

A background network diagram consisting of numerous grey dots (nodes) connected by thin grey lines (edges), forming a complex web. There are also solid red rectangular shapes: one at the top left, one at the bottom left, and a large vertical one on the right side.

New Technologies in Outsourcing

Abstract

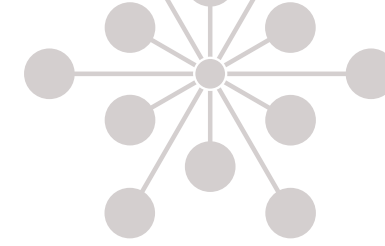
Outsourcing has become an essential element in the global business landscape, fundamentally transforming the way organizations manage their operations and resources.

The outsourcing of certain business functions to specialized third parties has evolved over time, adapting to the continuously changing needs and requirements of the business environment.

Currently, outsourcing a business or a process is not only a strategic choice for companies, but also a means of gaining a range of critical advantages in a competitive and rapidly evolving world.



The Importance of Outsourcing



Outsourcing allows companies to focus on their core activities by transferring non-strategic tasks to specialists. This can lead to a significant increase in operational efficiency and the concentration of resources on truly valuable activities.

Operational Efficiency

Outsourcing services can bring significant savings by eliminating the need to recruit and train personnel, spending on infrastructure and technology, or maintenance. Companies can benefit from lower costs and financial predictability.

Cost Reduction

Companies in the BPO industry are constantly staying abreast of the latest technologies, aiming not only to streamline workflow but also to positively impact performance and costs for clients.

Technology Investments

In a constantly changing world, outsourcing provides flexibility and adaptability. Companies can quickly adjust partnerships and services to respond to new opportunities or threats.

Quick Response to Questions



Access to Experts

Outsourcing provides access to a global pool of specialists and experts in various fields. This allows organizations to leverage the best skills, knowledge, and practices without being limited to internal resources.

Flexibility and Scalability

Outsourcing provides flexibility in managing human and technological resources. Companies can quickly scale based on project requirements or market changes without hiring permanent staff.

Strategic Focus

By outsourcing operational and administrative tasks, companies can concentrate resources and efforts on strategy and innovation, providing them with a significant competitive advantage.



Statistical Data

31% of IT services have already been outsourced, and this trend is expected to continue growing, according to Deloitte.

Sectors such as healthcare and finance have experienced significant growth in outsourcing, with an increase of **36%** and, respectively, **30%**

Human Resources (HR) has also become a significant area in outsourcing, experiencing a growth of **32%**

Over **43%** of the manufacturing industry resorts to outsourcing.

The forecasts for 2023 indicated a significant growth in outsourcing in areas such as innovation, technology, social responsibility, and data security.

The revenues of the global IT outsourcing market exploded in 2022 and were expected to reach the sum of \$430.50 billion in 2023 (Statista).

The ongoing growth of outsourcing is fueled by its benefits, including cost reduction and access to experts, with companies estimated to spend over \$700 billion annually on this practice.



Overall, outsourcing remains a vital strategy for companies aiming to stay competitive and adaptable to the rapidly changing market demands.

With its economic and operational advantages, coupled with the growing technological advancements, outsourcing will continue to play a significant role in the global business model.

For CGS, both globally and within Romania or other subsidiaries, the rapid adoption of the latest technologies and the delivery of increasingly efficient solutions to clients are the primary objectives.



New Technologies in Outsourcing

CLOUD COMPUTING

Cloud computing

Cloud computing (CC) stands out as the primary trend in the IT outsourcing field in 2023, playing a central role in industry transformation. Outsourcing to cloud services is crucial for accessing other modern technologies such as artificial intelligence (AI), robotic process automation (RPA), and machine learning.

Additionally, it enables businesses to collect, store, and utilize cloud-based resources and services. In 2022, over 60% of business data was stored in the cloud (Statista), and this trend is expected to continue growing.

As a result, companies across various sectors anticipate seeking experienced IT service providers in cloud engineering and development who are familiar with cloud infrastructure and management. These professionals will help companies avoid unexpected costs and ensure data security in the cloud environment.

To expand their functional capabilities, firms will need better management of customer issues and requirements in the IT field and other key areas.

Cloud computing offers standardized and highly automated services, with computing, storage, and networking resources owned and hosted by a service provider and provided to the client on demand. It provides elasticity and scalability, following a subscription or consumption-based pricing model. Among all the exponential technologies observed in the outsourcing industry, cloud computing is the most transformative to date, fueling growth in adjacent IT services (e.g., data center services and corporate network outsourcing).

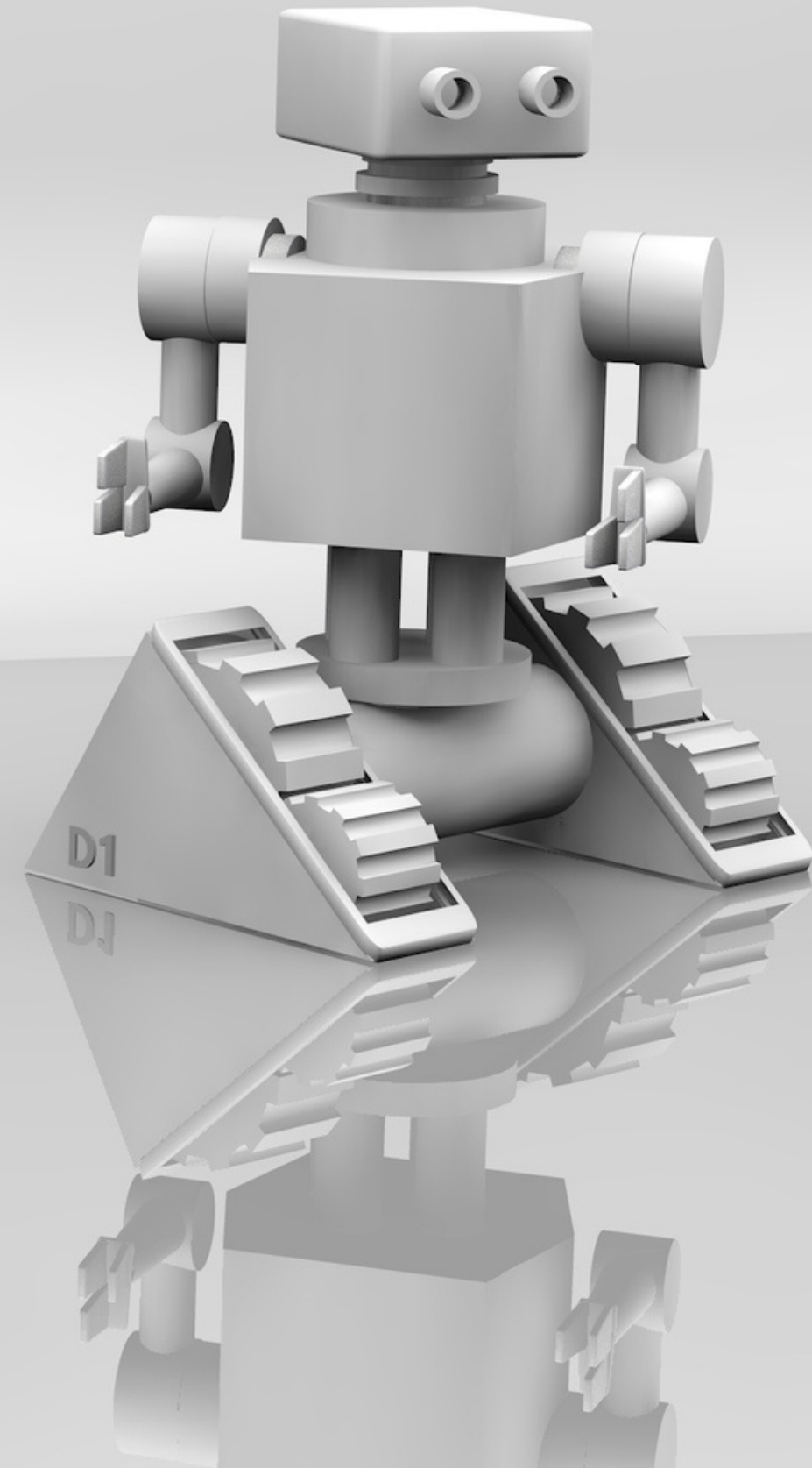
Cloud computing has led to "as-a-service" models and fueled the growth of adjacent IT services. Most notably, Business Process as a Service (BPaaS), essentially representing the outsourcing of business processes through the cloud, has become a nearly \$40 billion market segment, competing with traditional Business Process Outsourcing (BPO). BPaaS has exhibited double the Compound Annual Growth Rate (CAGR) over the past two years compared to traditional BPO (8.8% for BPaaS vs. 3.9% for BPO from 2016 to 2018). With analysts expecting this growth gap to persist or even widen, BPaaS was forecasted to capture a significant portion of the business process outsourcing market in 2023.

Migrating and managing in the cloud requires specialized skills from experts who fully understand this domain. The CGS team has been involved in over 200 cloud migration projects and has implemented public, private, and hybrid solutions for renowned companies.



**New Technologies
in Outsourcing**

ARTIFICIAL INTELLIGENCE & MACHINE LEARNING



AI & Machine Learning

Artificial Intelligence (AI) is one of the key technologies redefining the outsourcing industry. Within business operations and outsourcing, AI is used for automating repetitive tasks, calculations, or responses to messages. Additionally, AI contributes to improving customer services, with examples such as cloud-based chatbots or Interactive Voice Response (IVR) systems.

According to a 2022 Grand View Research survey, the global AI and machine learning outsourcing market size was \$93.5 billion in 2021 and is expected to grow at a Compound Annual Growth Rate (CAGR) of 38.1% from 2022 to 2030.

Automation is also a significant technology in the IT outsourcing trends. This term refers to the set of procedures and devices that enable systems to operate without human intervention. Companies are increasingly relying on automated tools for managing routine IT tasks, such as software updates, system maintenance, and security updates.



AI & Machine Learning



Automation of Repetitive Tasks

AI can automate repetitive and mundane tasks, freeing up human resources for more complex and value-added activities. This enhances productivity and reduces errors.

Natural Language Processing (NLP) and Chatbots

AI-powered chatbots and virtual assistants have revolutionized customer support services in the outsourcing industry. NLP algorithms enable chatbots to understand and respond to customer queries, providing instant and personalized support. This not only enhances customer satisfaction but also reduces response time and operational costs.

Predictive Analysis for Demand Forecasting

AI algorithms can analyze historical data, market trends, and customer behavior to accurately predict future demand. This capability is particularly beneficial for outsourcing companies involved in supply chain management and inventory planning.

Advanced Data Analysis and Decision Making

AI enables outsourcing companies to analyze massive amounts of data in real-time, extracting valuable insights and making informed decisions. Machine learning algorithms can process and interpret data faster and more accurately than humans.

Quality Assurance and Fraud Detection

AI plays a crucial role in quality control assurance and fraud detection in the outsourcing industry. Machine learning algorithms can analyze data and identify anomalies or patterns associated with fraudulent activities.

In the current digital era, the integration of AI has transformed the outsourcing industry, bringing with it a series of significant advantages.



AI & Machine Learning

In addition to Artificial Intelligence, Machine Learning represents another crucial pillar in the revolution of the outsourcing industry. Machine Learning utilizes algorithms and mathematical models to learn from data and make predictions or decisions without requiring explicit programming. In the outsourcing industry, Machine Learning is used to optimize operational processes and provide customized solutions to clients.

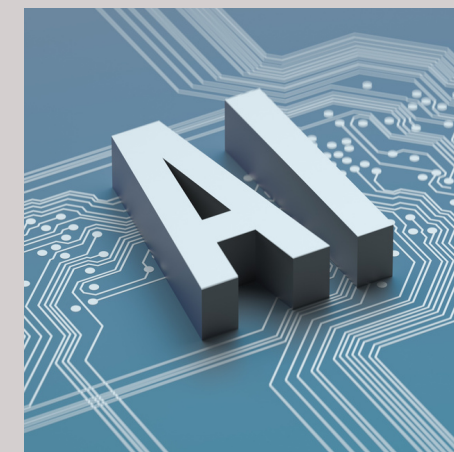
A notable example is the use of Machine Learning to enhance customer support services. Machine Learning algorithms can analyze the history of customer interactions and recommend appropriate responses or actions in real-time. This not only reduces response time but also enhances the overall customer experience.

Moreover, Machine Learning can be applied to identify patterns in financial and business data, aiding in strategic decision-making and risk management. This technology enables outsourcing companies to provide advanced solutions and optimize operations in a more intelligent and efficient manner.

Thus, both AI and Machine Learning have significantly transformed the outsourcing industry, bringing automation, advanced data analysis, and improved customer services. Combined, Artificial Intelligence and Machine Learning drive the industry towards new horizons and increased efficiency.

In the new era of digitization, all processes undertaken by a company take on new dimensions thanks to the latest machine learning and artificial intelligence (AI) technologies.

Consequently, our company consistently implements new tools designed to automate both internal and customer-facing processes. Among these, the most significant ones include recruitment tools, sentiment analysis tools, as well as quality control automation tools.



**New Technologies
in Outsourcing**

ROBOTIC PROCESS AUTOMATION

Robotic Process Automation

Robotic Process Automation (RPA) represents a process automation technology that has a significant impact on the outsourcing industry. This software can automatically execute repetitive, rule-based tasks without human intervention. After cloud computing, RPA is the most adopted emerging technology in the outsourcing industry.

RPA is essential in developing, implementing, and managing robots that can perform simple tasks. The demand for robotic process automation is increasing as companies realize that using robots for repetitive tasks is more cost-effective. According to a 2022 Grand View Research report, the RPA market size was estimated at \$1.89 billion in 2021, and this market is expected to grow at a Compound Annual Growth Rate (CAGR) of 38.2% from 2022 to 2030.

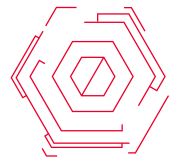
RPA has brought significant efficiency to the outsourcing industry, enabling the automation of repetitive processes. For example, instead of a call center operator, Interactive Voice Response (IVR) now provides basic information to customers and connects them to live operators based on their needs.

As RPA advances, it emphasizes the need to identify and automate standard processes, as well as the ongoing maintenance of robots performing these tasks. In the past, humans provided services; now they manage and resolve exceptions. The differences between traditional operational models and robot-driven environments are substantial.

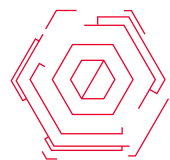
The evolution of computing power in the last 20 years has allowed the automation of many rule-based repetitive tasks and even taught robots to think. These capabilities underpin Robotic Process Automation (RPA), becoming a significant driver of innovation in back-office activity processing. As organizations seek to extract more value from their outsourcing contracts, RPA plays an increasingly important role in the value equation.

Robotic Process Automation

RPA brings significant benefits, such as:

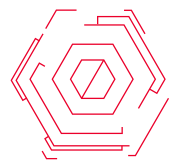


Cost Reduction



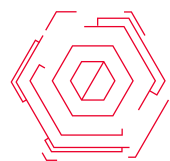
Precision

Robot-based processes reduce the need for human intervention, leading to increased consistency and quality in processes.



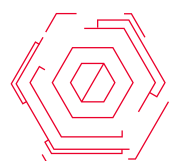
Improved Efficiency

Robots can work 24/7/365 and handle tedious and repetitive tasks, such as software updates.



Time Optimization

The implementation of a robot can take only a few weeks, meaning a quicker deployment compared to traditional transformation tools.



Scalability

A robotic workforce is flexible and scalable, capable of being programmed to run as needed, with as many robots as required.



Robotic Process Automation

However, the implementation of RPA may pose challenges related to security, the decision to develop or buy robotic capabilities, defining success metrics, etc. Nevertheless, these challenges can be managed with proactive planning.

In conclusion, RPA will continue to be a driving force in the outsourcing industry in the coming years, bringing significant innovation and efficiency, transforming business processes, and accelerating large-scale transformation.

CGS continuously invests in emerging technologies such as chatbots and RPA. These cutting-edge technologies help optimize the process, improving customer service. Our RPA tools seamlessly execute repetitive processes spanning multiple systems or involving multiple data input tasks. This reduces human errors, increases productivity, ensures compliance, and enhances quality control. You can mitigate issues that might expose your company to reputational risk.

Customer experience is our priority. Implementing support platforms like RPA and chatbots simplifies interactions for our live agents. This allows them to focus on more complex finance and accounting tasks that require critical thinking and empathy.



Instead of a conclusion

Outsourcing has evolved into a crucial force in the contemporary business world, redefining how organizations manage their operations and resources. It is now not only a strategic choice but also a necessity for companies aiming to thrive in a continually changing and competitive business environment.

Statistical data indicates that outsourcing continues to grow and expand across various sectors, with emerging technologies such as cloud computing, Artificial Intelligence (AI), Machine Learning, and Robotic Process Automation (RPA) playing an essential role in this evolution.

Cloud computing serves as the backbone of digital transformation, providing access to new technologies like AI, RPA, and Machine Learning. Artificial Intelligence (AI) and Machine Learning have revolutionized how businesses handle their operations, offering automation, advanced data analysis, and improved customer services. Robotic Process Automation (RPA) has become a significant force in business process automation.

In conclusion, outsourcing remains a vital strategy for companies, and emerging technologies have become the primary driver of efficiency and innovation in this industry.

