FORRESTER®

Move Toward A Sustainable Digital Future With IFS Solutions Deployed In The Cloud

Sustainability-focused companies see better financial results than their peers.[1] Digital operations platforms can provide organizations with insights on the breadth of their operational footprint and related emissions.[2] This baseline helps chart improvements toward creating future-fit, optimized organizations.

IFS's end-to-end, enterprise resource planning (ERP), service, and asset-management solutions deliver advancements in digital operations. For both hybrid-configured organizations and those seeking to operate fully in the cloud, IFS provides a flexible journey to evergreen software with the trusted partnership of Microsoft Azure. IFS cloud solutions offer extensive industry expertise with purpose-built technical capabilities and AI.

To better understand the benefits, costs, and risks associated with IFS solutions deployed in the cloud, IFS commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study.[3]

Forrester interviewed the following representatives:

- A chief information officer (CIO) in the technology industry.
- A global ERP director in the chemicals industry.
- A director of service management in the food packaging industry.
- A director of engineering and IT in the manufacturing industry.
- An IT manager in the manufacturing industry.
- A maintenance development manager in the manufacturing industry.

Benefits PV
$36.61M

Sustainability-related benefits PV
$13.83M

Of these six interviewees' organizations, five have global operations and one has European and North American operations. Total employees at the interviewees' organizations range from 700 to 25,000.

This abstract will focus on the longer-term sustainability value that interviewees forecast from their organizations' use of IFS solutions deployed in the cloud.

For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single composite organization that is a capital-intensive, manufacturing business with $1 billion annual revenue, 5,000 employees, 20 entities in IFS, and five production sites.

READ THE FULL STUDY

DRIVERS OF SUSTAINABLE INVESTMENT

According to Forrester research, the business value of sustainability extends beyond process efficiencies and cost avoidances to impacting revenue growth from new opportunities, employee retention, attracting new investments, regulatory compliance, and the innovation that sustainability incubates.[4]

The full case study explores investment drivers for all six interviewees, and it highlights several challenges and catalysts for both existing and net-new IFS customers.

The previous technology environments of the interviewees' organizations had extensive hardware and capex. In some cases, interviewees reported legacy environments over 20 years old and required significant hardware and infrastructure reinvestments to operate.

Regular upgrades and ongoing maintenance added cost and process inefficiencies to IT resource and capital expenditures (capex).

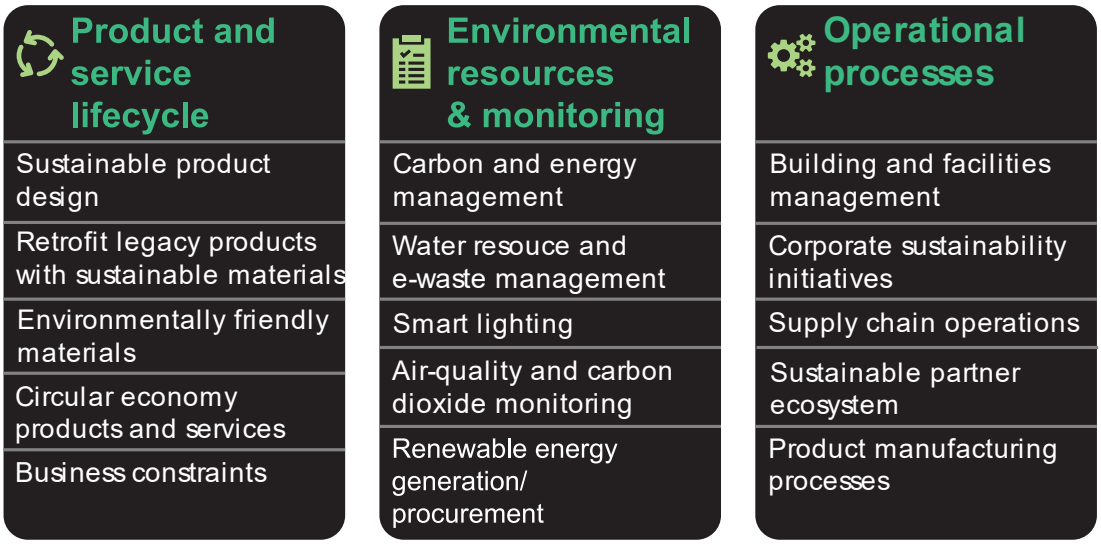
The composite organization seeks to maximize the environmental benefits of IFS cloud solutions by optimizing capital and operational expenditures.

Interviewees said their organizations selected IFS cloud-deployed solutions because IFS supported their firms' sustainable business targets.

These included goals to:

- Shift to the cloud incrementally and strategically.
- Lower carbon footprints through better planning, reduced on-premises hardware and energy consumption, and reduced travel between sites.
- Consolidate inventories and gain efficiencies in equipment maintenance and deprecation.

Figure 1. Industrial sustainability addresses products, resources, and operational processes.



KEY SUSTAINABILITY RESULTS

Interviewees reported quantified opportunities for more sustainable business operations with IFS solutions deployed in the cloud. Three-year, risk-adjusted present value (PV) benefits for the composite organization include the following:

- **20% reduction in inventory carrying costs, which lowers capex by $12.3 million.** With IFS supply chain insights, the composite organization minimizes obsolescence, transportation, and inventory holding expenses, which reduces the physical sprawl and effort required to maintain its legacy infrastructure.[5] IFS solutions deployed to the cloud enable edge and IoT devices and harness the power of automation and machine learning to lower their capital expenditures and inventory carrying costs.

  Positioning inventory efficiently ahead of anticipated demand and close to customers reduces the composite's carbon footprint. Leveraging these emerging technologies allows the organization to position inventory efficiently ahead of anticipated demand and close to customers, which helps it reduce its carbon footprint.[6] Forrester research indicates that deploying these technologies can further give insight and increase efficiency in asset-intensive industries.[7] This helps to:

  - Reduce the carbon footprint and energy consumption of massive cloud data centers by storing and analyzing data in the location it's created.
  - Decrease critical resource use (e.g., water and energy) and minimize waste.
  - Lower hazardous greenhouse gas (GHG) emissions.
  - Improve the health and safety of customers and employees and satisfy compliance requirements.
  - Give citizens, customers, and employees insights into harmful air pollutant levels at a given place and time.

> **"The legacy hardware that we decommission will reduce our carbon footprint. With better production, we will be able to scrap less, become more careful with our natural resources, and reduce the cost of electricity."**
>
> *IT manager, manufacturing*

- **Savings of $1.5 million from decommissioning hardware and moving to an evergreen software approach**. By deploying IFS solutions hosted in the Azure cloud ecosystem, the composite organization retires 70% of its hardware. This saves on license, support, update, and patch costs, and costs to maintain legacy hardware while helping to decrease physical and carbon footprints.[8] Furthermore, moving to an Azure-hosted data center further decreases the composite's carbon footprint by reducing the physical sprawl of its legacy data center, which eliminates on-premises power and cooling requirements and increases reliance on renewable energy.[9]

  The director of service management in the food packaging industry said their organization has a comprehensive corporate sustainability strategy with IFS at the center of its sustainable resource planning ecosystem. They relayed that their organization is making sizable investments in solar panels and renewable energy, reducing carbon emissions, and adding energy back to the grid.

  They said their organization also has ambitions to move to a virtual-reality training environment to reduce foot traffic through physical training centers and further decrease the organization's carbon footprint.

The CIO in the technology industry said that through IFS deployed in the cloud, their organization decreased its energy consumption. And by moving to a smaller data center and reducing the number of servers, the organization reduced its physical data infrastructure footprint.

- **Fewer paper processes and avoidance of costly errors.** The director of engineering and IT in the manufacturing agency pointed to the power of automation in significantly reducing inefficient, error-prone paper processes. They said: "We have about 200 different SQL reports that we are leveraging daily, weekly, monthly. With the IFS reporting portal, we will only produce 20% to 25% of those now. … There's a lot of labor associated with paper processes. … We anticipate just having visibility and standardizing that with digital processes [will produce] a lot of operational efficiencies."

Scaled impact of paper

Carbon emissions per page (g CO2e) **4.4 g**

Pages per tree **10,000+**

Source: Ana Claudia Dias, "Comparison of methodologies for estimating the carbon footprint," Journal Of Cleaner Production, March 2012.

THE TOTAL SUSTAINABILTY IMPACT OF TECHNOLOGY

Digital operations platforms like IFS solutions deployed to the cloud can provide organizations with insights on the breadth of their operational and infrastructure footprints and related emissions. On the other side of the value proposition, introducing new and emerging technologies can have the following hidden risks:

- The impact of potential e-waste resulting from large volumes of new and legacy devices and batteries associated with IoT and edge devices.
- Reliance on other emerging technologies such as AI/ML and virtualization that can require considerable compute requirements with corresponding power demands.
- The organization's approach to cloud hosting.[10]

"Every day, we agree on why we are deploying IFS cloud solutions: to move away from the combustion engine, to enter new markets, and to grow a profitable company that can last a hundred more years."

IT manager, manufacturing

SUSTAINABLE PATHWAYS WITH IFS DEPLOYED IN THE CLOUD

Interviewees said having improved visibility into their organizations' speed, consistency, reliability, and quality of insights with IFS deployed in the cloud helped their firms advance toward more sustainable business practices.

Just as each organization's cloud journey will vary, so too will each organization's sustainability strategy and related reporting. Organizations that leverage sustainability-related optimizations should consider a longer-term investment horizon. Operational efficiency affects bottom- and top-line growth, and it supports an innovative work culture. Having a general sense of making a positive effect on the planet motivates employees to find creative solutions around archaic processes and ways of working.[11]

Because the return on sustainability-related investments can be difficult to quantify, Forrester advises that a strong sustainability ROI takes time. Important up-front costs in setting up a holistic sustainability approach for an organization include third-party independent assessments and time spent on planning and implementation efforts.

Contact IFS for additional details.

TOTAL ECONOMIC IMPACT ANALYSIS

For more information, download the full study: "The Total Economic Impact™ Of IFS Solutions Deployed In The Cloud," a commissioned study conducted by Forrester Consulting on behalf of IFS, April 2023.

STUDY FINDINGS

Forrester interviewed six representatives at organizations with experience using IFS solutions deployed in the cloud and combined the results into a three-year composite organization financial analysis. Risk-adjusted present value (PV) quantified benefits for the composite organization include:

- $18.5 million in labor efficiencies reallocated to growth activities.
- $12.3 million in capital cost efficiencies.
- $4.3 million in reporting and uptime efficiencies.
- $1.5 million in savings from decommissioning legacy on-prem environment.

Benefits PV

$36.61M

Sustainability-related benefits PV

$13.83M

Appendix A: Endnotes

[1] Source: "Factors Driving The ROI Of Sustainability," Forrester Research, Inc., April 22, 2021.

[2] Source: "The State Of Industrial Sustainability In 2022," Forrester Research, Inc., May 27, 2022.

[3] Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

[4] Source: "Factors Driving The ROI Of Sustainability," Forrester Research, Inc., April 22, 2021.

[5] Source: "The ROI Of Supply Chain Management," Forrester Research, Inc., April 6, 2022.

[6] Source: Ibid

[7] Source: "Jekyll And Hyde: The Dual Role Of Emerging Tech In Environmental Sustainability," Forrester Research, Inc., April 20, 2022.

[8] Source: "The Forrester Technology Sustainability Framework," Forrester Research, Inc., July 26, 2021.

[9] Source: "Guide Your Sustainability Program With The Forrester Sustainability Maturity Model," Forrester Research, Inc., October 27, 2021.

[10] Source: "Jekyll And Hyde: The Dual Role Of Emerging Tech In Environmental Sustainability," Forrester Research, Inc., April 20, 2022.

[11] Source: "Factors Driving The ROI Of Sustainability," Forrester Research, Inc., April 22, 2021.


FORRESTER®