CYLAD

INSIDER'S PERSPECTIVE

SaaS - What's in for integrated hardware/software companies?

Status quo, benefits, and challenges

by Dr. Michael Müller, Dr. Robert Schenk, and Elizaveta Akhimova

At a glance

Following the example of software-only companies, integrated technology companies (i.e. delivering hardware, software, and services to their customers) show increasingly interest in Software-as-a-Service (SaaS) models.

However, compared to software-only companies, this market segment is less mature yet:

/ The biggest share of integrated technology companies (53%) currently offers both options, SaaS and on-prem software, while about 1/3 of companies still doesn't have a SaaS offer at all

/ Integrated technology companies plan to almost double their SaaS revenues within the next 5 years (from averagely about 32% of software revenues to 62%). By then, SaaS will be the dominant revenue stream within software for more than half of the companies

/ Data privacy and security, revenue model shift to subscription, and HR capabilities as well as skillset are the top 3 hurdles for integrated technology companies when establishing SaaS

/ 3 key advantages of expanding the business model through SaaS are being reported by integrated technology companies: simplified software updates/upgrades, positive marketing effects on brand image, and an increase of annual recurring revenue (ARR)

/ The customers predominantly profit from reduced IT complexity, simplified software version management, and more liquid funds for profitable investments in the core business (shift from CapEx to OpEx).

Software-as-a-Service

Software-only companies recognized the benefits and business potential of Software-as-a-Service (SaaS) models more than 10 years ago. Industrial companies with a DNA in hardware, although equipped with a vertically integrated business model that also includes the hardware related software and according services, predominantly still cling to on-premises solutions.

What business opportunities are these companies missing, and what is the current maturity of SaaS offerings in these integrated hardware/software companies?

Why should industry companies offer their hardware-related software as a service?

SaaS/cloud-based business models help to secure the customer base, create new opportunities to increase market share, and drive company value. While existing customers benefit from lower IT complexity, reliable system updates and increased uptime as well as reduced total cost of ownership, new customers are attracted by significantly lower cost of entry, shift from capital expenditure (CapEx) to operational expenditure (OpEx), and shorter time-to-market. Owners and investors know that the stock market values software-based recurring revenue with multiples of 5 to 10 compared to traditional products and services. In fact, SaaS/cloud operating models provide scalability to fuel revenue growth with CAGRs in excess of 25% while generating 3 to 7 times higher EBIT margins due to reduced onboarding and operational cost.

What are the differences from traditional software companies?

Many traditional software companies have already understood and taken the opportunity. For example, Microsoft is successfully offering its Office suite based on subscription and hosted in the cloud. While this seems a natural evolutionary step for a software house, SaaS hosted in the cloud is a great opportunity for other industries, for instance machine manufacturers. Traditionally, this industry focuses on one-time hardware sales while offering machine-related software on top. However, software solutions combining machine software and data analytics applications are becoming more and more powerful and thus relevant for the overall business. As Tesla's Elon Musk put it, cars have become "sophisticated computers on wheels", having in mind the increasing relevance of software in a formerly hardware-dominated industry. Bringing these software solutions with the right consumption and service model to your customers will be key.

What are the prerequisites of setting up a SaaS-based model?

Integrated hardware/software companies have to change mindset, technology, and the business model. Offering Software-as-a-Service requires to re-think 4 key dimensions of the business model: First, a cloud-native software application has to be built around market requirements and your customers' business processes. Second, companies must invest in setting up and operating cloud infrastructure. Third, SaaS customers expect high levels of support and state of the art IT security. Fourth, operations have to be adapted to a subscription-based business model. This means adjusting pricing strategies, operational processes, and IT systems to transition from one-time deals to the recurring revenue model of SaaS.

While these key dimensions apply to software-only companies as well (albeit in different intensity), integrated technology companies have an specific challenge: **they must harmonize and balance all these technical and business-related adjustments with the hardware product to create a fitting package.**

Although SaaS is a prominent topic, information on the situation of integrated technology companies is hardly available. To shed some light on this hitherto unnoticed market segment, CYLAD has conducted a first empirical investigation.

Market survey

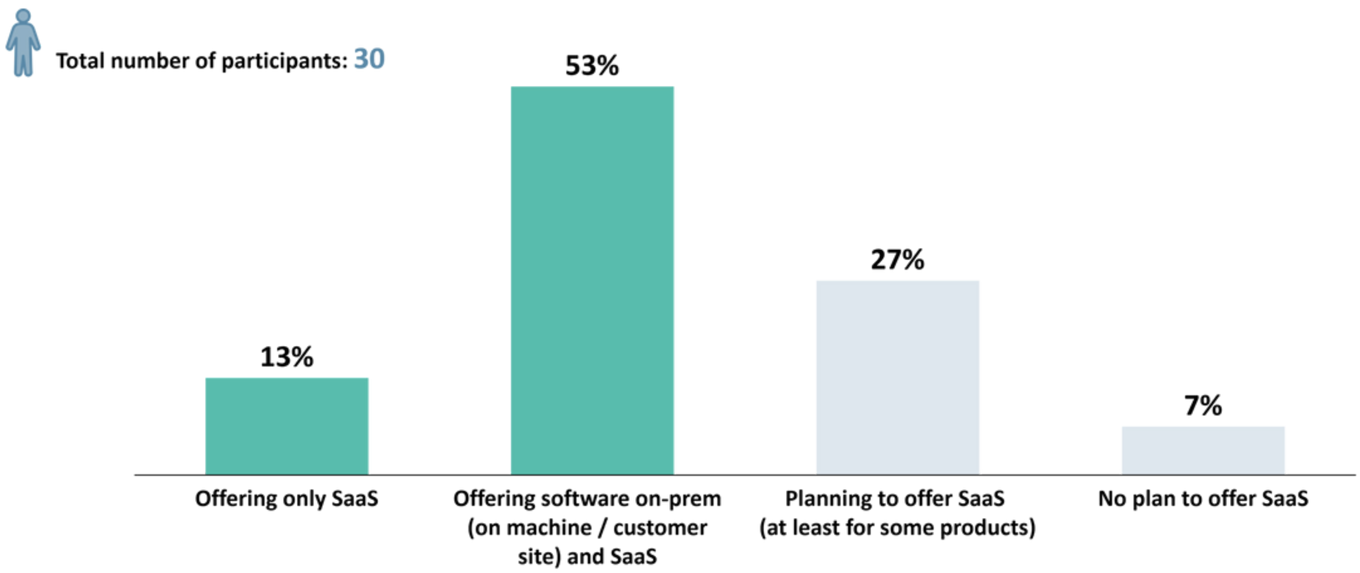
Sample characteristics

CYLAD has investigated **30 leading integrated technology companies**, thereof **77% headquartered in Europe and 23% in the USA.**

- *The companies offer the machine control software for their hardware (3%), client-facing/value-adding software like data storage, analytics, reports (50%) etc., or both (47%).*
- *The average company in the panel creates 40% of its revenues in software, 28% in services, and 26% in hardware. However, the revenue shares vary broadly from company to company.*
- *Hardware and software related services (maintenance, support, overhaul/repair) are provided in both ways, remotely and physically on site. Only 3% of the companies have outsourced all services to a 3rd party.*
- *All participants are the primary decision maker or significantly involved in the decision-making process regarding SaaS (i.e. C-Levels, Vice Presidents, and Directors).*

SAAS STATUS QUO

Are you planning to provide your software in an as-a-service model, or did you already establish SaaS?



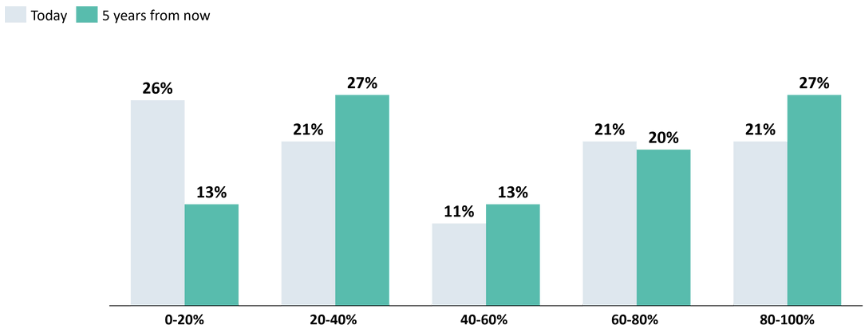
About 2/3 of integrated companies already offer SaaS to their customers. The companies that have fully switched to SaaS have their major revenue share in software sales (up to 98%) and therefore might be more receptive to the developments of the software industry. However, the biggest share of integrated companies (53%) offers both options: SaaS and on-prem software.
23% of the companies don't provide SaaS at the moment, but plan to offer it in the future (at least for some products).

More than 70% of these companies have their major stake in hardware production. Since these companies are less dependent on software revenues, they adopt innovations from the software environment later and wait for models to be proven successful.
The companies that have no plans to offer SaaS in the future have only a very small proportion of their revenues in software sales (~10%) and therefore shy away from the transformational effort.

REVENUE FORESIGHT

Companies are actively planning to boost their SaaS revenue share. In total, integrated technology companies generate an average of about 32% of their software revenues through SaaS today. Actually, only 30% of the companies generate more than half of their software revenues through SaaS. In 5 years from now, the companies plan to almost double their SaaS revenues to an overall average of about 62%. By then, SaaS will be the dominant revenue stream within software for 60% of the companies (i.e. more than half of their software revenues will originate from SaaS).

What is your company's SaaS revenue share in percent of total software sales today? Where do you see it in 5 years from now?



Companies that offer both today, on-prem software and SaaS, plan a significant shift towards SaaS in the next 5 years. Generating about 49% of their revenues on average by SaaS, these companies plan an increase by 21 pps. to about 70% in the future. None of the companies is aiming for less than 25% SaaS revenue in 5 years from now.

Companies that don't offer SaaS yet but plan to offer it in the future are targeting an even more ambitious increase. Coming from no SaaS revenue at all, these companies aspire 46% of software revenues from SaaS in the future.
None of these companies is aiming for less than 20% SaaS revenues, while the most ambitious companies plan to almost completely switch to SaaS offerings. This proactive approach reflects the industry's recognition of the growth potential in SaaS and the aspiration to diversify revenue streams in response to evolving market dynamics.

Notably, about 38% of the companies currently not generating any revenue from SaaS plan to make it their largest revenue source in 5 years.

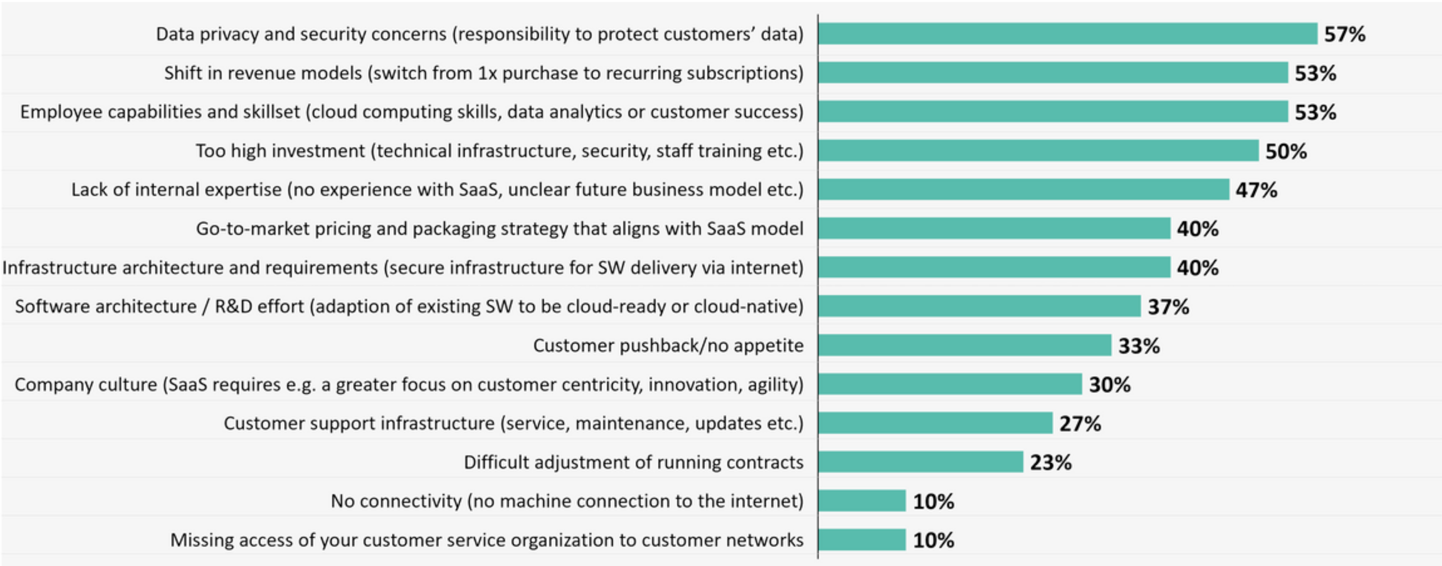
This strategic shift emphasizes the increasing significance of subscription-based recurring revenue models in software sales of integrated technology companies.

32%

In total, integrated technology companies generate an average of about 32% of their software revenues through SaaS today

MAIN CHALLENGES

What are/were your company's major difficulties in establishing SaaS?



While establishing SaaS, integrated technology companies are prone to diverse difficulties. Alone the top 3 challenges reveal difficulties in technology, business, and HR sphere.

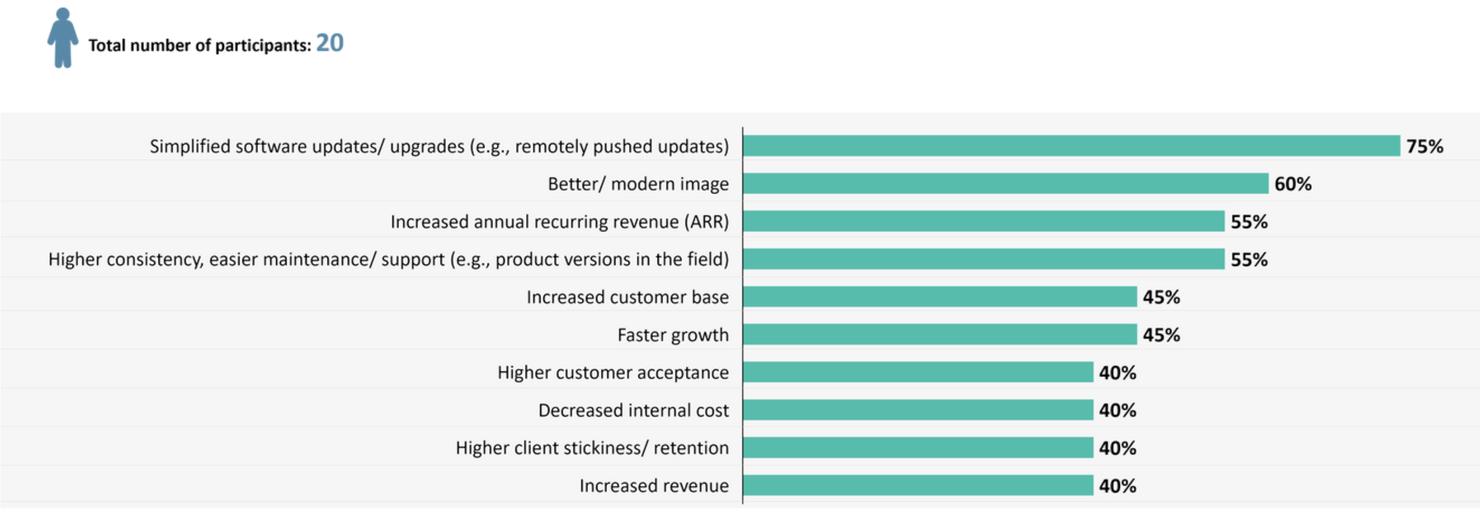
57% of the companies report data privacy and security concerns as the most important obstacle. Since the dominant delivery model for SaaS is cloud hosting, the challenge is to set up an entire cloud-ready technology stack (incl. infrastructure, network, and application software) with according encryption technology, security protocols etc. to ensure security of customer data.

On the business side, companies report the shift from traditional one-time sales to a subscription-based revenue model as the 2nd biggest issue (53% of all companies). Traditional software sales typically rely on perpetual licenses that are paid one time (upfront) and an attached, but separate maintenance and support (M&S) contract that is paid as yearly fee. In a cloud-based SaaS model both, license and M&S, are merged to one service fee paid per year. Assuming stable sales, revenues will go down by switching to SaaS, since the revenue of the license will be split over several years (on the other side, it's an attractive shift from CapEx to OpEx for the customer).

Likewise, 53% of companies have been facing problems on the people side. The shift to a cloud-based SaaS model not only requires new capabilities and skills on the technical side but also a different set-up and mindset on the services side. Investing in training and new hires, particularly in cloud computing and data analytics but also in a customer success-oriented services organization are crucial for an effective SaaS implementation.

KEY ADVANTAGES - VENDOR PERSPECTIVE

What benefits are you experiencing in your company through SaaS?



The transition to SaaS goes along with many advantages for integrated technology companies as vendors- the top 3 benefits relating to technology, marketing, and business.

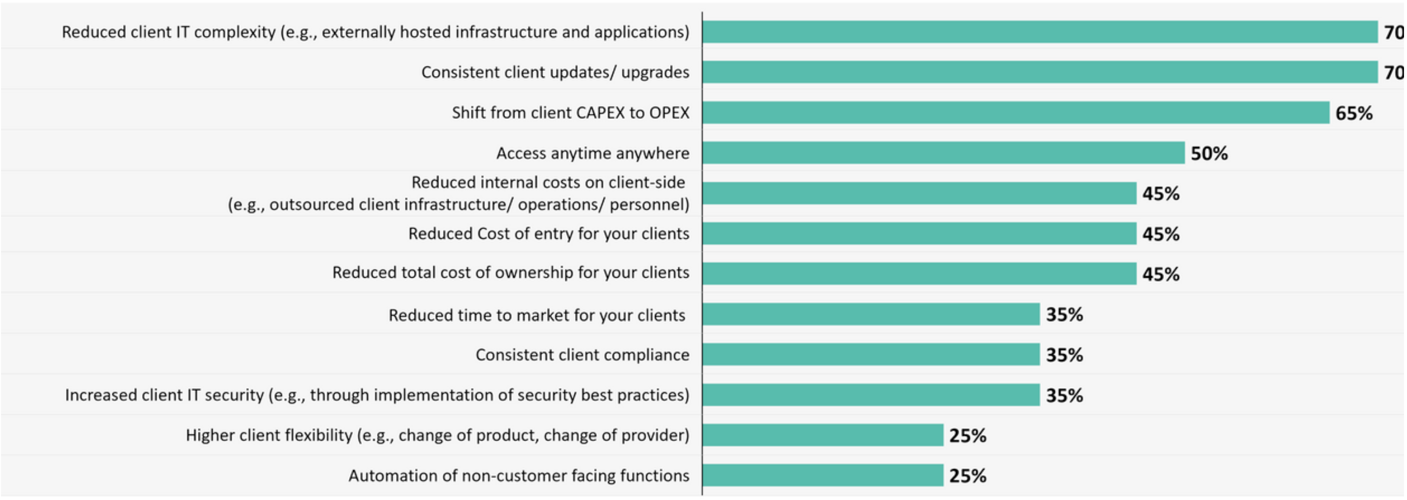
75% of the companies report simplified software updates and upgrades, since these can be run autonomously by the vendor with no or minimal customer interaction (consistent product versions also simplify M&S, what is recognized by 55% of the companies as an additional advantage).

As cutting-edge technology, SaaS provides the vendor also with the positive image effect of an innovative and modern company, delivering software state of the art. 60% of the companies report this as a key advantage.

On the business side, 55% of integrated technology companies confirm an increase of annual recurring revenue (ARR) as a consequence of the subscription-based offering. Recurring business is more predictable since future revenue is already "secured" by existing contracts. Subscription models aim at a long-term customer relationship, offering the opportunity to renewals that will grant more revenue over time with the same product (compared to perpetual licenses). Additionally, SaaS allows for high scalability at almost zero cost increase due to a "one-to-many" delivery model (depicted as faster growth by 45% of the companies).

KEY ADVANTAGES - CUSTOMER PERSPECTIVE

What benefits were created for your customers by offering SaaS?



SaaS also offers tangible advantages to customer organizations. The top 3 factors relate to technology and business financing:

70% report that customers profit from reduced IT complexity, since infrastructure and applications are externally hosted and can be easily accessed by a web interface (the associated service promise to access the cloud software anytime from anywhere is another advantage seen by 50% of the companies)

As already confirmed on vendor side, 70% also regard simplified software updates and upgrades as key advantage for their customers. As part of the service package, the vendor makes sure that the customer is provided with the latest software version. The customer just needs to access the cloud, where up-to-date applications are hosted in a consistent software environment.

The shift from CapEx to OpEx is named by 65% of the companies as key advantage for their customers (and one of the most prominent factors in "as-a-Service" discussions, generally). Software licenses, and e.g. network infrastructure or server capacities are provided by the vendor and remunerated by a monthly service fee. The customer has no upfront investment and therefore no financing risk, lower working capital (due to less assets), higher flexibility to balance capacity with demand, and tax advantages (OpEx are typically recognized in the accounting period in which they are incurred). Thereby, the customers have more liquid funds, and the free capital can be used for profitable investments in the core business.

Talk to our experts

Dr. Michael Müller
Partner
michael.mueller@cylad.com

Dr. Robert Schenk
Principal
robert.schenk@cylad.com

Elizaveta Akhimova
Consultant
elizaveta.akhimova@cylad.com

About CYLAD

Independent consulting firm, CYLAD advises executives from industries and associated services to overcome performance, transformation and growth challenges. The firm combines Consulting Methodology with Senior Experts' experience for sustainable results for its clients of all sizes, offering a comprehensive range of services. Apart from Integrated Technology Companies, CYLAD supports especially the Aerospace & Defence, Pharmaceutical/Health, Energy, Electronics and Transportation sectors.

CYLAD currently has 150 employees and 17 Partners across eight offices: Paris and Toulouse in France, Hamburg and Munich in Germany, Zurich (Pfäffikon SZ) and Geneva in Switzerland, Adelaide in Australia and Montreal in Canada.

www.cylad.com