pressing issues of industrial companies, evaluate trends and changes that may disrupt their businesses, and assess counteractions to either avoid or absorb potential losses.

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