Reconfiguring IT Sourcing at ProSiebenSat.1 (Initial Handout for Students)

Teaching Case

Michael Könning
TU Dresden
Dresden, Germany
michael.koenning@
mailbox.tu-dresden.de

Friedrich Chasin
University of Münster, ERCIS
Münster, Germany
friedrich.chasin@
ercis.uni-muenster.de

Abstract

In early 2007, ProSiebenSat.1 Media SE, one of Europe's leading independent media corporations, embarked on a journey to define a new sourcing configuration for its IT landscape. Previously operating a completely insourced IT delivery model, the company looked at outsourcing in hopes of reducing costs, leveraging economies of scale, and capitalizing on innovations. Now, after ten years and a number of major reconfiguration efforts, it is clearly apparent which expectations have materialized – and which have not. Based on interviews with the company's top management and insights from strategy projects performed in the course of these reconfigurations, this teaching case reconstructs P7S1's IT sourcing initiatives. Taking its readers through ten years of decision-making about IT sourcing, the case outlines a broad range of sourcing strategies. The case helps students to grasp the risks and challenges that are associated with sourcing decisions.

Keywords: IT Strategy; IT Sourcing; Case Study

Introduction

Competing in today's digital arena has become increasingly difficult. As technology evolves, traditional business models and decades-old cornerstones of corporate strategy are challenged. Companies whose value propositions have never included IT enter market spaces that were once reserved for IT providers, and vice versa. In addition, the ready availability of technology gives quick rise to tech-savvy, well-financed startups. Companies like Tesla and Faraday Future in the automotive industry are prime examples of pioneers that have capitalized on digital as the foundation of their IT-enabled business models to compete with billion-dollar blue chips on the playground of mature industries. Against this background, selecting the right IT sourcing strategy can make the difference between success and failure for any company that is making its way into the digital future, where IT is increasingly a competitive differentiator.

IT sourcing refers to how IT services are provided. There are two archetypical modes of IT sourcing: A particular service can be performed by the company itself, i.e., using internal employees and other resources (insourcing), or the service can be provided by one or more external service provider(s) (outsourcing)[1]. Looking at a change in the mode of IT sourcing of a given service, "outsourcing" also refers to the process of transferring an activity that has previously been performed in-house into the responsibility of an external

[1] see Dibbern et al. (2004), Gonzalez et al. (2006), Lacity et al. (2016), and Liang et al. (2015) for a conceptualization and extensive review of extant IT outsourcing literature

provider. The process of reintegrating a previously outsourced service is referred to as "backsourcing" (Bary 2018). Hence, any activity that is essential to a company's ability to deliver its value proposition is always in the state of being insourced, in the state of being outsourced, or in the transition process from one state to the other (outsourcing or backsourcing). Each of the states and transition processes has implications for the decisions to be made and activities to be performed.

On a more granular level, IT sourcing configurations can take on different forms along several dimensions. While some organizations decide to almost completely replace their internal IT function with external service providers (full outsourcing), some choose to keep a significant part of competences in-house and only supplement them with external services (partial outsourcing). Furthermore, whereas some firms rely on a single main service provider (single-vendor sourcing), a growing share of companies decide to engage several main provider firms (multi-vendor sourcing or multisourcing). Finally, some firms outsource their IT services to an organization that operates from an offshore location (offshoring), while others prefer tasks to be fulfilled at the company headquarters (onshoring) or at least from a nearby region (nearshoring).

The possibility of outsourcing parts of a company's IT activities creates a decision space for enterprises, where they choose among insourcing, outsourcing, or a mix of both in configurating their operations. On the surface, making insourcing/outsourcing decisions seems to be straightforward: the less specific and the less strategically important an IT service is, the more suitable it appears for IT outsourcing, given there is a provider that can deliver the same service quality at lower cost. However, those assessments cannot really be made that easily, as situations are much more complex and unforeseen complications often emerge.

This teaching case tells the story of ProSiebenSat.1 Media SE (P7S1), one of Europe's leading independent media companies. Having insourced all IT activities so far, in 2007 the company decided to reconfigure its IT sourcing model and to look for outsourcing opportunities. P7S1 then embarked on a long journey in search of the configuration that would fit its strategic priorities.

Company Background

With more than 6,500 employees (2017) and a diverse portfolio of activities in the television broadcasting business and the digital market, P7S1 is one of the leading independent media corporations in Europe. Advertising-financed free TV has been the company's core business since it was established by the merger of the former ProSieben Media AG and the Sat.1 SatellitenFernsehen GmbH in October 2000. Today, the company's station family comprises eleven TV channels in Germany[2], nine in Austria, five in Switzerland, and one in the US and Canada. Consequently, P7S1's channels offer a broad range of shows, including popular US TV shows like *The Big Bang Theory*, blockbuster movies, in-house productions like *Beat the Host,* sports entertainment events, and live coverage of US National Football League games. The company is regarded as the number one broadcaster in the German TV advertising market. In recent years, P7S1 also entered an additional attractive business area by distributing its television channels in HD quality.

Since 2006, P7S1 has continually extended the wide reach of its market-leading TV-broadcasting business with its own online business units to diversify the company's revenue sources and build income from sources other than TV advertising. For instance, P7S1 operates its own online video platform, maxdome, several mobile apps, and a website to distribute digital entertainment. P7S1 has also built a digital commerce portfolio whose growth is promoted through a strategic link-up with the TV business. The portfolio contains companies like the online dating agency Parship, the comparison portal Verivox, and the two leading experience providers in Germany, mydays and Jochen Schweizer.

Fueled by increasing advertising revenues and increasingly profitable online business units, P7S1's revenue increased from EUR 2.7 billion in 2007 to EUR 4.1 billion in 2017, representing an average annual growth from 2007-2017 of 4.2 percent. At the same time, recurring earnings before interest, taxes, depreciation and amortization (EBITDA) increased from EUR 662 million (recurring EBITDA margin of 24.5%) in 2007 to reach a company record of EUR 1,050 million (25.7% of revenue) in 2017, for a 4.7 percent average annual

[2] seven free TV stations (ProSieben, SAT.1, kabel eins, sixx, SAT.1 Gold, ProSieben MAXX, and kabel eins Doku), and four pay TV stations (ProSieben FUN, Sat.1 emotions, kabel eins classics, and wetter.com TV)

growth rate. P7S1 also diversified the source of its revenues. After being heavily dependent on revenue from on advertising-financed free TV for most of its history – 86.7 percent of its revenue still came from that sector in 2011 – in 2017 the company generated almost half of its revenue (44.7%) from other activities, primarily online. In 2018, the company grouped these "other activities" into three areas, namely "Digital Entertainment," "Content Production and Global Sales," and "Digital Ventures and Commerce." Table 1 in the appendix depicts the development of revenue, profit, and employment.

P7S1's most important revenue market continues to be Germany. Having been listed in the DAX between March 2016 and March 2018, its shares are currently listed on the Frankfurt Stock Exchange in the MDAX[3] and on the Luxembourg Stock Exchange. P7S1 is headquartered in Unterföhring, near Munich, Germany.

Strategic Importance and Main Activities within P7S1's IT Landscape

One of Europe's leading media corporations and owner of several online platforms, P7S1 is heavily reliant on a well-functioning IT infrastructure, which the company uses to store and process thousands of TV shows, movies, sporting events, and commercials; to produce and distribute its own original content; and to compile and broadcast more than 100,000 hours of TV programming a year across all stations. The growing importance of online as distribution and communication channel has even increased the pivotal role of IT for P7S1's corporate strategy. In 2007, P7S1's IT function employed more than 300 people and was led by the Chief Information Officer (CIO), who reported to the Chief Financial Officer (CFO).

P7S1's IT is organized around three main areas: Infrastructure operations, application development and maintenance (ADM), and IT management. Figure 1 provides an overview of the key activities of each area.

Area	Main Activities
Infrastructure Operations	• Workplace/Office IT and Service Desk • Server, OS, Virtualization, and Database Management • Storage, Archive, and Backup Management • Datacenter Management, incl. Hardware Provisioning • Network, Security, and Communication Services
Application Development and Maintenance (ADM)	• Project Management • Requirements Engineering • Solution Architecture • Development & Testing • Application and Middleware Operations
IT Management	• IT Strategy • Enterprise Architecture • IT Security • Service & Provider Management

Figure 1. P7S1's IT by Areas and Corresponding Activities

In the area of *infrastructure operations*, P7S1 subdivides its IT infrastructure into "workplace IT" and "data center." On the workplace IT side, the organization further differentiates between service desk and onsite support. Whereas the service desk includes typical support activities like troubleshooting via telephone, e-mail, or a ticket system, on-site support refers to activities like the physical rollout of new hardware, notebook and mobile phone repairs, problem-solving for peripheral devices like printers and scanners, and other similar tasks. On the data center side, activities can be grouped into archetypical tasks and

[3] The DAX index is a blue-chip stock market index consisting of the thirty major German companies that trade on the Frankfurt Stock Exchange. The MDAX lists the fifty biggest companies below blue-chip level.

technologies in the form of a "technology stack." The stack is easiest read from the bottom up: The foundation for all IT activities is a fully functional network, a well-managed datacenter, and the provision of hardware that is suitable for the task for which it is installed. The next layer, virtualization, facilitates decoupling the (logical) server instances from the (physical) machines on which the instances are run so multiple operating systems and server instances can be run on a single physical server, increasing flexibility and the efficiency of resource use. The operating system provides the basis for the databases and application operations that are on top of the stack and that are increasingly connected by middleware technologies that build the connections between applications and from applications to the database. Figure 2 provides an overview of P7S1's IT infrastructure activities, with each box representing a self-contained work package (for workplace IT) or a specific task for a specific technology (for data center).

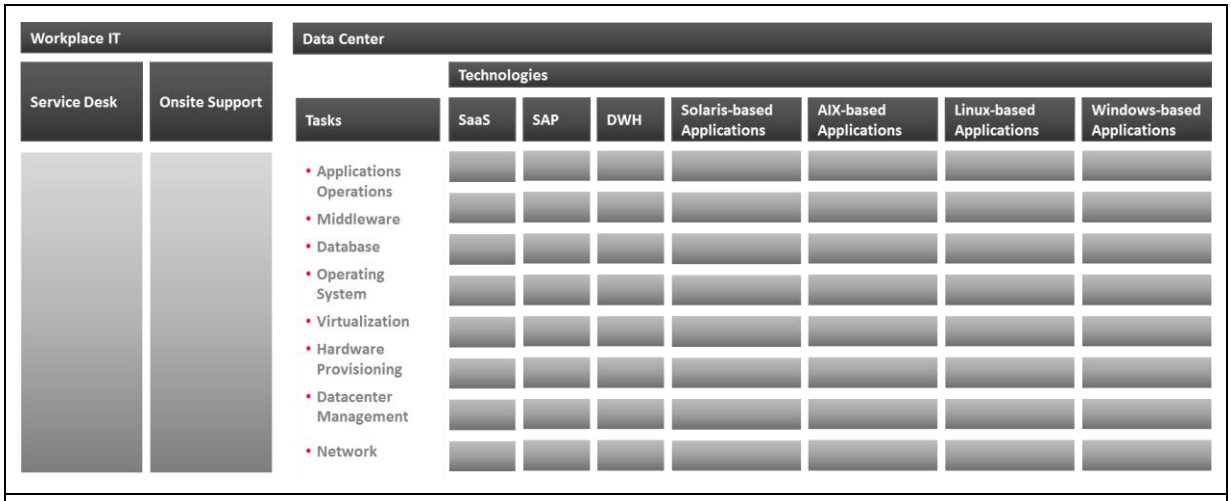

Figure 2. Breakdown of Main Activities in P7S1's IT Infrastructure
From a purely technical point of view, this illustration is inaccurate, as the data warehouse (DHW) is an AIX-based application. Still, it is depicted in a separate column to reflect its importance for P7S1.

The second area of P7S1's IT, *application development and maintenance (ADM)*, is concerned with providing the company with the application landscape it requires to fulfill its business objectives. Software solutions in use at P7S1 include commercial off-the-shelf applications (COTS) that can be procured off the software market and put to work unchanged, more customized COTS software like SAP, software as a service (SaaS) solutions like Office 365 or Salesforce, and custom software, i.e., solutions tailored to ProSiebenSat.1's requirements.

Besides some common applications like Office 365 and SAP that are used in most similar-sized companies, P7S1 requires a number of more specific software solutions. The latter can be grouped into three main categories: Data-management application, content-management applications, and sales applications. Data-management applications store and manage all pieces of information that P7S1 collects, combines, and uses to make decisions and steer its business (i.e., as a basis for their business intelligence). This information includes data on TV viewership, general market data, users' account data for the company's websites, app data, and website clickstreams. Content management applications store and manage the company's content (i.e., shows, movies, and ad videos), schedule the company's TV stations, and manage the rights and licenses that P7S1 obtains from film distributors like Walt Disney, Warner Bros., Sony Pictures, and sports associations like the Union of European Football Associations (UEFA). Sales applications calculate prices for advertisements (based on the cost of TV rights, expected audience size and structure, past pricing, and overall market development) and manage the resulting contracts.

All three of these groups of software solutions are part of the application development that is commonly conceptualized in the form of the so-called V model (Alpar et al. 2008). The first step of development is modelling the software's application area that is to be developed—typically a business or part of a business. Tangible specifications and requirements are derived from the model. Taking these specifications and

requirements into account, a detailed solution is planned: a specific software architecture is defined, the software and its elements are designed, and then the software is implemented (coding). Once a consistent version is created, it is tested for functionality so errors can be resolved. Then a user-acceptance test that focuses on usability and workflow integration assesses the software's suitability to the specific client organization. Once the software product has passed these tests, it is deployed and configured for an optimal fit. Figure 3 illustrates the main activities of software development according to the V model.

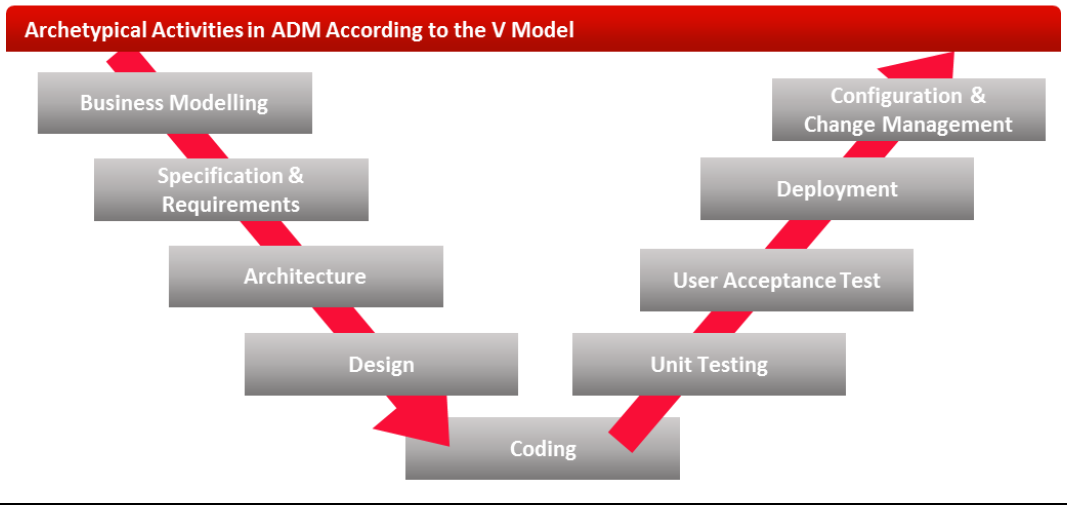

Figure 3. Phases of the V Model by Time and Degree of Detailing

The tasks of the third area of IT at P7S1, *IT management*, include planning, monitoring, and controlling the company's IT activities. More specifically, the function defines the company's IT strategy and its enterprise architecture, oversees IT security, and is responsible for provider management, a particularly important area in the context of IT sourcing.

Acknowledging the high strategic importance of the IT management function in steering the company's IT activities, P7S1 always kept these activities internal during the last decade. Instead, the company's sourcing decisions affected only ADM and infrastructure operations. Therefore, the next sections focus on these two areas in their descriptions of P7S1's sourcing reconfigurations.

Reconfiguring IT Sourcing

Episode 1: From Insourcing to Outsourcing (2008 – 2010)

Until 2007, P7S1 performed all of its activities around infrastructure operations internally. Before their merger in 2000, both ProSieben Media AG and Sat.1 SatellitenFernsehen GmbH had made considerable investments to their IT infrastructures, but after the merger both IT infrastructures were combined into a new IT function that took care of all infrastructure-related tasks: developing and maintaining the company's network and servers, managing application operations and middleware, managing the internal datacenter and application landscape, and providing its employees with suitable workplace IT.

This completely insourced operating model allowed the company to keep its combined IT knowledge and use it to integrate the respective infrastructures of the former two organizations into one. However, fulfilling all infrastructure-related tasks in-house also meant high costs, especially for personnel but also for managing the depreciation of older systems.

P7S1 also performed most of its ADM-related activities internally. Whenever a new application had to be developed or an existing application had to be changed, the IT organization was responsible for project

management, requirements engineering, and solution architecture, while the development and testing activities were performed by an offshore software development company headquartered in Minsk, Belarus. The software was then deployed and run on the organization's own servers and workstations.

In early 2007, P7S1 decided to change its IT sourcing model by transferring most of its IT-related activities to an outsourcing provider. The organization quickly turned to IBM, one of the world's largest IT outsourcing providers with locations and clients all around the globe. The two main motivations for this radical shift were the desire to reduce costs and the need for access to innovation. As P7S1's CIO explained,

> *The idea back then was to transfer our complete infrastructure and application landscape to IBM. Acquiring three additional broadcasters as clients, IBM then would build a large media cluster with great new systems that would replace ours while also leveraging economies of scale in the process. Why would we need to develop and maintain our own sales system when IBM can build one for three companies at once at better cost? A very, very large, very visionary approach: innovation through outsourcing!*

Driven by high expectations of innovative and cost-efficient modernization of its infrastructure and application landscape and long-term cost reductions, P7S1 signed a ten-year IT outsourcing contract with IBM. The complex agreement included a transfer of nearly all of the company's IT staff to IBM, along with control of P7S1's existing IT infrastructure assets, although P7S1 would still own them. IBM procured new assets that it then leased to P7S1 and signed an additional contract with the American network and telecommunications provider AT&T to take over the provision and management of internet access and P7S1's internal network. After a year-long preparation and transition phase, the new contracts went into effect in June 2008. Figure 4 illustrates the new operating model for IT infrastructure operations as it was implemented in 2008.

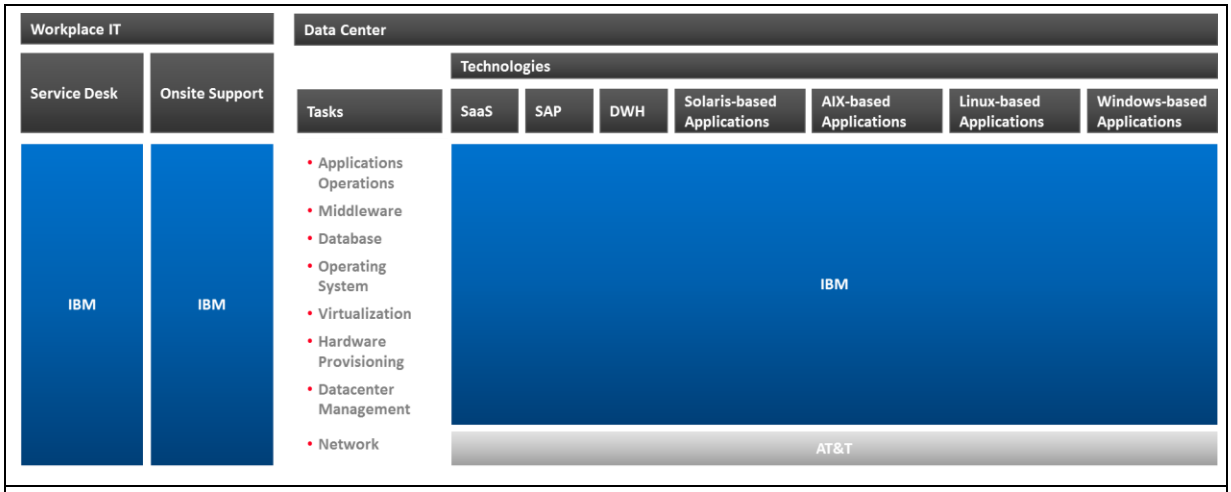

Figure 4. IT Infrastructure Sourcing Model after Full Outsourcing in 2008

When the dust had settled by the end of 2008, P7S1 had transitioned from completely insourcing all of its infrastructure and ADM-related activities to completely outsourcing them, leaving almost no internal IT staff or knowledge in-house except for those required for the most strategic IT management duties. The seven employees in the department for service and provider management took on new importance, as they were in charge of managing the relationship with IBM by, for example, providing the interface between P7S1's business units and IBM, ensuring compliance with the service level agreements (SLAs), and enforcing penalties when necessary. Having undertaken this radical shift, P7S1 hoped to have set up a solid and cost-efficient foundation for its IT for years to come. But would the new outsourcing model yield the benefits the company hoped for?

Challenges

After about two and a half years of transitioning to the new outsourcing model, P7S1's hopes hit a bitter reality: Having operated a relatively costly but proven and well-practiced insourcing model for years, P7S1 saw a quick rise in unforeseen challenges from the radical shift to a new mode of operation. Problems first appeared in the network area that IBM had subcontracted to AT&T in the form of insufficient data throughput rates, increased latency, and even occasional network interruptions. As network operations are a crucial building block of P7S1's IT operations, these issues had a direct effect on its business. As the company's CIO explained,

> *Undisturbed network operations are at the heart of our IT infrastructure. As a media company, we transfer large media files internally between our servers and also exchange them with our external partners, such as large license owners, clients, and other broadcasters. When we noticed that service levels were declining, initial problems that we had expected in the transition phase never completely went away, and that IBM and AT&T were disagreeing over who was responsible for that, we knew we had to do something and quick!*

P7S1 looked for ways to improve the situation while keeping the ten-year contract with IBM. As the contract was based on variable pricing.

The challenges did not stop there. It would take only another six months, until early 2012, before P7S1 began to question the company's cultural fit with IBM in terms of workplace IT, especially on-site support. P7S1's profile was that of an established media player and a comparatively young and quickly growing incubator of promising companies in its online business units, so it employed an agile, informal, and not always completely structured mode of operations. As an IT manager put it,

> *We are not a company that is very compatible with someone like IBM. IBM is very process-focused, very professional – somewhat formal, if you will. P7S1, on the other hand, is quite the opposite – rather informal, very pragmatic, and very agile – and those two cultures just don't go together very well! I remember one situation where [one of our business units] was like, "Okay, let's open a new site in London next month. Let's set up a team and work out how we can do it!" That just doesn't fit into the standard processes of a large provider. It's way easier to do with smaller vendors that have the flexibility and just an all-in-all different culture going that is a natural fit with ours.*

References

Alpar, P., Grob, H. L., Weimann, P., and Winter, R. 2008. Anwendungsorientierte Wirtschaftsinformatik: Strategische Planung, Entwicklung und Nutzung von Informations- und Kommunikationssystemen, Wiesbaden: Vieweg.

Bary, B. von. 2018. "How to Bring IT Home: Developing a Common Terminology to Compare Cases of IS Backsourcing," Proceedings of the 24th Americas Conference on Information Systems.

Dibbern, J., Goles, T., Hirschheim, R., Bandula, J., and Jayatilaka, B. 2004. "Information Systems Outsourcing: A Survey and Analysis of the Literature," The DATA BASE for Advances in Information Systems (35:4), pp. 6–102.

Gonzalez, R., Gasco, J., and Llopis, J. 2006. "Information Systems Outsourcing: A Literature Analysis," Information & Management (43:7), pp. 821–834.

Lacity, M. C., Khan, S. A., and Yan, A. 2016. "Review of the Empirical Business Services Sourcing Literature: An Update and Future Directions," Journal of Information Technology (31:3), pp. 269–328.

Liang, H., Wang, J.-j., Xue, Y., and Cui, X. 2015. "Information & Management IT Outsourcing Research from 1992 to 2013: A Literature Review Based on Main Path Analysis," Information & Management.

Payne, J., and Dorn, W. R. 2012. Managing Indirect Spend: Enhancing Profitability Through Strategic Sourcing, Hoboken, N.J: Wiley.

Appendix

ProSiebenSat.1 Performance over Time Source: Annual Reports ProSiebenSat.1 SE 2008-2017											
	2007	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Revenue [EUR m]	2,710	3,054	2,760	3,000	2,756	2,356	2,606	2,876	3,261	3,799	4,079
- **from TV [%]**	n/a	n/a	n/a	n/a	86.7	81.7	76.7	71.7	66.0	58.0	55.3
- **from Digital & Adjacent [%]**	n/a	n/a	n/a	n/a	11.6	14.2	18.6	21.2	26.0	32.0	35.9
- **from content production and sales [%]**	n/a	n/a	n/a	n/a	1.7	4.1	4.8	7.0	8.0	10.0	8.7
Pre-tax profit/loss [EUR m]	187	68	233	329	348	457	527	560	604	658	646
EBIT [EUR m]	385	264	475	567	581	601	669	695	730	777	820
EBITDA [EUR m]	522	618	623	694	653	680	578	818	881	982	1084
Recurring EBITDA [EUR m]	663	675	697	792	726	745	790	847	926	1018	1050
Recurring EBITDA margin [%]	24.5	22.1	25.2	26.4	26.3	31.6	30.3	29.5	28.4	26.8	25.7
Employees (year avg. FTE)	4,852	5,450	4,814	4,061	4,258	2,849	3,400	4,118	4,880	6,054	6,452

Table 1. ProSiebenSat.1 Performance over Time