Helping the Planet

The role of EAM technology in enterprise sustainability

IFS

Global climate change is causing a seismic shift in how we do business.

Most organizations are motivated by good corporate citizenship and a desire to make real and lasting change, while others are focused on regulatory oversight and other commitments.

Balancing green (sustainability) and gold (profitability) are essential regardless of the impetus. Businesses that aren't profitable won't be in business long–no matter how well they care for the environment.

In a recent webinar, we examined the impact of sustainable practices on the planet and the business – in particular for those organizations that rely on enterprise assets to manufacture, produce, and serve. This paper provides additional research and insights to help your organization become cleaner and greener.

The New Order

Customers, investors, and employees expect the business to be accountable. While in the past this pertained to financial returns, profitability, and safety, today accountability extends to how well we treat the planet, with Environmental, Social, and Governance (ESG) goals clearly defined and tracked.

Some examples of environmental objectives include improvements in carbon emissions, air and water pollution, deforestation, waste management, water usage, and many others.

Along with damaging the environment, failure to deliver on these goals has far-reaching effects on the enterprise:

- Customers will leave, choosing to do business with greener competitors

- Potential new hires will select employers with stronger sustainability practices (as will your existing workforce)

- Investors that use ESG metrics to screen investments will invest in other companies

- The business will suffer from enduring reputational damage

Achievement of ESG objectives is imperative to the success of the business. Companies that fall short will not survive.

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The Current State of ESG

Governments and regulatory bodies are supporting responsible behavior with funding incentives, as well as penalties for those who don't comply.

For example, in the energy, utility, and resources sector, 91% of utilities in North America reported increased investments in ESG, leveraging the Infrastructure Investment and Jobs Act and other government funding initiatives.

We see even more funding options and regulatory oversight in Europe. For example, failure by a utility to deliver on ESG standards directly impacts its credit rating, impeding access to the funding needed to make capital expenditures that help achieve sustainability goals.

While there are clear-cut rules and regulations to keep everyone honest, there are also many positive examples of enterprises leading the charge and setting targets that far exceed the standard.

A good example is Sporveien AS, Norway's largest public transport operator. The company has implemented IFS Cloud to support Oslo's ambitious objective to become a zero-emission city in just one decade. The technology allows Sporveien AS to digitalize its operation, including its enterprise asset management (EAM) strategy, to provide greener and cheaper transport

"

IFS has been essential in our journey towards digitalisation. The upgrade we are undertaking will position us to make a smooth transition to becoming evergreen, and provide us with the comprehensive end-to-end functionality and a single platform that simplifies our business processes and means we can focus on our mission: a green city"

Marianne Vik, CFO

sporveien

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How Asset Management Supports ESG Objectives

For asset-dependent organizations such as Sporveien, sustainability success will depend upon how well the company manages and maintains its enterprise assets, including:

- Timely maintenance to optimize energy efficiency

- Consistent operation with no unplanned downtime to reduce carbon emissions

- Sustainable warehouse management methodology to reduce material waste

- Digital, paperless workflows and procedures

- Cloud-based EAM solution which is up to 98% more carbon-efficient than on-premises solutions

IFS Cloud EAM supports an advanced Asset Performance Management (APM) dynamic, enabling asset managers and senior executives to gauge asset performance against established corporate goals, including ESG and sustainability objectives.

IFS customer LKAB, Europe's largest iron ore producer, implemented state-of-the-art EAM technology to leverage digitalization and automation in support of its sustainability and productivity goals.

"

To lead the industry toward more responsible, resource-efficient mining practices, we need the very best technology to make sure our people and assets are working efficiently and safely."

Markus Petäjäniemi, Senior Vice President, Market and Technology

LKAB

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The technology provides enterprises with real-time oversight and precise controls across a diverse and often geographically dispersed body of assets, focusing on three critical areas:
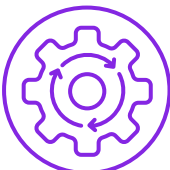

Data & reporting

EAM technology collects data generated by assets, compiles it with data from other sources, maps it to ESG frameworks, then analyzes and uses it to create desired sustainability outcomes. Detailed reporting tracks and confirms the results.
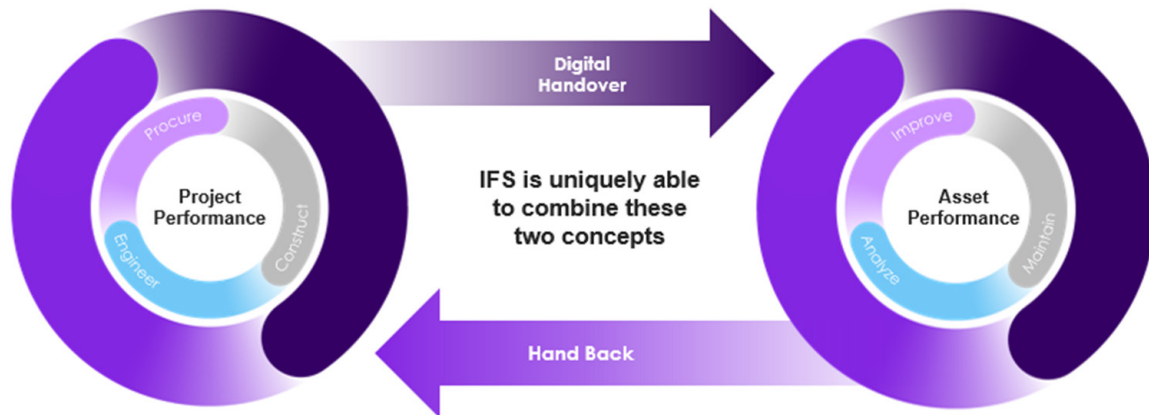

Resource efficiency

EAM provides real-time oversight to ensure assets are running efficiently for smarter resource use in support of environmental goals.

Asset performance

EAM ensures that assets remain within set ESG parameters to minimize energy waste for a lower carbon footprint.

Achieving Green (and Gold) with IFS

The prioritization of considering environmental and social impacts has expanded how we define Total Cost of Ownership (TCO). While in the past we focused on the initial hard costs of an asset, today TCO encompasses management, maintenance, and energy costs for a more comprehensive measurement.

IFS Cloud EAM with APM practices uniquely supports the interrelation between hard costs (Project Performance) and maintenance/ management (Asset Performance). This continuous cycle manages the asset from initial design to decommission, optimizing availability across the entire lifecycle.

IFS customers rely on EAM technology to achieve a variety of ESG goals. Here are some examples:

- Data is extracted from different assets and examined in real-time to monitor ongoing performance

- Vehicle usage and environmental costs are captured with detailed reports to prove compliance

- Mobile technicians oversee the return of unused inventory and uninstalled components to reduce waste, better manage parts inventory, and enable refurbishment

While all of these outcomes align with ESG objectives, they also support a more efficient and productive operation for meaningful improvements to the bottom line.
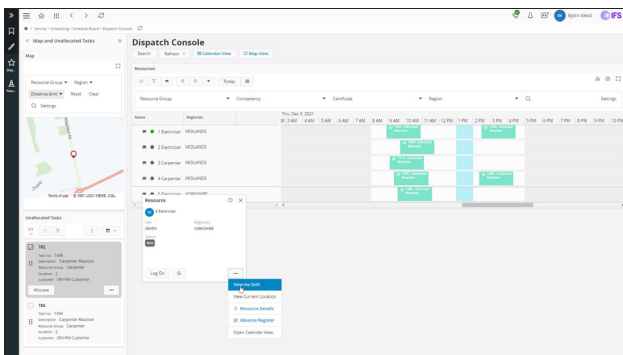
Purpose-Built for Sustainability

Along with modern enterprise asset management capabilities, IFS continues to innovate, supporting sustainability in all business areas. Examples include:

Planning and scheduling optimization

One of the largest contributors to harmful greenhouse gases is transportation. With fuel costs increasing at an alarming rate, it's also one of our biggest cost centers.

[IFS workforce planning and scheduling](#) allows you to reduce your service team's fuel costs and carbon footprint while increasing worker productivity in the field.

Use automated intelligent travel profiles (AITP) to help set accurate travel weightings for urban areas at different times of the day. Along with provisioning more accurate drive times, especially during high traffic (rush hour) periods, routes are optimized to avoid congested areas for a faster trip, minimizing fossil fuel usage and lowering carbon emissions.
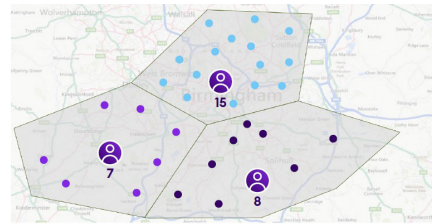
Capacity Planning

Conserve fuel by increasing the coverage and efficiency of existing field crews. IFS Capacity Planning provides real-time flexibility with automated soft boundaries versus traditional hard boundaries that limit the movement of workers in the field.

Hard boundaries-no cross over

16% lost productivity
Number of jobs varies by technician based on territory. 30 jobs assigned, only 25 completed due to travel time.

Capacity
10 jobs per day
3 x 10 = 30 jobs

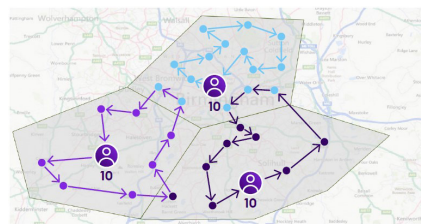Actual
10 + 8 + 7 = 25 jobs

16% lost productivity

Soft boundaries-Flexible, automated

100% productivity
Jobs assigned to technicians based on proximity. 30 jobs assigned, 30 completed.

Capacity
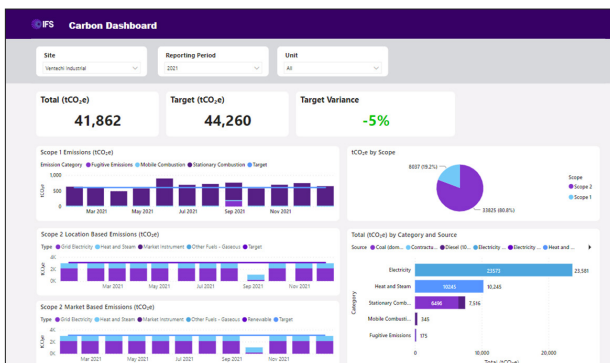10 jobs per day
3 x 10 = 30 jobs

Actual
10 + 10 + 10 = 30 j

All jobs compl

The technology allows you to maximize productivity by removing regional barriers and policies. Instead, technicians work within overlapping areas, ensuring the closest technician drives the shortest route. With Capacity Planning, the same number of workers can cover more calls in one day while maximizing fuel efficiency.

Carbon footprinting technology

Once set, carbon footprint reduction goals must be monitored and managed to help understand where improvements are required and to prove results. IFS Carbon Footprinting technology delivers:

- Consolidated source of data

- Data quality checks

- Dashboards to visualize progress

- Analysis for insightful decision-making

- Detailed reporting

- Compliance with regulatory bodies and investor requests

Remote Assistance

With advances in merged/augmented reality, a qualified expert no longer needs to physically attend a site to carry out their work. Instead, experts remotely guide onsite personnel through the diagnosis and repair.

Remote assistance results in fewer truck rolls, reducing the use of fossil fuel and carbon emissions.

Working with hardware designers, IFS has helped develop and refine head-mounted displays. Onsite technicians use the gear to communicate with experts to access information remotely and receive guidance in the moment.

Servitization

As organizations shift to a servitization model, they're also shifting towards a more sustainable operation.

IFS enables servitization with real-time oversight of assets in use by clients, as well as predictive maintenance to proactively optimize performance. With IFS, our customers lengthen the lifecycle of equipment which in turn leads to reductions in waste and resource consumption, improving the environmental performance of the enterprise.

IFS customer Rolls Royce is one of the world's earliest adopters of servitization, with a decarbonization strategy to achieve net zero by 2050. By collecting and examining data from assets, the company monitors the health of their equipment, predicting issues before they arise, and taking corrective action to avoid downtime.

Rolls-Royce: Intelligent engine (C4G Winner)

45%

longer time between engine maintenance overhauls

30K

tons of CO2 generated in 200 overhaul shop visits: clear sustainability impact

> " Partnering with IFS has been a fantastic experience. We've been able to accelerate our journey along the data exchange, data sharing, and development."

Michael Krigsman, VP Digital Services, Rolls-Royce

Watch the Digital Transformation & Servitization CXO Talk

Balancing Profitability with the Planet

Profitability and sustainability are not mutually exclusive. The efficiencies we seek to protect and support our planet will also contribute to the bottom line.

Yet without digital transformation and APM measures, supported by modern EAM technology, asset-dependent organizations such as Sporveien, LKAB, and many others will never achieve their ESG goals.

Think IFS for EAM

IFS works with enterprises globally, providing flexible, end-to-end asset management capabilities within IFS Cloud to help them set and achieve their ESG goals. Watch the sustainability webinar or visit the IFS New View on Sustainability web page for more information.

About IFS

IFS develops and delivers cloud enterprise software for companies around the world who manufacture and distribute goods, build and maintain assets, and manage service-focused operations. Within our single platform, our industry specific products are innately connected to a single data model and use embedded digital innovation so that our customers can be their best when it really matters to their customers – at the Moment of Service™.

The industry expertise of our people and of our growing ecosystem, together with a commitment to deliver value at every single step, has made IFS a recognized leader and the most recommended supplier in our sector. Our global team of 5,000 employees every day live our values of agility, trustworthiness and collaboration in how we support thousands of customers.

Learn more about how our enterprise software solutions can help your business today at ifs.com.

#MomentOfService