

Forecast Overview: Product Support Services, Worldwide, 2015 Update

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This annually updated document contains the forecast market model or methodology and explains the market dynamics and foundational assumptions that underpin our understanding and analysis of the market.

Key Findings

- The annuity characteristics of support contracts that underpin the PSS market are challenged by SaaS and IaaS. Despite this, the combined product support market will continue to grow with single-digit growth during the next five years.
- Software support services will grow at a CAGR of 4.6% during the forecast period. Hardware support services will grow at a CAGR of 0.2%. Both of these five-year CAGRs are lower than published CAGRs the previous year.
- The hardware and software product markets are the primary drivers of PSS. Growth in some software product markets will keep growth of software support services in the mid-single-digit range for the next five years.
- Client device support spending is forecast to decline in every year of the forecast period. This is primarily due to low attach rates and declining renewal rates for client devices. Many client devices are spared or replaced, instead of being included in a hardware support contract.

Companion Documents

Click [here](#) to review the companion data document for the most recent forecast:

"Forecast: IT Services, Worldwide, 2013-2019, 2Q15 Update"

For key changes to our product support services forecast assumptions, see:

"Forecast Analysis: IT Services, Worldwide, 2Q15"

Market Description

The product support services (PSS) market is mature based on a foundation of annuity revenue. The PSS market is composed of two segments.

- Software support services — Spending for software support is driven by support contracts for incremental software product license sales and support contracts on the installed base. A high percentage of new software license sales results in creation of a support contract for that product. The majority of the software service market is derived from mature software products with perpetual licenses that are predominantly deployed as on-premises software. The major shift in the software market is to a software as a service (SaaS) subscription model, with the software deployed as a cloud service. Some vendors do have premium support offerings designed to provide enhanced support for SaaS, but spending and future opportunities are limited.
- Hardware support services — Spending for hardware support is driven by support contracts for incremental hardware products and support contracts on the installed base. A high percentage of new hardware sales results in creation of a support contract for that product. Hardware support contracts are typically sold as one- or three-year contracts. Three-year contracts are most commonly paid annually (annual prepayments) instead of being paid all three years in advance. Two-, four- and five-year contracts are less common.

Traditionally, PSS has been constrained to the provision of remediation and technical assistance services in relation to discrete technology products. More recently, the scope of such service contracts has expanded to move beyond single technologies, and service contracts now may apply to entire systems, application stacks or physical environments. The nature of these services is also changing, with greater emphasis being placed on prevention-based approaches to try to avoid or mitigate the effects of technical failures within a customer environment. Product support offerings are also being bolstered by value-added service elements aimed at improving the customers' return on their technology investment, while reducing internal operating costs and improving solution stability.

Five factors that affect the adoption of PSS:

- Support attach rates
- Support renewal rates
- New on-premises technology deals
- Movement to cloud delivery
- Alternatives to vendor support services

Support Attach Rates

The primary starting point for PSS is attachment of support contracts to new hardware or software product sales. Attach rates vary significantly for hardware and software, and within product lines, attach rates can vary dramatically at the product level. For example, software products that are deemed mission-critical for the customer have almost 100% attach rates. Hardware attach rates can range from 20% to 100%. Attach rates are very consistent and stable at the product support market level. In reality, some products may not have any support attached, which we have referred to in the past as the "no support" model. "No support" may be chosen as an option because the product can be spared, it is disposable/commodity in nature, or it comes with a limited lifetime warranty (LLW). Nearly all software support services and many hardware support services are sold as part of the initial product sale. Most support service contracts sold separately are for additional or premium product support services. An example would be a contract for a technical account manager that was added into the initial contract after a few months.

Support Renewal Rates

Once product support contracts are in place, they are subject to renewal at contract expiration. At the product support market level, renewals are consistent, stable and generally high because most customers prefer to have their deployed products supported. Hardware support may have some unique characteristics due to the short refresh cycles that can result in the hardware being replaced when the warranty runs out. In addition, there is a certain degree of vendor lock-in, where, for some software products to be eligible for certain software entitlements, organizations must have a support contract. PSS renewal rates are often not significantly affected by recessionary trends. In a down economy, customers may prolong hardware or software upgrades, but they continue to renew support contracts.

New On-Premises Technology Deals

IT budget priorities affect the support market in two ways:

- First, if new on-premises technology deals are approved, it can be a driver for new support contracts and attach rates, but can inhibit renewal rates as products are retired. These product refresh rates are frequently the governing factor that decides the frequency of hardware and software product purchases. Hardware products tend to have shorter refresh cycles, and software products tend to have longer refresh cycles.
- Second, if new on-premises technology deals are not approved, it can be a driver for renewal rates, as organizations choose to maintain existing hardware or software for a longer duration. Because budget priorities affect only the purchase of new hardware or software, the PSS market is consistently stable, thanks to the long-term contracts.

Movement to Cloud Delivery

IT budgets moving to cloud delivery for software (SaaS) and infrastructure (IaaS) affect the product support market:

- SaaS — The major shift in the software market is to a SaaS subscription model, with the software deployed as a cloud service. SaaS is included in Gartner's public cloud Forecast, but it is not subject to the maintenance fees that are the basis of software support spending. Therefore, as clients shift from traditional on-premises software to SaaS, the PSS market will be negatively affected. Some vendors do have premium support offerings designed to provide SaaS support, and these offerings are also included in Gartner's public cloud Forecast. For example, Salesforce's Premier Success offering provides premium support for its SaaS solution, but spending and future opportunities are limited for PSS providers.
- IaaS — The infrastructure service market is also seeing a shift to a subscription model, with the infrastructure deployed as a cloud service. IaaS revenue (and SaaS) is included in Gartner's public cloud Forecast (see "Forecast: Public Cloud Services, Worldwide, 2013-2019, 2Q15 Update"). As clients shift from traditional on-premises hardware to IaaS, and as spending shifts to IT outsourcing, the PSS market will be negatively affected. All three segments of hardware support will be affected — client device, data center and network. Note, however, that not all support will be eroded: As enterprise (end-user) support spending declines, there will be some additional spending for support by service providers, such as managed service providers (MSPs).

Alternatives to Vendor Support Services

There are alternatives to OEM or independent-software-vendor-provided support services in both the hardware and software service market. The overall PSS market is not largely affected in spending by the presence of alternative support providers for hardware or software products:

- Hardware support alternatives — Alternatives are fairly common in the hardware support market, with a thriving ecosystem of multivendor and independent support providers for server, storage and networking equipment. Independent support providers include both authorized and unauthorized providers. Authorized providers are typically OEM channel partners that have been certified by the OEM to provide their own support, which is backed by the OEM. This is commonly called "co-delivery" or "collaborative" support. Unauthorized support providers are not authorized by the OEM to provide support, so access to the OEM may not exist or is supplied only on a time and materials (T&M) basis. Unauthorized providers are commonly called "third-party maintainers" (TPMs). Customers will often switch to TPMs when the original warranty runs out, rather than renew the OEM support, due to significant OEM postwarranty price increases.
- Software support alternatives — Alternatives for software services are limited, owing to the proprietary nature of the vast majority of the market. While alternative providers do offer customers some choices, the number of providers is small, and the risks to move to unauthorized providers are seen as being more significant than in the hardware support market.

Foundational Assumptions

Demand-Side Factors

The software support market will continue to grow at a rate parallel to the spending forecast for software products through 2019.

The software product market has a strong influence on the software support service forecast because of the incremental revenue that results in the acquisition of new software support service contracts. In our forecast process, this incremental revenue is transformed into a "contribution ratio" that affects the growth of software support spending. The contribution is enduring because it becomes part of the annuity growth of software contracts. The enduring nature of enterprise software deployments and the extended life cycles of major software implementations combine with proprietary vendor lock-in for support provision to give vendors a more predictable and stable revenue stream, irrespective of wider economic conditions.

Because software product spending is the supplier of incremental growth for the software service market, we see the software service market growing at a parallel single-digit compound annual growth rate (CAGR), at least at the worldwide level. Not all software markets in all regions and countries will grow equally, but most interrelated software markets will move in tandem because there will be a high level of correlation.

Demand for cloud-based applications continues to expand, especially for the business intelligence (BI), CRM, digital content creation, office suite and supply chain management (SCM) markets. While annual subscription revenue may generate less vendor revenue during the first year of the contract, such recurring revenue commonly exceeds on-premises-based license sales revenue after two to three years. Cloud-based revenue gains have become prevalent since 2012, and double-digit cloud-based revenue growth is expected to continue through 2019.

Through 2019, the number of hardware devices not covered by a support contract will increase by 15%.

As hardware becomes more reliable, and as some product categories have LLWs, organizations are increasingly able to adopt variations of a no-support approach to hardware services. These strategies include identifying some hardware types as disposable, participating in more self-maintenance and sparing programs, moving to T&M contracts, and moving hardware maintenance to third-party maintenance providers, in which spending is reduced. Because buyers have so many viable options to reduce costs, spending on hardware support will continue to be relatively flat.

Attach rates and renewal rates for cloud and noncloud PSS will not materially change through 2019.

During 2014, Gartner conducted interviews with service executives of PSS providers on the key measurements and key performance indicators (KPIs) that drove their service businesses (see "Performance Road Map: Best Practices for Shaping Service Provider Business Strategy for Product Support Services"). Two of the key measures investigated were sales performance and

support portfolio adoption. In the discussions with executives, attach rates and renewal rates were consistently included in the metrics used by service providers. A consistent finding was that the metrics used by any one service provider varied by a number of factors, such as hardware products versus software products and on-premises software versus cloud solution, and customer segments, such as small-or-midsize-business customers versus large enterprises. The actual numbers for a particular service provider in its specific service markets varied widely. Additionally, the metrics varied depending on whether the provider applied the metrics to sales performance or adoption of a support offering. Some providers held that best in class was between 75% and 80% for adoption of a support portfolio. Some said that their metric for sales performance was a 90% attach rate. Different providers said it was 96% for renewal.

Despite the many variations in the actual numbers, the trends for a specific measure, such as sales performance, were consistent and stable when viewed for a specific service line, support offering and customer segment. Measurement of attach rates and renewal rates is a very thorough and mature process across all PSS providers. While individual service providers may make notable gains in specific product/service markets, we would not expect to see major shifts at the industry level.

IT Product Support Budget

IT budgets for PSS will not vary by more than 1% for the next two years.

Gartner conducted a survey of 2,016 respondents in December 2013. The survey gathered input on the respondents' forecast and budget characteristics. The respondents made the following key points:

- Regarding changes in spending with external service providers during the next 12 to 24 months, 40% of respondents expected a slight increase, and 30% expected no change in spending.
- Regarding spending in economic downturns, 49% of respondents indicated that budgets are maintained, but watched more closely. Only 5% indicated that spending is cut immediately when economic signs point down.
- When asked about how IT budgets are set for the next year, 41% of respondents indicated that it is adjusted up or down based on business performance. Twenty-eight percent indicated it was set to match the total of operational commitments, maintenance and approved IT projects.
- When asked to characterize how their organization responds to major external events, such as economic shocks, new market entrants or innovations from competitors, 38% of respondents indicated they made a best-effort response, while reworking tactical and strategic plans to adapt to the external event.

Based on these trends, as well as historical indicators of IT technology spending, we believe that, barring significant widespread economic downturns, IT spending on PSS providers will remain stable for at least the next two years.

IT budgets will increase, but not by more than 1% globally, from 2014 to 2015, resulting in barely perceptible changes in PSS spending.

Gartner surveyed 2,810 CIOs in the 2015 CIO Survey. CIOs were asked to quantify the percentage change they expected in IT expenditure from 2014 to 2015. CIO respondents indicated the following:

- The weighted average budget increase for all respondents was 1.0% for 2015. Regional results included:
 - North America: 0.8%
 - Latin America: 0.4%
 - EMEA: 0.9%
 - Asia/Pacific and Japan: 3.0%

With a significant portion of CIO respondents indicating that spending will be flat or actually increase, we make the assumption that spending was expected to increase for 2014, but only very marginally.

Support Models and Pricing

Fast-paced business needs will drive increased SaaS adoption, which will have a growing impact on the demand for software support services through 2019.

Demand for SaaS is resulting in a shift in spending from annual maintenance and support contracts, to spending on subscriptions that include software support services. SaaS vendors' revenue is already included in Gartner's public cloud Forecast, and this revenue influences the software support service market.

Although pure SaaS vendors do not typically include a fee for the most basic technical support, many include additional fees for higher levels of technical support in their per-seat rates, or they sell tiered support offerings on an annual or multiyear contract basis, but this spending will continue to be relatively small relative to support for traditional software.

Pure SaaS vendors are more isolated from economic downturns than traditional software vendors, because customers cannot delay or defer the ongoing subscription for SaaS as they can with some software upgrades. In some software markets, vendors that deliver SaaS offerings are growing faster than on-premises software vendors.

Sociopolitical and Macroeconomic Trends

We base our economic assumptions on GDP forecasts from IHS Economics & Country Risk (formerly IHS Global Insight). We set our economic assumptions at the beginning of each forecast cycle based on the latest available economics forecast.

Real GDP will not vary more than a half-percent from the mean for the three major regions of the PSS forecast through 2019.

The three largest regions that comprise our forecast are Asia/Pacific, North America (predominantly, the United States) and Western Europe. Based on real GDP estimates available in March 2015, the mean real GDP of the three major regions is forecast in 2015 to be:

- 4.8% for Asia/Pacific
- 3.0% for the U.S.
- 1.7% for Western Europe

The real GDP of specific countries may vary more widely than a half-percent during the next five years, but we don't expect change at a country level to materially affect the product support forecast in a given year. Likewise, as long as the major regions do not experience a widespread economic change of more than a half-percent, we don't expect there will be a material effect on segments of the PSS forecast at the worldwide level.

Competition and Alternative Providers

Alternatives to vendor-delivered support will have no detectable impact on the total market size for PSS through 2019.

The market for third-party hardware maintenance is very competitive, especially for data center hardware (servers, storage and network equipment). The market in the U.S. is very fragmented with many small independent service providers. Due to the size of the players, the impact on the hardware service market at the total worldwide level is negligible.

Alternatives to vendor-delivered software support services, including third-party application maintenance and support services, will not result in a measurable difference in the market size, at either the vendor level, or in support services for a specific application or an infrastructure software submarket. Although interest in third-party application maintenance and support services is growing, inhibitors to the growth of adoption of third-party contracts include the end-user organizations' perceived risk, end-user concern about the viability and financial stability of the third-party organizations, and end-user concern about the quality of support offered by third-party application maintenance and support service firms. The main driver for adoption is cost reduction, although some end-user organizations cite a desire for more-customized service levels.

The very small market for third-party application maintenance and support services will not influence the market overall, or even the subsegments of BI, CRM, ERP and SCM software services. Nevertheless, this market offers significant cost savings for the right customers.

Gartner estimates that currently about 25% of the software market is composed of open-source software. Although the uptake of open-source software is increasing as a result of customers looking for lower-cost alternatives, it has not yet resulted in a noticeable dent in the software service market, which is driven primarily by proprietary software.

Through 2019, a lack of alternatives for proprietary software support will continue to limit price competition in software support services.

Software is inherently extensible, and new features are not robust, often requiring bug fixes. Software vendors, protected by copyright and patent laws, are the only entities that can change product source code. As a result, even though discounting on software support contracts will continue, larger software vendors will enjoy enviable pricing power, and they will continue to bundle product updates with labor-based support services.

Market Model or Methodology

Our market model is a representation of the main factors that are considered in our forecast process and that underpin the hardware and software support service spending forecast (see Figure 1). The market model uses a fact-based approach, consisting of multiple sources of available information, including public information on economic performance and relevant quantitative statistics, along with Gartner's market share analysis of service provider performance and supporting statistical research. It is supplemented with a qualitative assessment of other influencing factors, which analysts review on a quarterly basis. All the factors that can influence our forecast factors are described in this section.

The forecast for the PSS market provides our worldwide predictions for hardware and software support service spending during the next five years, by region and country for each market segment. There are two top-level segments to Gartner's IT services taxonomy: business services and PSS. Gartner's PSS market taxonomy is composed of two major segments and 13 subsegments. The segment structure for the PSS lines is shown in Table 1.

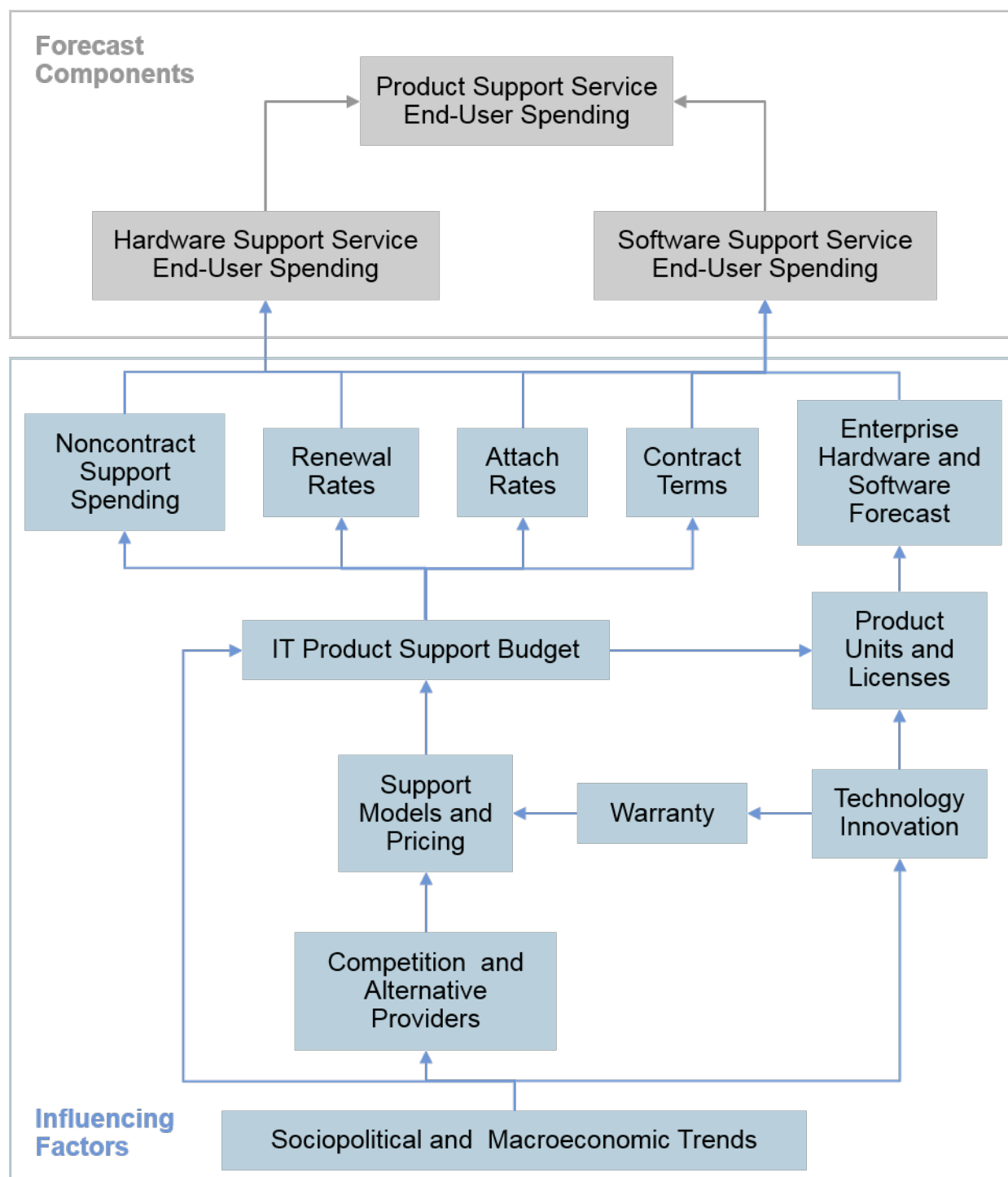
Table 1. PSS Segments

Top Segment	First Subsegment	Second Subsegment	Third Subsegment
Product Support	Hardware Support	Client Device Support	
		Data Center System Support	
		Network System Support	
	Software Support	Application Software Support	BI, CRM, ERP and SCM Software Services
			Office Suites Software Services
			Other Application Software Services
		Infrastructure Software Support	Application Development Software Services
			Information Management Software Services
			IT Operations, Storage and Security Software Services
			Operating System Software Services
			Other Infrastructure Software Services

Source: Gartner (August 2015)

For a full description of each PSS market segment and subsegment, see "Market Definitions and Methodology: IT Services."

Figure 1. PSS Market Model



Source: Gartner (August 2015)

Forecast Components

PSS spending is the composite of our forecasts for hardware and software support service spending. It is a top-level segment in our IT services forecast and a peer service line to business services.

Influencing Factors

Influencing factors are inputs that, when applied to forecast components, shape the forecast output. There are two distinct phases to the PSS forecast process:

- Phase 1: Historical installed base sizing for hardware and software support services. Segment the base year (before the forecast year) market spending into PSS segments.
- Phase 2: Forecasting the market. Future spending on PSS is based on hardware and software product market forecast and adjustments to the contribution based on assumptions about influencing factors.

IT Product Support Budget

The budgets of IT organizations for products and PSS are a central influencing factor for hardware and software product support. The IT product and product support budget is driven from the supply side by two influencing factors:

- Service provider support models and pricing
- Sociopolitical and macroeconomic trends

These two factors determine the choices an IT organization has for product support and the economic environment that influences the organization's ability to spend.

Support Models and Pricing

Service provider support models and pricing for PSS offerings enable customers to select from a range of support offerings that match the customer's requirements for support coverage and the level of affordability their budget provides.

Competition and Alternative Providers

Competition between vendors in a market, for example, hardware product support, is a key driver of support models and pricing. Support models and offerings evolve based on technology innovation, and they also create or maintain competitive differentiation in the market. Service from alternative service providers that could be used in place of vendor-provided support and maintenance is another form of competition, and provides the IT organization additional choices for meeting its support requirements.

Demand-Side Factors

On the demand side, the IT organization makes buying decisions in four areas that directly affect spending for hardware and software support services:

- Attach rates — This is the rate for attaching support services to products.
- Renewal rates — This is the scope of renewal for product support contracts.
- Contract terms — The most influential contract term is the length of hardware and software support contracts.
- Noncontract support spending — This is PSS provided outside maintenance and support contracts, and it is a complement to product support contracts.

Demand-side trends in the IT organization impact consumption of hardware and software products and services. For example, CIO and CFO IT spending expectations are indicators of future investments that will require hardware or software support services.

Enterprise Hardware and Software Product Forecasts

Product forecasts for hardware and software are a major determinant for the incremental spending on support services in any given year. Sales of products represent new incremental spending in a given year that adds to the momentum of PSS annuity spending from the previous year. The incremental nature of product sales and the annuity characteristics of PSS behave very differently. For example, a 6% increase in a specific software market does not translate to a 6% increase in the related software service market.

Enterprise Software Forecast

Future software product spending is an indicator of incremental service demand (see "Forecast: Enterprise Software Markets, Worldwide, 2012-2019, 2Q15 Update"). The outlook for software support service spending is based on our forecast for software product spending.

A portion of software market spending represents new incremental software support service contracts in each year of the forecast period. Software product spending is incremental spending in a specific calendar year that is the result of a major new product acquisition or procurement of additional licenses for an existing product. Major purchases occur at the time of a technology refresh, and set the beginning of a life cycle for that software product. It may be five to 10 years before a specific technology user makes another major purchase, while the purchase of additional licenses is typically an ongoing process. These cycles are definitely affected by economic conditions, and as a result of business financial performance, these large investments may be delayed or curtailed, depending on the severity of the financial conditions.

The incremental spending is derived by applying the historical contribution ratio to spending represented in the enterprise software forecast. The amount of incremental spending is modified up or down for each software market segment or the software market as a whole, by IT spending trends and economic trend factors.

Generally, the incremental spending follows the trend of software product spending. Higher growth for a software market in one year generates more incremental growth in the corresponding software service category, and vice versa. Therefore, the forecast for software product spending acts as a "kicker" to give the flywheel of software service spending an incremental boost on an annual basis.

As with the installed base, factors that influence the enterprise software forecast include attachment rates, pricing methodology and discounting. The influences of these factors are built into the enterprise software forecast. If we anticipate separate trends related to services in the forecast years, we account for them in the IT spending trends. Supply-side trends in the software product market include recent quarterly financial data, which is an indicator for short-term market growth.

Product Units and Licenses

The hardware and software product forecasts are an outcome of the purchase of specific hardware and software products, which is influenced directly by the IT product support budget and by the products available from current and previous technology innovation.

Technology Innovation and Hardware Warranty

Technology innovation ensures the evolution of hardware and software products. It is influenced by the sociopolitical and macroeconomic trends at the region and country levels. Technology innovation directly affects the creation of support offerings that ensure the successful adoption and operation of the technology. For hardware products, the technology leads to the development of specific warranty strategies that also influence support models, offerings and pricing.

Sociopolitical and Macroeconomic Trends

Sociopolitical and macroeconomic trends influence several factors in the PSS market model, including:

- IT product support budgets
- Competition and alternative providers
- Technology innovation

GDP growth forecast and business confidence indexes are indicators of investment climate; IT is a significant component of business investment. For example, if GDP makes a marked improvement in the U.S., causing manufacturing to grow rapidly, this may signal an uptick in new hardware and/or software deployments for that industry and, thus, an increase in related support services. Another example would be a financial crisis in a specific region or country that could stall spending on new hardware and/or software products, but that often ensures continued spending on existing product support maintenance and support.

Sociopolitical and cultural trends include educational impact; for example, a large availability of skilled IT labor can impact growth of the IT services markets, in general, and PSS markets, in particular. For example, the large pool of skilled software programmers and software help desk

consultants in India (and, to a lesser extent, China) can have a stimulatory impact on the growth of their domestic software support service markets due to the ease of hiring such support staff.

Finally, the bundling practices of vendors tend to be the same across the market. If one or more vendors break rank with the norm for bundling maintenance and support, it could cause a shift in spending for support services. We may detect this in a change of vendor practices, or it could be foreseen as a shift in IT spending. Either way, we would make appropriate adjustments to the forecast contribution ratio, which would, in turn, affect the growth rates in specific markets.

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

"Forecast: IT Services, Worldwide, 2013-2019, 2Q15 Update"

"Forecast: Public Cloud Services, Worldwide, 2013-2019, 2Q15 Update"

"Forecast Analysis: IT Services, Worldwide, 2Q15"

"Market Definitions and Methodology: IT Services"

"Market Definitions: Software"

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