

AI Business Efficiency

Turning Data & AI into Measurable Value



● KEY TAKEAWAYS

AI must deliver measurable value

Business efficiency initiatives should start with validated use cases aligned to strategic goals, not experimental pilots.

Scalability and governance are critical

Success depends on composable architectures, vendor-neutral designs, and strong governance to ensure reliable, ethical, and secure adoption.

Cultural and operational adoption unlocks impact

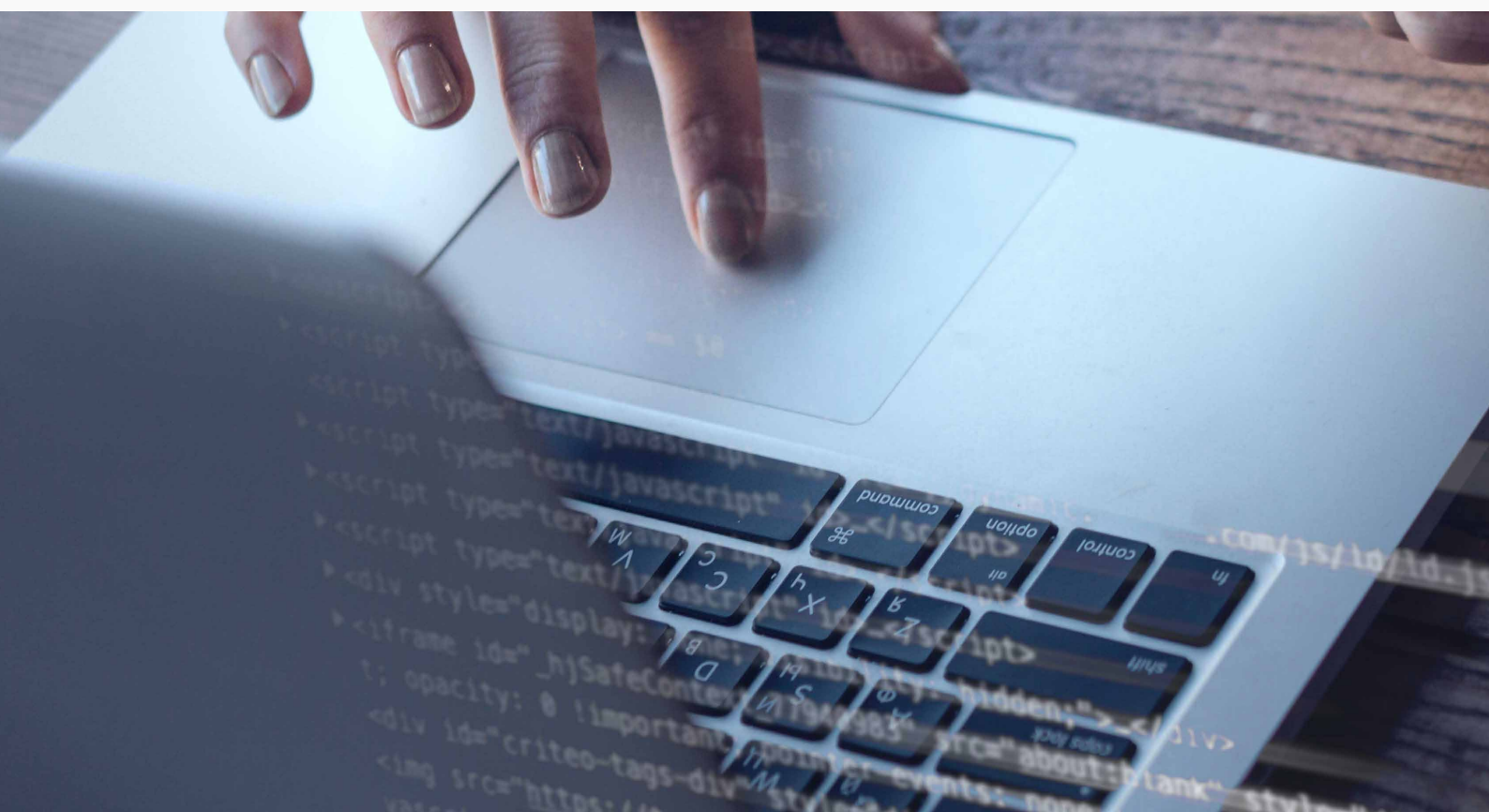
Beyond technology, embedding AI into business processes and culture is key to achieving agility, competitiveness, and long-term ROI.

● WHO SHOULD READ THIS DOCUMENT

- Chief Information Officer
- Chief Operating Officer
- Chief Data & AI Officer
- Chief Data & Analytics Officer
- Director/Head of Data & Analytics
- Heads of Business Transformation & Innovation
- Operations & Process Owners
- Marketing & Sales Teams

Table of Contents

Executive Summary	p.3
Business Scenario	p.4
Today's Challenges for Businesses	p.5
Our Value-Driven Approach	p.6
Three Pillars of Celfocus's AI Business Efficiency Offer	p.9
Main Architecture Drivers for AI Platforms Supporting Business Efficiency	p.10
How We Deliver	p.12
Use Cases	p.14
Benefits	p.14
Conclusion	p.15
Why Celfocus	p.16



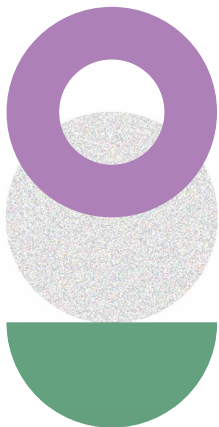
Executive Summary

In an increasingly competitive and fast-changing digital landscape, organisations are under pressure to achieve higher levels of efficiency while continuing to innovate and grow. Artificial Intelligence (AI) and Generative AI present a powerful opportunity to address these challenges by streamlining processes, automating repetitive tasks, and transforming data into measurable business value.

However, while adoption is accelerating, many organisations struggle to move beyond pilots and achieve scalable, sustainable results. Issues such as fragmented data, high implementation costs, and a lack of alignment with business objectives often prevent AI from delivering its full potential.

Celfocus addresses these challenges with a value-driven approach that ensures AI initiatives are strategically aligned, technically robust, and designed for scale. By combining business case validation, flexible implementation, and strong governance, Celfocus helps organisations embed AI into their operations in a way that reduces risk, accelerates adoption, and maximises impact.

Through proven frameworks, vendor-neutral design, and deep expertise across multiple industries, Celfocus empowers organisations to unlock the benefits of AI Business Efficiency, enabling them to **innovate faster, respond smarter, and compete more effectively in a data-driven economy.**



Business Scenario

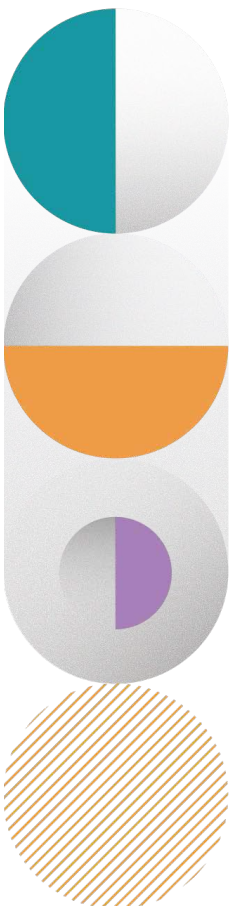
In today's fast-paced digital landscape, businesses face a huge amount of pressure to achieve greater efficiency while staying competitive in an ever-evolving market. To meet these challenges, organisations are increasingly turning to AI-driven solutions to optimise their operations.

Leveraging cutting-edge technologies like AI and Generative AI, businesses can transform their processes, **automating repetitive tasks, integrating insights from diverse data formats, and streamlining workflows.**

These solutions go beyond mere automation; they focus on solving specific business challenges. By reducing operational complexities and enhancing productivity, companies can allocate their resources more strategically. Whether it's accelerating the development of new offerings, reducing errors in routine operations, or improving responsiveness to market demands by augmenting their employees, **AI-powered strategies enable businesses to remain agile and future-ready.**

These solutions range from **Competitive Intelligence capabilities**, designed to help marketers identify competitor offers by automatically crawling commercial promotions and campaigns from websites and social networks; to **Claims Automation capabilities**, which optimise the claims analysis process, reducing time and effort while improving the customer experience; and **Augmented Customer Support capabilities**, which assist call centre agents by providing insights into client interactions, such as sentiment, intent, and summarisation.

Ultimately, this approach allows organisations to accelerate innovation, make more informed decisions, and succeed in a data-driven world.



Today's Challenges for Businesses

While AI adoption is accelerating, many organisations find it difficult to scale AI and deliver measurable business outcomes. Typical challenges include:



High implementation costs

Experimental projects with unclear ROI.



Data fragmentation

Scattered data sources and siloed processes limit impact.



Scalability issues

Pilots succeed but enterprise-wide adoption stalls.



Reliability & Accuracy

Concerns over trustworthiness of AI-generated outputs.

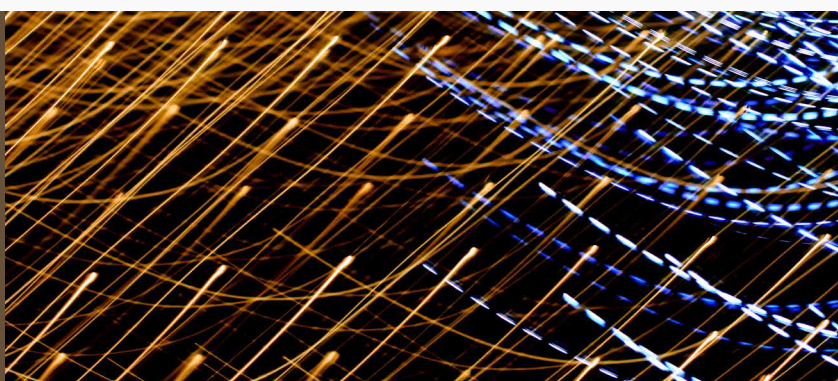
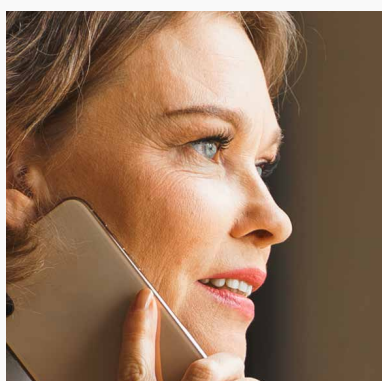


Strategic alignment

Difficulty ensuring AI investments support business goals.

Today, the challenges associated with AI Business Efficiency can be summarised in one question:

Is my organisation ready to scale AI and Generative AI to deliver measurable value?



Our Value-Driven Approach

Celfocus aims to empower organisations through AI and Generative AI, transforming business operations and ensuring these technologies are strategically deployed to deliver measurable value.

Celfocus categorises AI use cases into three main domains to address specific business needs:



Customer Experience

Reinvent customer engagement

Using AI to deliver real-time support, customised suggestions, and more meaningful interactions through personalised insights.



Process Efficiency

Reshape Business Processes

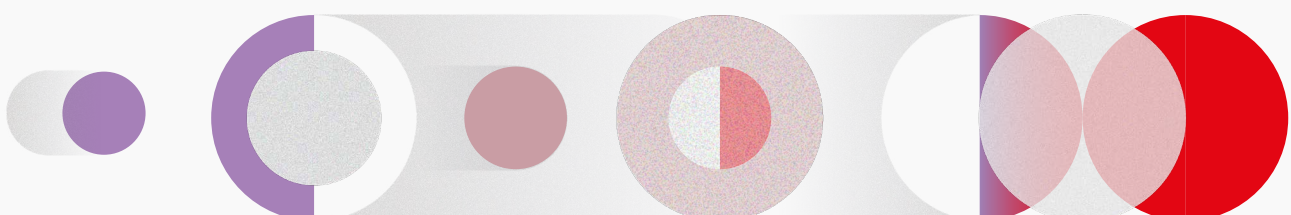
Leverage AI to cut down the time it takes to find, manage, and act on information or data, even as it grows in volume and complexity across industries.



Workforce Augmentation

Empower the Workforce

Lighten administrative workloads by leveraging AI to enhance decision-making, simplify documentation, and quickly uncover insights and answers.





Celfocus has demonstrated the impact of a value-driven approach to AI by delivering to production several use cases, such as:

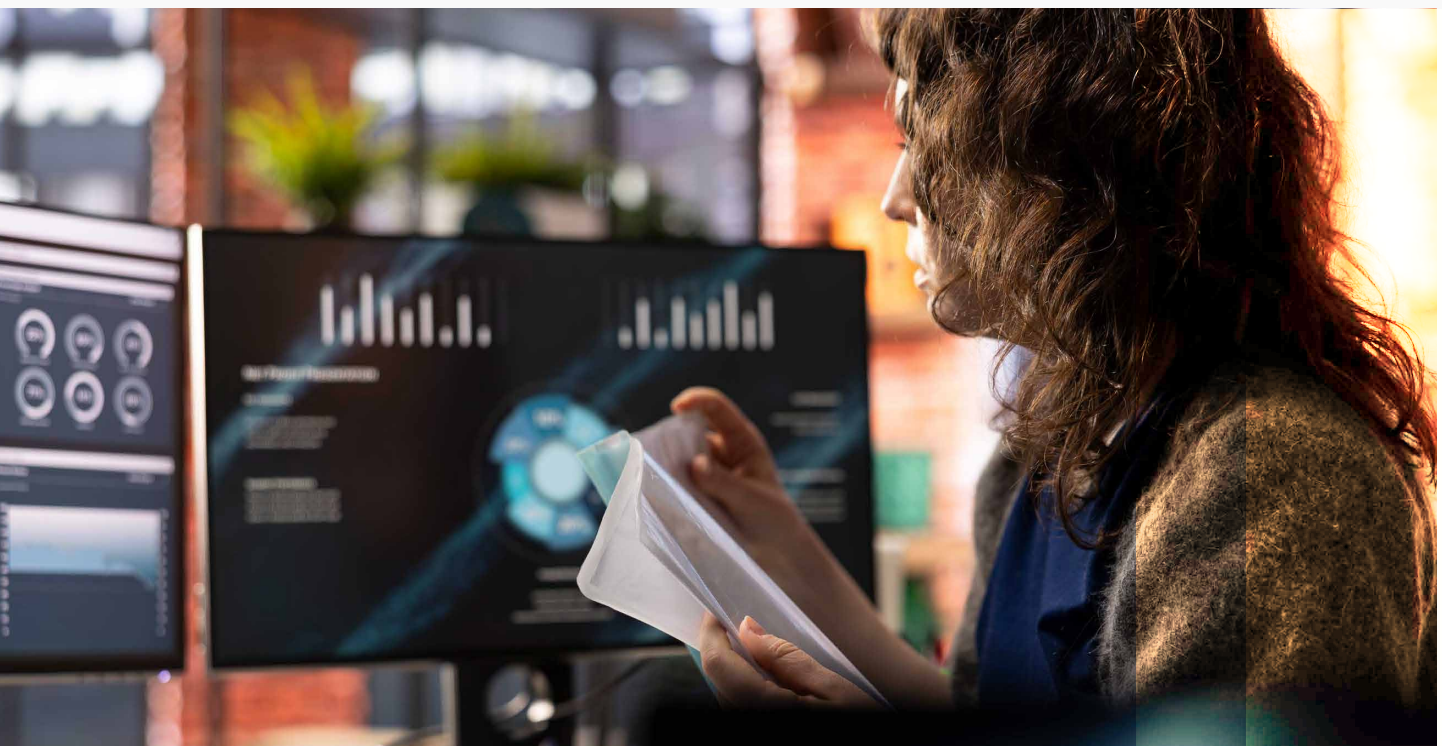
- In an insurance company, Celfocus was **able to automate 66% of the underwriting process** by using OCR and Generative AI to process underwriting forms, significantly improving operational efficiency and accuracy.
- In a Communication Service Provider, Celfocus **reduced call handling time by 15%** for customers with billing inquiries by automatically summarising the differences between the last two invoices, enabling agents to resolve issues faster and enhance customer satisfaction.
- Celfocus developed a Cognitive Search solution for the IT operations team of a European Stock Market, integrating JIRA, Confluence, and CMDB data to provide contextual information to agents. This solution **reduced search time by up to 40%, streamlining workflows and boosting productivity.**

Through a collaborative, co-creation model, Celfocus works alongside organisations to ensure AI capabilities are effectively tailored to meet business goals.

Celfocus observes that the root of the typical challenges for businesses often lies deeper: most organisations lack a cohesive AI strategy. Instead of developing a clear vision for AI across the enterprise, companies tend to explore use cases in isolation. This leads to the creation of applications or services focused on single tasks, rather than modular solutions that can be leveraged across multiple domains. As a result, efforts remain fragmented and fail to deliver enterprise-wide impact.

Moreover, few organisations prepare robust business cases to guarantee that each AI initiative has a well-defined expected ROI. Without this discipline, experimental projects proliferate, but their value remains unclear, and their scalability limited.

Celfocus recommends that organisations move beyond isolated pilots and invest in strategic planning for AI. By establishing a clear vision, validating business cases, and designing modular, scalable solutions, companies can overcome these barriers and unlock the full potential of AI.



Three Pillars of Celfocus's AI Business Efficiency Offer

Business Case Validation

Celfocus begins by identifying and validating the business case for AI use, ensuring clear alignment with organisational objectives and measurable outcomes.

Flexible Implementation

Depending on the use case domain, Celfocus helps organisations adopt and integrate AI capabilities across their ecosystems, including designing AI models, automating processes, and implementing AI-driven systems tailored to business needs.

Governance and Reliability

Celfocus prioritises governance to ensure AI adoption is secure, ethical, and aligned with organisational internal procedures.



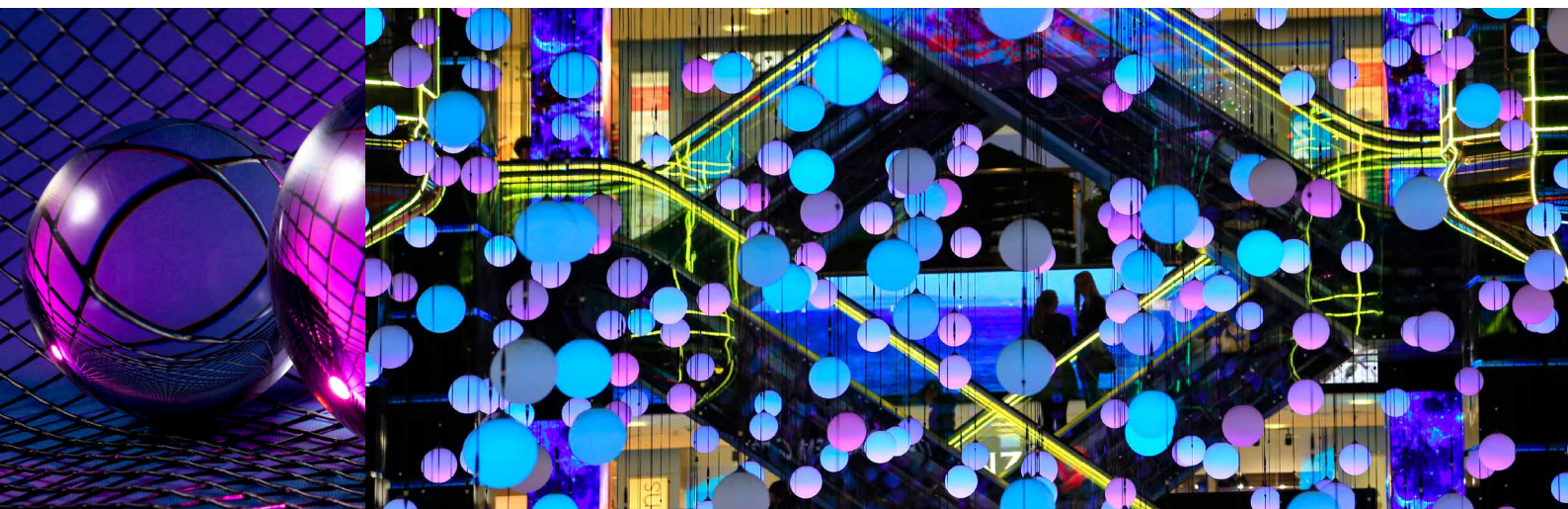
Main Architecture Drivers for AI Platforms Supporting Business Efficiency

Building AI platforms that deliver real business impact requires a robust architectural foundation. To maximise efficiency and scalability, organisations must adopt design principles that ensure flexibility, seamless integration, and responsible governance.

The following drivers outline the critical elements to consider when designing AI platforms for business efficiency use cases.

Composable & Scalable Architecture

- Solutions must be modular, allowing reuse across different use cases (e.g., the same NLP pipeline supporting both invoice comparison and claims automation).
- Scalability is critical - start small with pilots but seamlessly expand to enterprise-wide adoption.
- Support for multi-cloud and hybrid deployments (on-prem, private cloud, public cloud) to align with client IT ecosystems and compliance demands.



Data Readiness & Integration

- Unified data pipelines capable of handling structured, semi-structured, and unstructured data (documents, images, text, logs, etc.).
- Breaking down silos by integrating heterogeneous data sources into a coherent view.
- Metadata management, lineage, and data catalogues to ensure discoverability and governance.

AI/Machine-Learning Ops & Governance

- Full lifecycle management of AI/GenAI models (training, monitoring, retraining).
- Governance frameworks to ensure explainability, bias monitoring, and compliance with regulations.
- Monitoring & Observability dashboards to provide transparency into AI-driven processes.

By following these drivers, we ensure that AI solutions are designed to meet the specific needs of each business case, emphasising scalability, agility, and cost optimisation. Celfocus supports our clients by integrating AI seamlessly into their existing processes, providing a foundation for reliable and scalable adoption.



How We Deliver

Successful implementation of AI use cases depends on business understanding and organisational adoption. To ensure this, companies must follow five main steps:

1. | **Assess and Validate**
Collaborate with stakeholders to evaluate and prioritise AI opportunities, ensuring alignment with strategic objectives and measurable business value.
2. | **Develop Scalable AI Solutions**
Design and implement composable, cloud or on-prem-based AI systems that integrate seamlessly into existing workflows, minimising complexity and maximising impact.
3. | **Automate and Optimise Processes**
Enhance operational efficiency by automating repetitive tasks, streamlining workflows, and enabling AI-driven decision-making across business domains.
4. | **Deliver AI-as-a-Service**
Develop mechanisms to expose and operationalise AI capabilities, such as APIs, automated decision systems, and pre-built models, for seamless integration into business processes.
5. | **Accelerate Cultural and Business Adoption**
Promote the adoption of AI capabilities through targeted strategies, fostering confidence and alignment with organisational goals.

Celfocus approach is focused on understanding the unique challenges and opportunities within each business, starting with an assessment of whether there is a clear business case for utilising AI and Generative AI capabilities, supporting companies in their first step of their AI-driven journey.



Following the assessment & validation, Celfocus accelerates project implementation by leveraging distinctive Frameworks and Assets, combining best practices with proven expertise. Guided by the principles of Reutilisation and Standardisation, this approach enables faster delivery while enhancing maintenance and scalability.

To address specific business challenges with AI, Celfocus provides a suite of pre-built packages designed for efficiency and impact:

Scalability

Horizontal



Anomaly Detection SHADE

- Unlabelled timeseries
- Signal transformation
- Soft Labelling



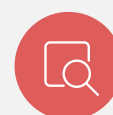
Predictive Analytics FATES

- Seasonality detection
- Auto parameter tuning
- Statistical and NN architectures



Process Automation SADIE & SAIB

- Image correction/alignment
- Named Entity Recognition
- Document classification



Intelligent Search SAFIRA

- Search your docs using GPT
- Middle layer in between GPT and Vectorial DBs for accurate search results

Vertical



Customer Support AI4CX

- Real time conversation enrichment
- LLM Agnostic
- Converge all customer interactions into a Unified Data Model

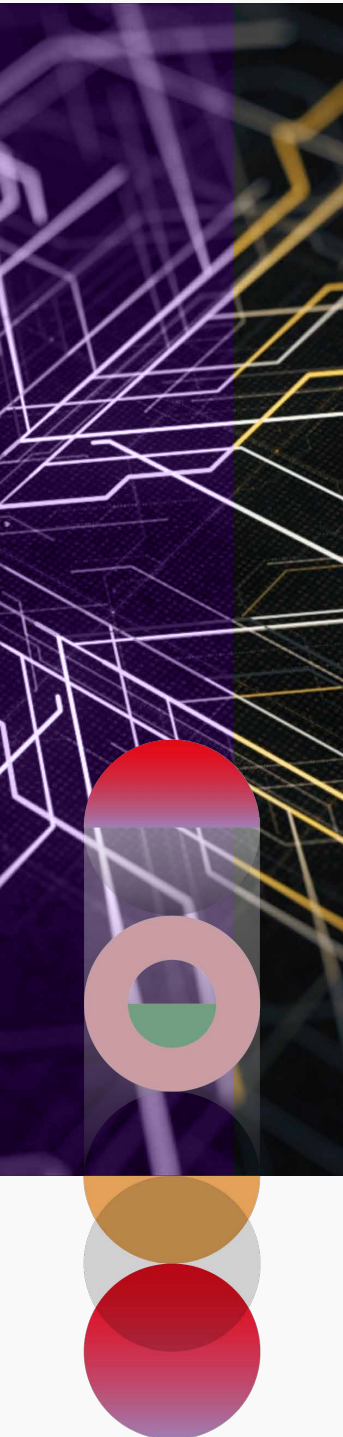


Marketing & Sales MARKETING INTELLIGENCE

- Converge all both competition and own offers into a data model
- Offer Recommendation based on usage and customer sentiment
- Flag customers for potential churn caused by offers from competitors

 Powered by GenAI

All these packages leverage either on open-source or cloud services to optimise the business case, depending on the client's needs.



Examples of Use Cases

- **Customer Support Augmentation** - Enhance customer service with AI-driven virtual support.
- **Invoice Comparison** - Automatically highlight differences between invoices in natural language.
- **Agent Self-Improvement** - Provide employees with fast, personalised answers via cognitive search.
- **Product Underwriting/Subscription** - Automate proposal form extraction to accelerate subscription processes.
- **Claims Automation** – Reduce effort and errors in claims processing.
- **Competitive Intelligence** – Track competitors’ offers and campaigns automatically.

Benefits

Celfocus enables organisations to unlock the full potential of their data by delivering solutions that are fast to implement, adaptable to different technology ecosystems, and backed by extensive industry expertise.

The key benefits of Celfocus’s AI Business Efficiency solution include:

- **Accelerated Project Implementation** - Fast-track delivery by leveraging best practices, proven methodologies, and Celfocus frameworks.

→ **Vendor-Neutral Design** - Integrate technologies from multiple vendors and open-source solutions to build a flexible data platform that supports evolving business needs.

→ **Reduced Risk** - Benefit from Celfocus's strong background and proven track record in strategic Data & Analytics projects across diverse industries.

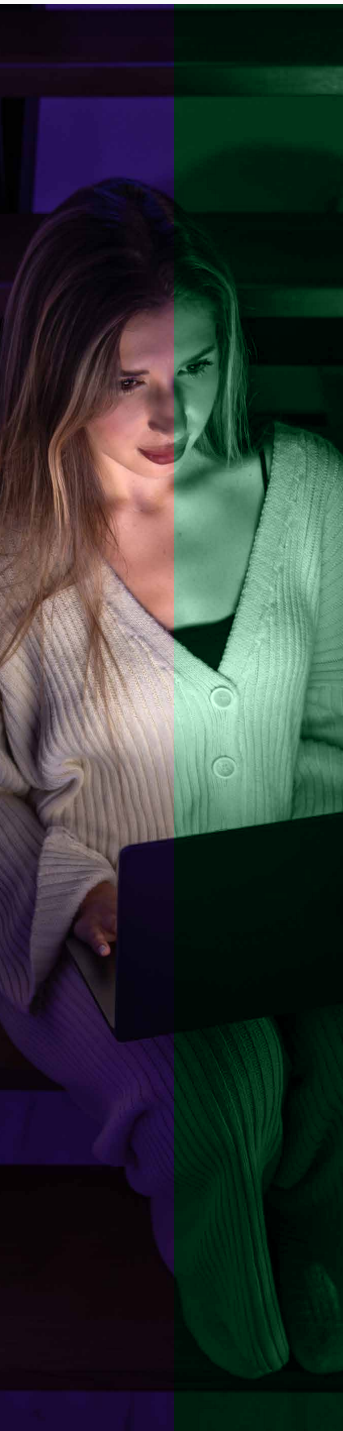
Conclusion

From Potential to Measurable Impact

AI Business Efficiency has moved from being a competitive advantage to a strategic necessity. Organisations that successfully scale AI and Generative AI will not only improve operational efficiency but also unlock new opportunities for innovation, growth, and customer engagement.

The journey to achieving this requires more than technology – it demands clear business alignment, cultural readiness, and a governance framework that ensures trust and reliability. By adopting a composable and scalable architecture, integrating diverse data sources, and embedding robust AI operations, organisations can create a foundation for **long-term value creation**.

The organisations that act now will be better positioned to thrive in a digital economy defined by agility, intelligence, and innovation. **The opportunity to transform business with AI is immediate, and those who act now will lead.**



Why Celfocus?

With over 20 years of experience in business transformation, Celfocus guides our customers from strategy to implementation and operations. When it comes to implementing AI use cases, we help our clients tackle some of the most complex challenges by addressing critical questions such as:

- How to define and execute a roadmap for AI-driven business?
- How to implement composable & scalable architectures that evolve based on the use cases to be implemented?
- How to set up effective AI governance?
- How to effectively measure the output of our strategic initiatives to ensure adoption?

We leverage the existing ecosystem and strategic clients' investments to deliver integrated, future-ready solutions. Our platforms are based on proven, pre-built assets that align with open standards and are designed to work seamlessly in complex technology landscapes.

Celfocus helps enterprises accelerate their journey by combining deep technical expertise with a strong understanding of business strategy. Through validated use cases, flexible and vendor-neutral solutions, and a proven delivery model, we enable our clients to transform AI from a promising concept into a measurable driver of efficiency and competitiveness.



CELFOCUS

For more information about CELFOCUS,
please visit our website
www.celfocus.com

Follow us on: 

Copyright © CELFOCUS. All RIGHTS RESERVED TO CELFOCUS and its Licensors under Law. The disclosure, copying, adaptation, citation, transcription, translation, and/or any other form of total or partial use of the content, layout and graphic design, images or sound of this document or accessible herein, by any means of using any format (physical or virtual) without the respective authorization or licensing by CELFOCUS or its Licensors is prohibited and offenders shall be prosecuted. The user or licensee of all or part of this document may only use the document under the terms and conditions agreed upon with CELFOCUS and/or its Licensors for the purposes determined, otherwise subject to civil and/or criminal prosecution of the offenders.

CELFOCUS, S.A..
Avenida D. João II, Lote 34
Parque das Nações
1998-031 Lisboa, Portugal
Tel. +351 213 836 300 . Fax +351 213 836 301
www.celfocus.com