Forecast Analysis: Enterprise Application Software, Worldwide

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Initiatives: Technology Market Essentials and 1 more

This analysis is a follow-on to Gartner’s “Forecast Analysis: Global Recession Scenario” and associated Forecast Alert publications. The global enterprise application software spending is forecast to shrink to $196 billion in 2020 (a reduction of 4.6% over 2019 in constant currency).

Overview

Forecast Assumptions

- In 2020, more than 90% of the enterprises will delay investment in new software projects on account of reduced revenue streams — due to government administered lockdowns and changes in buyer behavior.

- By 2021, 95% of all new enterprise application software purchases will be on the cloud instead of 75% assumed in our previous forecast.

- Through 2021, recovery of demand for enterprise application software will vary across vertical industries. Demand for enterprise application software from “critical infrastructure” industries will recover sooner than “people gathering” verticals.

Market Impacts

- Spend on enterprise application software is expected to decline by 4.7% in 2020.

- Software spend on cloud is expected to increase by 6.8% while spend for on-premises software will decline by 15.2% in 2020.

- Enterprise spend on manufacturing and operations technology and enterprise asset management will be the last to return to its 2019 level, because of its large exposure to the “people gathering” industries.

Notable Changes

This forecast analysis is subsequent to Gartner’s “Forecast Analysis: Global Recession Scenario” and related Forecast Alerts.
Forecast Data Summary

Figure 1 shows the 2019 market size (bubble size) in constant U.S. dollars, the 2020 growth estimate in constant currency (x axis) and the compound annual growth rates in constant currency (y axis) for the enterprise applications software markets.

Figure 1. Enterprise Applications Software 2019 Market Sizes, 2020 AGRs and 2019-2024 CAGRs
(Millions of Dollars)

Table 1 shows the market sizes, annual growth rates (AGR) and compound annual growth rates (CAGR) for Enterprise Applications Software markets.

Table 1: Enterprise Applications Software Forecast, 2019 to 2024 (Millions of Dollars)

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<tbody>
<tr>
<td>ABI</td>
<td>23,998</td>
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<td>33,039</td>
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According to "Forecast: Enterprise Application Software, Worldwide, 2018-2024, April 2020 Update," the overall global enterprise application software spending in 2020 is expected to decline by −4.7% in 2019 to $225 billion in constant currency. In 2021, we estimate the growth rate to be 7.4%. By 2024, the global software spend will reach $3.61 billion, with a five-year compound average growth rate (CAGR) of 8.9% in constant currency.

As industries and businesses go through the process of dealing with revenue uncertainties, managing cash flow will be of utmost concern for CFOs. CIOs will be asked to control their spending in line with their company’s uncertainty. As a result, spending on software will suffer increased pressure in 2020.

CIOs will prioritize spend on software applications that are deemed nondiscretionary and mission-critical over spend on applications aimed at growth or transformation with a longer ROI time frame. In this scenario, software applications with a higher recurring revenue will be better placed.
to withstand this recession than the software applications markets that have higher dependence on new license revenue. In 2019, the recurring revenue that has grown to include SaaS, maintenance as well as subscriptions for on-premises software, accounted for around 80% of total software applications spending. Therefore, in 2020, we expect this large stream of recurring revenue to cushion the initial effects of a recession for most software providers. However, Gartner also assumes a decline in recurring revenue stream for many software vendors. This will be particularly true for market segments where consumption-based or user-based revenue is predominant (for example, sales automation within CRM and talent management within human capital management [HCM]/ERP). These markets will see retractions from clients trying to control costs and cash flow as well as a significant loss of workers. Similarly, contracts involving volume-based pricing (such as price per user, per traffic volume or per events processed) will have reductions from customers with either the ability or the necessity to reduce volumes.

**Forecast Model Summary**

Figure 2 shows our market model for enterprise applications software worldwide.

*Figure 2. Enterprise Applications Services Market Model*
Influencing Factors and Assumptions

Influencing Factor: Company and Unit Adoption

In our forecast market model, we look at software adoption in two ways — organizational adoption and unit adoption within organizations. The key parameters of these functions are the same, as we consider initial adoption, maximum adoption and growth during the forecast period.

Company Adoption: Spending on software depends, ultimately, on the number of organizations needing to purchase any functionality, and how long it will take these organizations to make their initial purchase.

Unit Adoption: Closely tied to company adoption is unit adoption, which identifies how the software technology is sold, and establishes how many units an organization would purchase...
initially.

**Forecast Assumptions**

During the year 2020, more than 90% of enterprises will delay investment in new software projects on account of reduced revenue streams due to government administered lock downs and changes in buyer behavior.

CFOs across the world are being asked to control spending in line with their company’s revenue inflow and to conserve cash. Spending on software applications will be one such area. The pressure to control spending on software will vary across industries and regions. For example, vertical industries like airlines, travel and manufacturing will take more extreme measures to cut software budgets to deal with the situation of limited or no revenue than other industries and regions. However, even as the degree of cuts in software spending will vary, all industries and regions are expected to initially defer discretionary spending first and quickly pause new projects as they are re-evaluated.

Further, we expect that projects that have low cash needs and a short time to value may be allowed to continue, while those with a longer time frame, regardless of their return on investment, will be canceled or delayed. Also practical issues with completion of the procurement cycle or project kickoff, even in companies that have the budgets (office lockdowns, conducting processes across distributed teams, perhaps some temporary furloughs of people involved, limited experience for remote implementation by both clients and vendors/system integrators [SIs] and so on) will also impact spending.

One of the areas that continue to see growth will be digital commerce. We are seeing a shift of spending from offline channels to digital channels and so enterprises will reallocate some spend to digital commerce that will enable them to achieve shorter time to market cycles and simpler (more economical) solutions.

**Influencing Factor: Purchase Style**

Purchase style is composed of license (on-premises and perpetual), SaaS, subscription (hosted) and open source.

The parameters shaping purchase style are the same as the software adoption parameters (initial adoption, maximum adoption and growth during the forecast period). They are used to reflect the differences in adoption that each purchase style has by company and user.

Additional parameters allow us to bind a purchase style by the years it was available, since not all purchase styles have been available or will be available for the entire forecast. For most of the history of enterprise applications software, the on-premises perpetual license has been vastly preferred over other available purchase styles (such as subscription, open source and SaaS). However, since 2007, SaaS has become more accepted and an increasingly popular purchase style by organizations and users adopting for the first time, as well as by those replacing or expanding...
their existing software. As a result, purchase style has become an increasingly important parameter affecting the dynamic of the enterprise applications services (EAS) market.

Within purchase style, we make explicit assumptions about the rate of SaaS, subscription and open-source adoption. Our assumptions about license adoption are then implicit in the difference between our explicit assumptions about overall software adoption and our explicit assumptions about other purchasing styles. Thus, if we assume an especially fast rate of SaaS adoption relative to overall software adoption, then SaaS is implicitly cannibalizing the growth of license and maintenance.

**Forecast Assumptions**

By 2021, 95% of all new software purchases will be on the cloud — instead of 75% estimated initially.

Gartner believes that enterprises won’t “bounce back” to where they were, but, instead “pivot forward” toward where they were already heading. One of the consequences of this behavioural change will be that the enterprises will prefer to accelerate the adoption of cloud solutions (platforms and software) giving them the flexibility to pay just for the capacity and consumption they need.

We are already seeing industries such as government, healthcare and education that have been forced into digitalization to meet customer needs. This will push the need for more modern (cloud) technology. Some of this upward trend in adoption of cloud will, however, be offset by slashed budgets in some cases (lockdown in higher education).

Starting 2021 through 2024, Gartner expects demand for cloud solutions to rebound strongly, with annual growth forecast to be in the 14% to 21% range. This strong growth will also be driven by a shift of focus of enterprises to invest in projects that have a shorter time to ROI leading them to prioritize smaller stand-alone efforts such as SaaS/platform as a service (PaaS) functionality over projects that require extensive enterprisewide coordination.

**Influencing Factor: Macroeconomics**

The variation in firmographics and macroeconomics — including growth of enterprises, size of enterprises, type of industries, GDP growth trends, unemployment rates driving changes in enterprise demand — has a direct impact on the size of the addressable enterprise applications software market.

**Forecast Assumptions**

Through 2021, recovery of demand for enterprise application software will vary across vertical industries. Demand for enterprise application software from “critical infrastructure” industries will return sooner than the “people gathering” verticals (see Note 1).
Impact on demand for enterprise application software will be widespread between industries. For example, throughout 2020, direct crisis mitigation activities will be a major driver of sustaining software spend in government and healthcare segments. We will see continued demand for innovative software solutions from agencies focused on public health and safety, national security, and critical infrastructures to address emergency response, mitigation and recovery. Alternatively, demand for software applications from the transport industry will be hit badly as countries close their borders, corporations restrict business travel, resulting in the number of flights being drastically reduced, with some airlines grounding 95% of their fleet and others filing for bankruptcy. The passenger segment, such as bus transit, as well as rail and water sectors, have also been hit, as there are concerns about people travelling in subways, buses, rail and cruise ships.

From 2021 onwards, EAS markets that have a higher reliance on “people gathering” vertical industries — where people have to engage with each other in close quarters — such as air transport, restaurants, physical retail, hotels, education, will show a slower recovery than software markets that derive revenue from “critical infrastructure” industries such as utilities, government, healthcare, banking and securities, communications, media and services. For example, enterprise spend on manufacturing and operations will be the last to return to its 2019 level because of its large exposure to the manufacturing industry, whereas customer service and support will rebound to its 2019 spending levels sooner because of its exposure to diverse industries.

### Acronym Key and Glossary Terms

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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABI</td>
<td>analytics and business intelligence</td>
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<tr>
<td>AGR</td>
<td>annual growth rate</td>
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<td>CAGR</td>
<td>compound annual growth rate</td>
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<td>CFO</td>
<td>chief financial officer</td>
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<td>CIO</td>
<td>chief information officer</td>
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<td>CRM</td>
<td>customer relationship management</td>
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<td>ERP</td>
<td>enterprise resource planning</td>
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<td>GDP</td>
<td>gross domestic product</td>
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<td>HCM</td>
<td>human capital management</td>
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<td>PaaS</td>
<td>platform as a service</td>
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<td>PPM</td>
<td>project and portfolio management</td>
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<td>ROI</td>
<td>return on investment</td>
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<td>SaaS</td>
<td>software as a service</td>
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<td>SCM</td>
<td>supply chain management</td>
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<tr>
<td>SI</td>
<td>system integrator</td>
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**Note 1: People Gathering Verticals and Critical Infrastructure Verticals**

Many countries are currently looking at how to lead the recovery of economic activity coming out of the lockdown. In “Forecast Analysis: Global Industry Recession Scenario” Gartner introduced the model that classifies expected IT spend across five initial back-to-work priority categories:

1. Critical infrastructure (subsegments largely operating throughout the pandemic)
2. Essentials supply chain (nondiscretionary products and services, such as food)
3. Nonessentials supply chain (more discretionary products and services)
4. People gathering (industry segment most impacted or even locked down due to social distancing measures)
5. Support industries (industry segments operating more in the background but essential for restarting some of the other segments)

When scrutinizing vertical industries, some “people gathering” verticals were directly impacted by the shutdown, such as air transport, restaurants, physical retail, hotels, education. Alternatively, such industries as utilities, government, healthcare, banking and securities, communications, media and services, being “critical infrastructure,” will continue their business activities throughout the pandemic.

**Document Revision History**

- Forecast Analysis: Enterprise Application Software, Worldwide, 4Q18 Update - 8 January 2019
- Forecast Analysis: Enterprise Application Software, Worldwide, 3Q18 Update - 19 October 2018
- Forecast Analysis: Enterprise Application Software, Worldwide, 2Q18 Update - 20 July 2018
Recommended by the Authors

Forecast: Enterprise Application Software, Worldwide, 2018-2024, April 2020 Update
Forecast Alert: Software, Worldwide, 2020
Forecast Analysis: Global Recession Scenario
Forecast Analysis: Global Industry Recession Scenario
Forecast Analysis: Enterprise Application Software, Worldwide

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Gartner Peer Insights ‘Voice of the Customer’: IT Infrastructure Monitoring Tools in Services Industries
Building the I&O Talent Strategy: Key Insights From the 2020 IT Skills Roadmap
Good, Better, Best Measurement
In Focus Video: İşbank’s CIO Explains How to Confront a Crisis and Come Out Stronger

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