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Teaching Case

An IT project as a plaything of its organizational environment: long-term challenges in financial services

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Abstract
At the end of 2015, and after 10 years, the German financial service provider FinAdvizard finally achieved the first results from the development project of its next-generation advisory application. Although this achievement can be considered as project success, the new application includes only the core of the initially intended scope because of environmental changes. First, the project team had to continuously deal with resource scarcity, stakeholder influences, regulatory requirements, and the involvement of its sales force. The team also had to adapt different management approaches and software development methods. Furthermore, the organization's focus and management attention repeatedly changed over time. Subsequently, this case retrospectively highlights information technology (IT) project management issues and challenges faced by large software development projects. Given the longitudinal analysis of the period of a decade, both positive and negative effects that are not visible in shorter IT projects become apparent. Additionally, the case sheds light and stimulates a discussion on, among others, collaboration between the business and IT departments, the importance of top IT management support, the challenge of bimodal or two-speed IT, and the influence of a strong sales force.
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Introduction: IT support for financial advisory

Whether you are moving out of your parents' home, starting college or a job, pursuing a dangerous hobby, planning to buy a car or a house, having a baby, or anything else, a new situation raises new financial or health issues that may last a lifetime. Thus, the social security agreements of many developed countries provide a basis for financial safety and health security (as a very specialized form of financial safety). For instance, in Germany, national insurance includes insurance for health, against unemployment, against invalidity, and old-age provisions and child benefits. Nonetheless, such insurance only covers basic needs. Further, to maintain or raise one's standard of living and one's security, financial institutions and insurance companies provide further opportunities. Staying in Germany, company and private pensions represent two further elements of a three-part old-age provision. Personal health insurance offers services that extend the standard protection. For example, insurance that covers personal liability, car damages, and statutory matters offers additional safety in all situations. Financial investment plans (e.g., for property purchases) help make one's dreams come true.

Because every life is unique, each individual requires highly customized solutions that consider one's financial, legal, personal, and family situations, as well as external conditions. As a result, the market for financial investments and insurance offers a wide range of products spread across

various providers. These products differ in duration, scope, costs, and risk and return profiles. A non-expert faces difficulties in finding the right products that achieve one's aims without compromising one's own risk attitude. Thus, professional service providers offer financial advisory and decision support. However, they often depend on IT support for calculation purposes given the complexity resulting from compound interest effects, tax implications, and so on. Thus, FinAdvizard[1], a German financial service provider, runs its own advisory applications. Nonetheless, because these applications must reflect the aforementioned complexity and must be easy to understand and use, managing their maintenance and development is very challenging, as the following case study shows.

Business background

FinAdvizard seeks to specialize in all issues relating to the financial safety of private individuals. Thus, it seeks to provide comprehensive advisory—from old-age provision and wealth management, to health and non-life insurance, to financing issues. Furthermore, FinAdvizard offers complete solutions from a single source. It supports customers from their entry into professional life, through all subsequent career steps, and into old age. Financial matters may include home financing, pension plans, or a family's financial security. FinAdvizard continuously examines the broad scope of offers available in the market as a whole, and then selects and offers suitable options and products that fit best the cases and expectations of its customers.

To ensure a comprehensive financial advisory products and services offering, FinAdvizard employs more than 2500 employees and almost 3000 independent financial advisors. Employees who receive a salary provide back-office support from the head office. Independent financial advisors represent the *face to the customer*. In contrast to employees, advisor remuneration depends on economic success and is based on commissions and fees. Thus, advisors work independently and on their own. They do not necessarily need to cooperate with a financial service provider such as FinAdvizard. Nonetheless, regardless of the special conditions from which FinAdvizard's advisors benefit (e.g., in the areas of finance and pensions, leisure and sports, and technology and mobiles), such cooperation is beneficial for two primary reasons. First, FinAdvizard runs its own education program that offers apprenticeship and in-service training for all advisors. The program concludes with officially accredited qualifications and certifications. From day one, advisors learn the basics of financing and insurance. They gain skills in customer conversations, customer acquisition, and organizational procedures (e.g., time scheduling or documentation). Advisors can also broaden their knowledge by participating in further courses and special training. As a result, they can become specialists in certain products or life situations, such as company pensions or the establishment of physicians. Second, FinAdvizard employs several specialists who observe the market as a whole and examine a plethora of products. Thus, the FinAdvizard portfolio available only to advisors consists of carefully pre-selected products complemented by products that the firm provides. Only in this way is it possible to survey more than 20,000 potential products. Specialists in each financial aspect and a network of experts provide support for complex cases. FinAdvizard's applications also provide additional advisory guidance and support. Overall, although these services carry an additional administration fee, cooperation with the financial service provider FinAdvizard allows an independent financial advisor to work with reduced risk.

Advisory applications: the initial situation

Regarding the period before the commencement of the project, FinAdvizard's application landscape included several components to support the financial advisory process (see Figure 1). Two core applications sought to fulfill the requirements of varying complexities. As students or young professionals, customers are seldom wealthy—yet. As a result, advisory applications mainly focus on insurance topics and initial financial planning. The corresponding application (henceforth, PLANNER), the stored data, and the financial forecast need not be very detailed. As time passes, advisory applications, which include wealth management and tax advice, become much more complex. Thus, the illustration and optimization of these complex scenarios were part of the second application (henceforth, OPTIMIZER). Depending on the situation and personal preferences, a shift between the applications was possible but not necessary.

In addition to the advisory applications, the Product Management Tool supported contract preparation. The tool contained pre-selected products available for sale. The advisors only had to fill in form fields with the relevant data and received signature-ready contracts. If a customer agreed to a contract, the Product Management Tool transferred the contract data to the Contract Management Tool. The Contract Management Tool managed the electronic data exchange of all contractual matters with financial institutions. An online customer portal provided reporting and banking functionalities on the customer side. A customer relationship management (CRM) system stored customers' master data.

Given less complex initial advisory scenarios, more customers were advised using PLANNER. Regardless of situational changes, only a few subsequently shifted to OPTIMIZER. A few advisors even used pen and paper. Nonetheless, at least they recorded the relevant data in PLANNER. The use of one application was mandatory for contract preparation purposes. As a result, PLANNER covered approximately 80% of FinAdvizard's customers and OPTIMIZER the remaining 20%. The maintenance, support, and ongoing development of the applications and tools were mainly driven by the IT department at headquarters. However, part of the programming of OPTIMIZER was outsourced.

The advisors could also draw on different additional tools that provided guidance in special topics (e.g., pension planning). However, most such tools were solutions of departments (e.g., product management, sales) or advisors. They were built without explicit organizational approval and did not form a part of FinAdvizard's IT strategy. Nonetheless, they represented innovative but very specialized advisory applications and were widely used. Subsequently, a kind of "shadow IT" existed that was not in line with the organization's requirements for control, documentation, security, reliability, and so on.

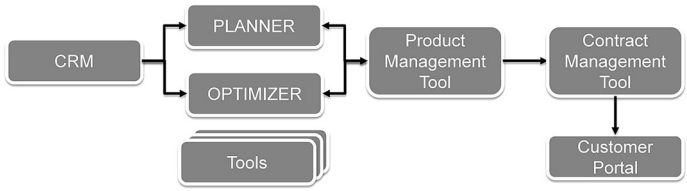

Figure 1 Components of FinAdvizard's application landscape.

In summary, the heterogeneous IT landscape with conscious or unconscious developments was one challenge that FinAdvizard had to address at the turn of the millennium. Additionally, both core applications—PLANNER and OPTIMIZER—had different calculation models, were developed in the 1990s, and were not state-of-the-art in terms of technology and user-friendliness.

The advent of the new advisory application

In 2004, FinAdvizard faced a growing need for a new advisory application. On the one hand, technical issues were formulated by the IT department, i.e., outdating and maintenance effort. On the other hand, pressure from advisors was increasing: in return for their administration fee, the advisors expected a modern and user-friendly application to support advisory and corresponding contract execution in an integrated manner. Finally, FinAdvizard opted for a new IT strategy. The new advisory application (called HARMONY) would harmonize advisory of all customer groups and would unify and extend the advantages of the current applications (e.g., in terms of functionality, data structure, and know-how), combined with a new look. One of the most-needed features was the integration of contract execution within the advisory application. Finally, HARMONY would replace existing applications and include existing tools (Figure 2 summarizes HARMONY's scope in relation to the initial situation). Although the economic aspect was of secondary importance, FinAdvizard also expected to increase the amount of contracts and related sales.

The beginnings

The HARMONY project officially started in 2005. FinAdvizard intended to develop the new application on its own. The sales department at headquarters acted as the project team at the interface between IT and the sales force. The team mainly consisted of former advisors and was headed by Gerhard Weber. He had also worked as an advisor and was a major contributor to the rise of the shadow IT. Without explicit organizational approval, he developed a set of widely used tools. In this regard, he provided the team with significant expertise and know-how about the advisory process and existing advisory applications. He also enjoyed widespread acceptance among advisors given his toolset.

As a first step, the team then identified the various advantages and features of PLANNER and OPTIMIZER. In doing so, they began to elaborate on the basic concept, supported by an external consultant team. In addition, Gerhard Weber evaluated additional requirements for the new application through informal talks with selected advisors. Finally, within a year, the concept achieved an 80% state.

In April 2006, FinAdvizard had to maintain existing applications given regulatory requirements, and wanted to develop HARMONY at the same time. However, the budget was tight and capacity was lacking. Further, FinAdvizard expected that the new application's innovativeness and the new disruptive technologies would push internal IT to its limits. Thus, to avoid jeopardizing the vision of the new application, emerging doubts led the steering board to halt the project and to change the strategy. Instead of in-house development, the board decided to evaluate the software market and seek an existing customizable standard advisory application.

As a result, the sales and IT departments again focused on the ongoing, incremental development of the existing applications PLANNER and OPTIMIZER. In doing so, they adapted new legal situations (e.g., the EU Insurance Mediation Directive ["EU-Vermittlerrichtlinie"; announced by the EU on January 15, 2003; adopted on December 22, 2006; in force since May 22, 2007] or the Securities Trading Act ["Wertpapierhandelsgesetz"; announced by the EU on December 15, 2004; adopted on January 5, 2007; in force since January 20, 2007]) into the existing applications and partially improved the advisory process. Further, they developed new features for PLANNER and introduced an integrated quarterly release cycle. Finally, the project break lasted until August 2007.

A second chance

In the fourth quarter of 2007, the sales department was reassigned to another board member with a stronger IT focus. Gerhard Weber also assumed additional responsibilities. As a result, he received more attention and was able to readdress the need for one holistic application that would combine and harmonize the advantages of PLANNER and OPTIMIZER. Thus, the HARMONY project was restarted. The sales department again acted as project team.

In the basic concept phase, the project team first analyzed the planned features and concepts of the previous approach and determined that they could reuse almost 90% of the existing concepts. In contrast to the first concept phase, FinAdvizard deepened the involvement of its advisors as experts to achieve higher rigor in the requirements analysis. For each of FinAdvizard's advisory applications or approaches (i.e., PLANNER, OPTIMIZER, or pen and paper), the advisors with the best performance in terms of customers and sales were chosen. In joint workshops, the project team presented the concept of the new application. They invited the advisors to provide the project team with feedback and to address further needs and desires. In addition, the workshops had a more strategic dimension. High advisor involvement at an early stage leads to a high acceptance rate as well as high expectations.

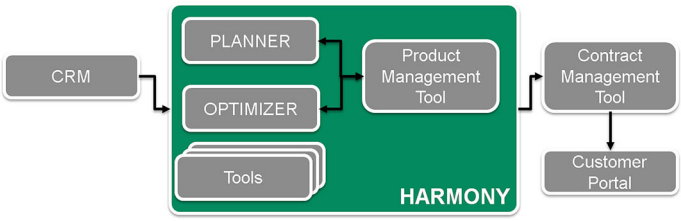

Figure 2 Scope of the HARMONY project.

Regardless of the reusability of concepts, the development effort was very high. To avoid starting from scratch, FinAdvizard decided to build HARMONY on its well-tried application OPTIMIZER. In doing so, they sought to retain the best-known features as the basis, and intended to integrate the newly designed features in a second step. However, before starting the development, another project risk arose. Few internal resources could provide the necessary capabilities. Thus, FinAdvizard conducted a make-or-buy analysis. As a result, it again decided to use a standard application that covered approximately 80% of the requirements. Because the remaining 20% represented FinAdvizard-specific features, it had to develop them themselves to build a competitive advantage. FinAdvizard announced a competition to find an appropriate external application provider. The firm invited the winner, SoftCon, to present its solution in detail. However, the result of subsequent deeper analysis was sobering. FinAdvizard had to recognize that SoftCon's application formed an inferior basis for HARMONY relative to the FinAdvizard applications PLANNER and OPTIMIZER. As a result, the project was temporarily stuck between a missing basis and lack of capabilities.

In 2008, the project team again faced new regulatory requirements. Germany's government introduced a flat rate for withholding taxes ("Abgeltungssteuer"; adopted on August 14, 2008; in force since January 1, 2009) and the Home Ownership and Pensions Act ("Eigenheimrentengesetz"; adopted on and in force since July 29, 2008), among others. As a result, the financial market offered new products. Extensive changes were necessary in all existing advisory applications. FinAdvizard also implemented organizational changes. The firm decided to introduce a new CIO, although he was known to be skeptical of internal IT. As one of his first measures, the new CIO outsourced a major part of the IT department to the IT service provider ProIT given the budget and human capital shortages. As a result, the sales department and the project team had to shift their focus to other topics, such as the maintenance of the existing applications PLANNER and OPTIMIZER. The HARMONY project lost its importance.

All good things come in threes…

In 2009, Gerhard Weber again initiated a consolidated IT landscape and an optimized advisory process. This time, an executive board member with a sales focus gave him the necessary top management support. Together, they brought about a decision by FinAdvizard's executive board. The project was started for a third time. FinAdvizard again assigned the project to the sales department and Gerhard Weber's team. The project team also received massive external support. This time, FinAdvizard intended to overcome the lack of capacity that resulted from the simultaneous maintenance and conceptualization efforts.

In contrast to the first two attempts, FinAdvizard did not intend to merge PLANNER and OPTIMIZER. The rise of shadow IT in terms of different single tools raised the hope of a new, simple all-in-one application. Regardless of its mindset toward the maintenance of existing applications, the project team started from scratch, inspired by new technologies such as tablets, LTE, and digital signatures. Further, FinAdvizard sought to provide a platform-independent application and user interface. Thus, HARMONY became a streamlined, web-based application. In contrast to previous applications and tools, application servers consolidated the data storage and calculations. Because a high-speed data link was no longer a challenge, users' devices primarily acted as the user interface and data and logic were stored in the servers.

With these ambitious goals in mind, further organizational changes generated new impetuses. Subsequently, FinAdvizard divided the project and its conceptualization into different subprojects. Each subproject focused on distinct parts of the advisory process, such as financial investments or pension plans, and was assigned to a distinct project team member. The project team also sought to benefit from stronger integration of the independent advisors compared with the previous attempts. In addition to the workshop concept, which was familiar from the previous phases, the team organized user forums as an opportunity for advisors to contribute to HARMONY's concepts.

In parallel to the concept design, FinAdvizard also further examined disruptive advisory approaches. For instance, Jens Becker, who headed the market and innovation department, presented his idea of a new customer-oriented advisory approach. He intended to consider the total available budget. The idea focused on customer wishes and needs (e.g., a new car or future expenditures) and was the first indication of whether these were within reach given a de facto financial situation (e.g., assets and income). Parts of the project team also adopted a new advisory approach using the average consumption rate. Loans covered the initial expenditures paid back by the income surplus over time. Early conceptual parts were worked out and reviewed but were not completed because of a lack of resources for more detailed analysis and further development.

After the concept phase, in 2011, FinAdvizard needed software development capacities and capabilities to develop the concept into an executable application. The estimated costs for in-house development were very high. Further, capacity was still scarce and had not improved its knowledge. Thus, FinAdvizard decided to outsource the

development of the new application to ProIT, which already maintained the firm's entire IT infrastructure. For cost-saving reasons, FinAdvizard chose ProIT's offshore subsidiary (henceforth, ProIT Offshore). New challenges arose. The delivered first parts of the application did not match FinAdvizard's quality requirements. FinAdvizard assumed that the significant language barriers and geographical distance hindered communication between the project team and the offshore developers. Therefore, the project team improved its English language skills as one of the several measures. Nonetheless, project quality did not improve and FinAdvizard terminated its cooperation with ProIT Offshore.

Upon reflection, FinAdvizard faced many challenges during its third attempt. In addition to the aforementioned communication problems, the division into subprojects led to insufficient coordination. As a result, concepts had different scopes and maturity levels. Because the project team also had to maintain existing applications and implement regulatory obligations (e.g., Citizen Relief Act ["Bürgerentlastungsgesetz"; adopted on July 16, 2009; in force since July 23, 2009]), little room remained for creativity. Further, the project team had reservations about future data migration. Given the fear of high complexity, the team finally simply put together many attributes of PLANNER and OPTIMIZER. Within FinAdvizard, heterogeneous ideas were also discussed regarding the new application. The team members supported their favored applications. The advisors formulated unrealizable wishes instead of reasonable requirements. Finally, neither the project team nor the advisors were convinced of HARMONY's advantages.

SoftCon: back in the game

Despite these difficulties, FinAdvizard continued to develop the new application. Because the company realized the challenges of outsourcing the software development to ProIT Offshore at such an early stage, it started parallel negotiations for alternatives. Given restrictions from a limited budget, FinAdvizard returned to the notion of customizing a standard advisory application. In contrast to the earlier idea, this time the company did not intend to extend such a solution on its own. Development activities would be pursued only by the external application provider. As primary partner, FinAdvizard would support the conceptualization. In return, the company would benefit from being the first user and from individual enhancements available only to FinAdvizard.

Using the 2008 evaluation, FinAdvizard again scanned the software market and selected SoftCon and its standard application as a business partner. Both parties were able to resolve the previous problems. Because SoftCon sought to develop a new release of its advisory application anyway, the company promised to provide sufficient capacities. In addition, FinAdvizard had the opportunity to influence the calculation algorithms from the outset.

Thus, FinAdvizard and SoftCon jointly developed the concepts of the new application, internally still called HARMONY. That both parties were familiar with the basics of financial planning and asset planning was a significant advantage. As a result, FinAdvizard and SoftCon decided to shorten the concept phase and start the development phase as soon as possible. The FinAdvizard project team was mainly responsible for providing the test sheets, the software tests, and preparation of the training concept for the advisors.

During the main project's (HARMONY) development, one of the alternative advisory approaches came to the fore again. Jens Becker pushed his idea of a customer-oriented application (henceforth, BUDGET). Thus, he received some resources from the main project to develop the first drafts of the concept and to start the development of the application, also in cooperation with SoftCon. However, BUDGET would only be an alternative entry point into the advisory process. BUDGET would initially identify a customer's financial situation and allocate the customer's income and wealth to desired goals. HARMONY would remain the core application for more detailed advisory work (see Figure 3).

In the meantime, the upcoming technological trend *bring your own device* (BYOD) had reached FinAdvizard's IT department. Thus, FinAdvizard started another major IT project. To make BYOD possible, the IT department prepared to switch to an online Citrix environment in cooperation with ProIT. The Citrix environment's hardware independence would provide the necessary and desired flexibility concerning devices. From a HARMONY project perspective, this IT strategy would have no technical implications. HARMONY's web-based platform-independent concept already met BYOD requirements. Nonetheless, the BYOD project affected HARMONY's timeline. Because the existing applications and tools could not be used in Citrix without additional effort, the new application was supposed to be finished by the time the new Citrix working environment went live.

Finally, because FinAdvizard, in cooperation with SoftCon, developed two applications in parallel, it again faced different challenges. First, the idea to develop an application without specifying its detailed design was rather optimistic. Because PLANNER and OPTIMIZER differed significantly from SoftCon's standard advisory application, misunderstandings arose over BUDGET's design and functionality. To clarify remaining points, FinAdvizard and SoftCon wasted time in intensive discussions about the responsibilities for the concept. Through several workshops and management measures, the project management team sought to put the project back on course. Finally, given the simultaneous software development projects, the concept specification and the bug-fixing process resulted in capacity bottlenecks. Suddenly, the time restrictions caused by the BYOD project also affected the BUDGET project. As a result, FinAdvizard and SoftCon decided to stop both the HARMONY and the BUDGET projects, as well as all of their cooperation. FinAdvizard then focused on a solution to make the existing applications (e.g., PLANNER, OPTIMIZER) available in the Citrix environment. At least the concepts for the new advisory application were complete. However, implementation into a running advisory application was still missing.

Advisory applications: a new direction

As a result of its cooperation with SoftCon, FinAdvizard recognized that there would be no standard advisory application on which to build. Only an individual application could address FinAdvizard's requirements. Fortunately, FinAdvizard had two intensive fine-tuned concepts that were implemented. However, FinAdvizard also realized that the

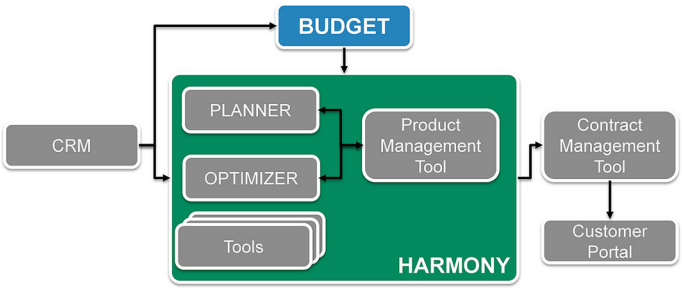

Figure 3 BUDGET as further component of the information system.

different advisory approaches of BUDGET and HARMONY led to diverging development. BUDGET was no longer only an alternative approach for the initial advisory services. In contrast to the harmonization strategy, BUDGET increased the heterogeneity, becoming a completely different advisory application that competed with existing ones. Thus, to refocus on the holistic advisory application, in July 2014, FinAdvizard became intent on merging the concepts of HARMONY and BUDGET.

Harmonizing the harmonized solutions

To achieve the integrated application of HARMONY and BUDGET, FinAdvizard evaluated all possible combinations of both concepts. The project team drew up different integration scenarios that met the needs of the advisors, the customers, and the departments. It defined seven different scenarios and estimated their distinct workloads. The project team presented these results to the board. The board chose the BUDDY scenario, which contained the main features of BUDGET (e.g., user-friendliness, simplicity, and advisory process support) as well as the detailed view and calculation logic of HARMONY (see Figure 4). With this solution, the board expected to satisfy most of FinAdvizard's advisors and customers.

As the next step, FinAdvizard elaborated on the basic concept of BUDDY. This concept provides the basis to estimate a budget and a timeline. In this phase, several external consultants (specialists and software developers) supported the project team. All participants were again divided into working groups responsible for distinct parts of BUDDY. The process management office monitored the weekly progress of the working groups and ensured the consistency of the results. Upon reflection, these cross-disciplinary working groups and weekly check-ups were two significant organizational innovations during the development of BUDDY. FinAdvizard also engaged an external design company to develop a first dummy user interface. Compared with the previous attempts, this measure represented an alternative to involving the advisors early in the software development process and decision making.

The organizational changes were mainly driven by the external software developers, who started to apply the agile software development paradigm to the BUDDY project. Because restructuring the working processes was time intensive, the adaption of the agile principles was initially not trouble free. Given the different experiences and understandings of the new agile approach, the working groups' outputs differed, especially in their level of detail. Furthermore, integration of the *customer voice* (Jens Becker represented the product owner) was a completely new situation for the project team. The weekly reviews with Becker led to reworks and revisions. The consideration of all of the regulatory requirements also had many unseen and complicated effects. At least one challenge remained. The project team still had to find the better of two solutions. Thus, depending on the working group members, some parts of BUDDY reflected HARMONY, whereas other parts reflected BUDGET.

Divide and conquer

In November 2014, the working groups completed their basic concepts. The external software developers estimated the time and costs to develop BUDDY by themselves. Not surprisingly, the development of BUDDY would be both time and cost intensive. Therefore, FinAdvizard's board made two decisions. First, it again engaged a subsidiary of its IT provider ProIT to develop the new application because doing so promised to be faster and cheaper. This time, given the cooperation difficulties with ProIT Offshore, FinAdvizard chose ProIT Nearshore. Further, it defined German as the project language, although ProIT Nearshore's software developers were only used to English. Second, the board recognized that the development of all intended features could not be finished within an acceptable timeframe or budget. Thus, they decided to divide the enterprise application into a core and several modules. The solid core would provide the basic functionalities. The various modules would contain the remaining features and more specific calculations that were not necessary at the outset. The core and the modules would be connected through defined interfaces. Overall, this new strategic alignment could be compared with the established co-existence of core applications (e.g., PLANNER and OPTIMIZER) and additional tools. However, one notable difference existed. The core, with clear interfaces to extend the functionalities, would contribute to the desired harmonization. Therefore, the project CORE started.

ProIT Nearshore continued the agile software development and chose Scrum as the method. Following Scrum, the application represents the intended *product*. *User stories* describe the software requirements, and the *product backlog* lists all of the user stories that still have to be completed. Selected user stories were implemented in so-called *sprints* of set lengths. As a result, ProIT Nearshore had to transfer the concepts into user stories and translate them into English—for its internal purposes. The external software developers that were already part of the project team in the previous

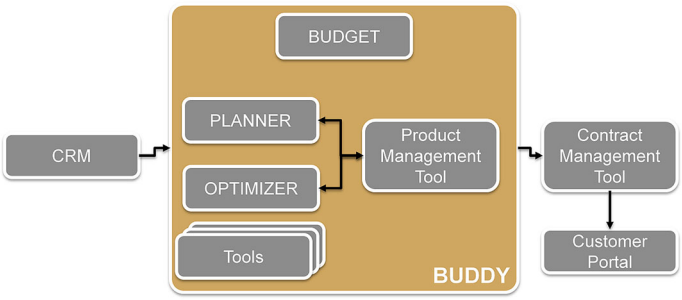

Figure 4 The scope of the BUDDY project.

phase acted as business analysts. They supported the user stories and the product backlog, in cooperation with the FinAdvizard project team. The FinAdvizard project team was responsible for testing the deployed features. The sprints lasted between two and three weeks. The go-live of CORE was planned for Q4 of 2015.

To address the challenges of agile software development early on, ProIT Nearshore first taught the project team about Scrum. ProIT Nearshore had no time to become more familiar with the concept because the delivery schedule was tight. Thus, the results were underwhelming. Most of the user stories were incomplete and the software testing was difficult. Additionally, the team failed to completely estimate the product backlog at the start of the project. Therefore, the estimated effort permanently grew during the development phase. The length of the sprints increased as more user stories were added, given the deadline restriction. Therefore, FinAdvizard and ProIT Nearshore increased development capacities and shortened the sprint durations to two weeks to prevent development activities from heading in the wrong direction. Nonetheless, regardless of all measures, the project threatened to be delayed.

In addition, during this phase, further organizational changes in FinAdvizard also affected the project team. First, the IT department head left FinAdvizard and, in the first quarter of 2016, Jens Becker (the head of the market and innovation department and the initiator of BUDGET) announced his exit from FinAdvizard. As a result, the responsibility for the project and the corresponding team switched from the IT department (under the CIO's control) to the sales and innovation department (under the CEO's control).

The end is in sight

Regardless of the personnel and organizational changes, FinAdvizard and its cooperation partners continued the software development process. To meet CORE's go-live date, FinAdvizard's board took further measures. First, it again reduced the project's scope. The board selected dispensable features and put them on a "long list." The remaining features mainly represented BUDGET's logic for the initial advisory service (see Figure 5). The project sought to provide these features at first release after go-live. Second, as a countermeasure to the dissatisfaction caused by the reduced functional scope, the board decided to roll out the pre-final version of CORE to a few power users during the last testing phase. The board chose the test group on the basis of individuals' experience levels and familiarity with an existing tool similar to CORE. In workshops, experts in the BUDGET approach trained the test group on the new application's functionality. The board also sought advisors' feedback, which they wanted to incorporate into the first release.

The project team was under additional time pressure from these management measures. On the one hand, the team had to finish the user stories in the remaining time. On the other hand, the team supported all test users. In particular, the project team struggled to explain the differences between CORE and the tool used by the test group and the BUDGET experts. Although the project team conceptualized CORE, it was not familiar with the previous tool. In contrast, the BUDGET experts were familiar with this tool but had no detailed knowledge of CORE. In addition, the project team again had to test the annual release of existing applications and tools (e.g., PLANNER, OPTIMIZER).

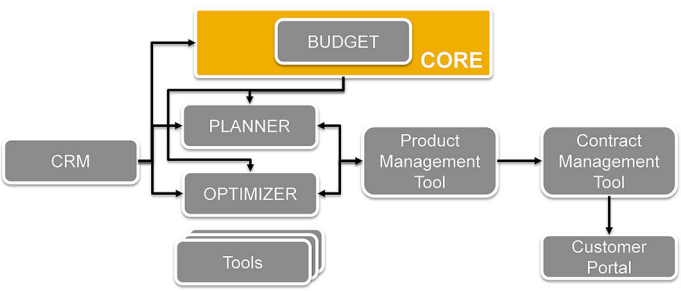

Figure 5 The final scope of the CORE project.

Nonetheless, the new way of thinking and acting and the organizational changes added impetus to the project. The assignment to the CEO and increased management attention changed perceptions in the organization—from headquarters to the advisors. In contrast to the previous attempts, FinAdvizard assigned more resources to the project in terms of people and budget. It has actively fostered knowledge building to stem the losses caused by the departing employees and to overcome challenges. FinAdvizard also employed an external project manager who brought a breath of fresh air to the project and the organization and broke the established structures and mindsets. As a result, management improved the project team's motivation. Productivity and project progress increased. Finally, FinAdvizard finished CORE on time, in December 2015. The first release is currently planned for Q1 of 2016. FinAdvizard then intends to roll out CORE to all of its advisors. The project team is keeping alive its vision to broaden CORE to the scope of BUDDY and continues to seek to conclude the long-desired harmonization of all existing advisory applications and tools.

Suggested questions for class discussion

1. Many IT projects escalate in the way that they are over time, over budget, or not within the predefined scope. Please discuss critically FinAdvizard's targets concerning time, budget, and scope as well as their achievement, and analyze the factor interdependencies.
2. In the context of financial services, regulatory requirements and legal provisions increase. How did these requirements and provisions influence FinAdvizard's project?
3. Companies such as FinAdvizard's often have to maintain existing systems and simultaneously develop new systems. What are the associated challenges of Bimodal IT? How can these challenges be approached?
4. What are the characteristics of a successful IT (project) organization? What are the positive or negative aspects in the case of FinAdvizard?
5. Please discuss the diverse interests of all stakeholders and how they were taken into account throughout the project.

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Notes

1 Please note that all names of companies and persons in the case are fictitious and any similarity to actual names is unintentional.

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