Global IT Outsourcing Trends In 2024



Table of Content

Introduction

Methodology

03 IT Outsourcing Overview

04 Global IT Outsourcing Statistics

05 IT Outsourcing Trends Navigating Change: Why Smart Companies Embrace IT Outsourcing for Growth

How to Effectively Manage IT Outsourcing?

80 Innovate, Adapt, Succeed with LTS Group's IT Outsourcing

The Future of IT Outsourcing

Appendix



Overview

The IT landscape is advancing in both quantity and quality. Beyond traditional technologies, the rise of industry 4.0, including AI, IoT, RPA, and cloud has introduced a wide range of new IT applications.

Meanwhile, businesses are increasingly leveraging IT applications for automation, optimization, informed decision-making, and staying competive. Notably, the digital transformation trend is gaining traction among businesses in 'traditional' industries.

As a result, the IT outsourcing scene will keep on growing, helping businesses from all tech backgrounds to harness IT applications for impactful business outcomes.

LTS Group, a seasoned IT outsourcing provider, has served clients from more than 10 countries at a customer satisfaction score of 96%. Drawing from our broad expertise and keen observations, we've crafted this ebook to give you an overview of the IT outsourcing landscape, insights into upcoming trends in the IT outsourcing market, and practical tips for effective IT outsourcing management.

Let's get started!





Methodology

The goal of the ebook is to pinpoint new trends, developments in technology, and changes in the industry that will influence the state of IT outsourcing in the upcoming year. Our team gathered both primary and secondary information from multiple reliable industry sources to create this e-book. We analyzed and processed the data, added our insights based on our experience as an IT outsourcing service provider.

Our team collected pertinent information from industry reports, white papers, trustworthy online sources, and publications on market research such as Garther, Deloitte, Statista, Yahoo Finance, Allied Market Research, etc. This information will serve as a basis for comprehending the condition of the IT outsourcing industry and technology outsourcing trends.







IT Outsourcing Overview

What is IT outsourcing?

IT outsourcing is the process of contracting with a third-party service provider to handle all or a portion of the IT functions of an organization instead of sourcing talent in-house. It enables businesses to concentrate on their core skills while utilizing third-party vendors to optimize processes and get the intended results. (1)

Numerous tasks and services can now be outsourced. Businesses frequently outsource programming, application development, technical assistance, and other IT functions.

Based on the specific needs and requirements of an organization, some common IT outsourcing services include:

- Application development and maintenance
- Infrastructure management
- Help desk and technical support
- Data management and analytics
- Cybersecurity



Which forms of outsourcing to choose?

Onshore outsourcing

Hiring services from outside an organization but within the same nation is known as "onshore" or "domestic" outsourcing. For instance, a US enterprise engages an IT service company located in the US to carry out their software development project.

PROS

Minimize language barriers

Because the client company and the outsourcing partner are based in the same nation or region, onshore outsourcing lowers linguistic barriers. This promotes clear communication, gets rid of ambiguities caused by language differences, and faciliate throughout the project.

Lower culture differences

Similarities in cultural norms, business processes, and working methods can foster better understanding, alignment, and synergy between the client and the outsourcing partner. This makes project execution more straightforward and decreases the possibility of cultural conflict.

Protect intellectual property (IP)

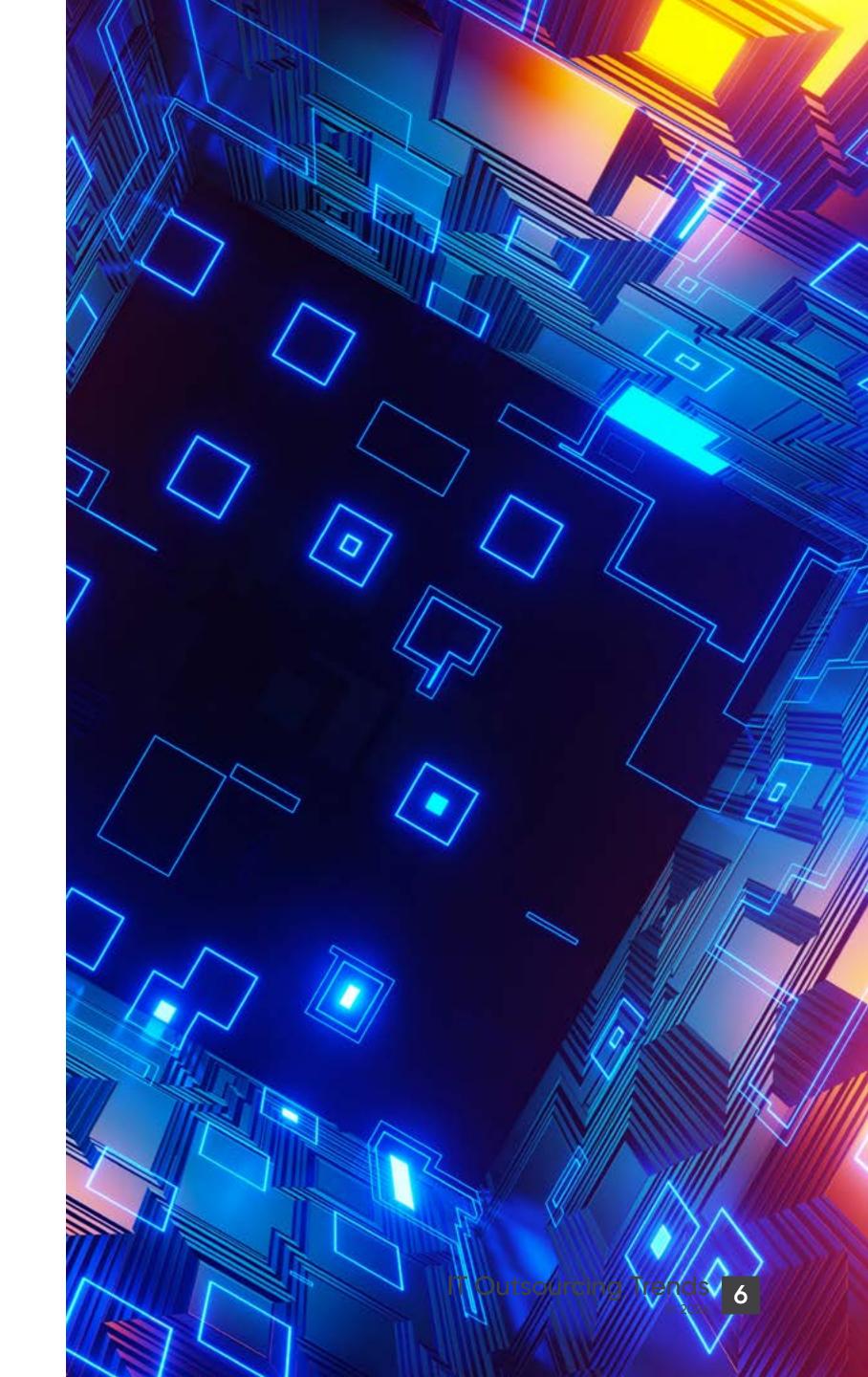
In general, onshore outsourcing may help businesses protect their IP because both parties operate under the same legal system, which often provides stronger IP protection and enforcement mechanisms. In addition, IP protection remains limited in some offshore countries, resulting in a loss of safety when implementing IT outsourcing projects.

CONS

Higher cost: In developed nations, domestic outsourcing is frequently more expensive than offshore outsourcing because the cost of labor and production is higher.

Limited pool of experts: Offshoring helps businesses access a global talent pool while onshore is limited to the domestic talent pool.





Nearshore outsourcing

Nearshore outsourcing refers to the practice of outsourcing business processes or services to service providers placed in a nearby or neighboring nation. It entails contracting with a third-party company located close to the client's home country or region. For instance, a company based in the United States may choose to nearshore its outsourcing operations to countries such as Mexico or Canada.

PROS

Time zone compatibility and cultural similarities

A number of businesses tend to outsource their work to countries with the same time zone and cultural similarities. It makes communication much more clear, straightforward and allows all business activities to run concurrently without increasing production costs or jeopardizing scheduled deliverables.

Access to a wider talent pool

Through nearshore outsourcing, businesses can take advantage of the skills of competent workers in nearby nations and access a wider talent pool. This can be beneficial when looking for specific skills or expertise that may be scarce or expensive locally.

Cost efficiency

Compared to hiring development talent domestically, hiring a software developer in a neighboring country may be less expensive. Nearshore outsourcing vendors may have lower labor costs, operating expenses, or tax breaks, making them a more budget-friendly option for organizations looking for outsourcing solutions.

CONS

Regulatory and legal variations

nearshore Adopting outsourcing entails collaborating with service providers located in various nations, each of which may possess distinct legal and regulatory structures. This can add complexities and challenges when brands endeavor to navigate varying compliance requirements, data protection laws, intellectual property regulations, and other legal considerations.

Limited cost savings

Nearby service providers may still have higher labor costs and operating expenses than those in further away locations. Therefore, businesses should carefully consider the cost implications and potential savings before deciding on this outsourcing form.



Offshore outsourcing

Offshore outsourcing is the practice of assigning IT projects to third party organizations in an overseas country. The service is frequently provided in a different nation with cheaper labor costs than the country where it is received, and there could be a significant time zone difference. (2)

PROS

Significant cost saving

Offshore outsourcing usually refers to the fact that developed countries, such as US, UK, Europe, etc., outsource to developing countries, namely Vietnam, the Philippines, Argentina, etc. In this case, businesses are able to reduce the cost of hiring, training, and onboarding by accessing IT professionals from outsourcing vendors and taking advantage of the income gap among nations. By offshoring, businesses can also allocate greater resources to internal operations and core competency without breaking the bank.

Besides, the great financial advantage comes from the supportive policies established by the government. Numerous developing countries are actively providing tax incentives (3), streamlined administrative processes, infrastructure and land accessibility incentives to attract foreign investors.

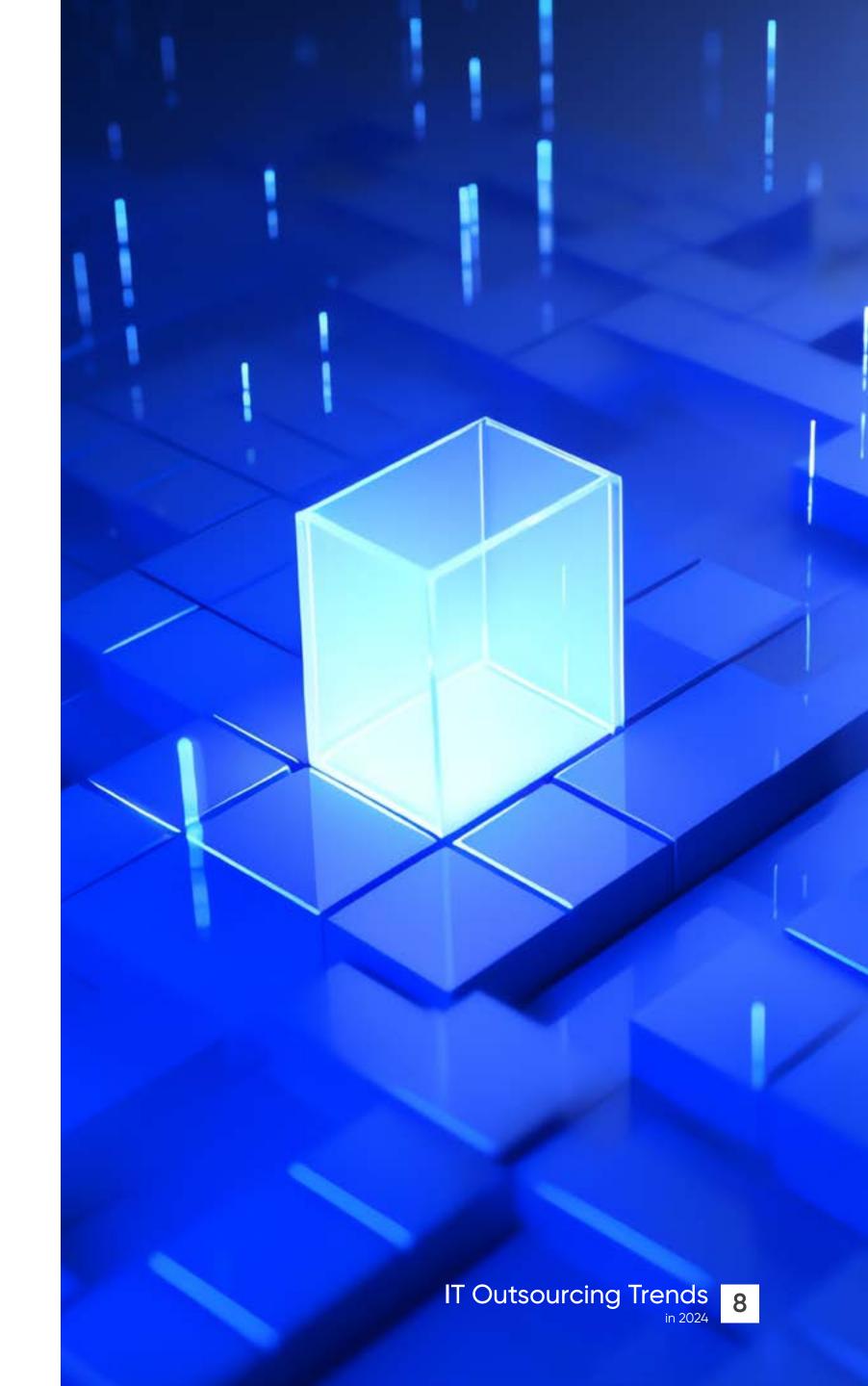
Access to skilled professionals

Offshoring is considered to be profoundly beneficial for businesses that outsource specialized tech tasks that require specific expertise. This form of outsourcing allows firms to tap into a global talent pool, especially IT talent in countries with a high openness to new technology.

These nations often boast a pool of IT talent that is not only proficient in cutting-edge technologies but also embraces innovation and continuous learning. IT professionals in such countries are likely to have a keen interest in emerging technologies, making them adaptable to industry trends.

Global presence expansion

Offshore outsourcing can assist organizations in establishing a presence in new markets and expanding their global footprint. Collaboration with offshore service providers can provide valuable insights into local markets, cultural understanding, and facilitating international growth for business.





CONS

Communication challenges

Time zone differences, language barriers, and cultural differences may sabotage the development process of offshore projects. Variation s in language proficiency can lead to miscommunications, misunderstandings, and difficulties in conveying complex information.

Besides, time zone difference can hinder real-time communication, resulting in delays in information exchange, decision-making, and problem-solving.

Managing an offshore IT team might be a challenging task. That's why a comprehensive guide to setting up offshore development center is essential for stakeholders to take full advantage of this outsourcing model and avoid hassle. Let's discover a comprehensive handbook on offshore development center setup.

Limited in quality control

It can be trickier to maintain control over the quality of the work when outsourcing overseas due to variations in quality assurance procedures, work standards, and cultural viewpoints on quality.

Compliance and regulatory challenges

Operating in different legal jurisdictions can complicate compliance and regulatory issues. Offshore outsourcing could require organizations to navigate unfamiliar legal frameworks, data privacy regulations, and employment laws, adding complexityandincreasingtheriskofnon-compliance.

In Vietnam's IT landscape, legal and regulatory compliance can include tax regulations, local labor laws, and other compliance requirements (4), which can be significant challenges for businesses operating in other countries. Furthermore, the scope of compliance requirements can extend to many aspects of business operations, such as data security, licensing, and occupational health and safety regulations,...





IT outsourcing models - types and how to pick the best one

Project-based

project-based IT outsourcing model means delegating a specific project or a set of predefined tasks to a third-party IT firm. In this model, businesses should have crystalclear requirements of what the outputs are, deliverables, timeline, and budget for executing the project and delivering the desired outcomes.

Suitable for

- Solid and clear requirements
- Short time frame project
- Fixed and limited IT budget
- Small to mid-sized project

Benefits

- Full-cycle project development
- Strict cost control
- Minimum involvement of in-house team
- On-time delivery

Dedicated team

The dedicated team outsourcing model is a business arrangement in which a company hires a dedicated team of professionals from an external provider to work exclusively on the client's projects and tasks. In this model, the customer has full control over the team and works directly with the team members.

A typical dedicated software development team is structured with:

- A project manager
- A technical leader
- A software architect
- UX/UI designers
- Software developers
- DevOps

Suitable for

- Long-term project
- Utmost security required
- Better control over staff work time and performance

Benefits

- Effective and predictable budget
- Transparent candidate selection
- Quick start
- High sustainability
- Great control
- Direct communication

IT staff augmentation

IT staff augmentation service is an outsourcing model in which a business temporarily uses IT specialists offered by a vendor to fill short-term positions.

Suitable for

- Short term project
- Quick access to specific expertise
- Project managed by the client team lead

Benefits

- Effective and predictable budget
- Transparent candidate selection
- Great flexibility



X

Bringing an objective voice and outlook

In the dynamic and ever-changing realm of technology, IT outsourcing will continue to be an essential strategy for companies embracing digital transformation in order to obtain a competitive edge and secure long-term success. In addition, as technology progresses at an unprecedented rate, enterprises will increasingly rely on **specialized** skills and expertise that may be better obtained externally. Furthermore, emerging technologies such as AI, cloud computing, blockchain, IoT,... are altering the IT environment, and outsourcing can provide access to expertise in these areas.







Global IT Outsourcing Statistics

The IT outsourcing landscape is experiencing rapid expansion and is projected to grow continuously in the next few years. Adoptions of digital transformation, Al applications, and cloud services are considered the most significant drivers for market growth.

Let's take a look at the most outstanding statistics regarding IT spending and IT outsourcing

Quick facts

- ~300,000 U.S. jobs are outsourced each year (Zippia, 2023) (<u>5</u>).
- 66% of businesses in the U.S. outsource at least one department (Zippia, 2023) (<u>5</u>).
- 76% of executive respondents indicated that IT functions are outsourced (Deloitte, 2022) (1).
- 70% of businesses cite cost as the biggest reason for outsourcing (Deloitte, 2020) (<u>9</u>).
- 50% of executive respondents chose talent acquisition as the top internal challenge (Deloitte, 2022) (1).
- 54% of executive respondents chose "transparency" as the best quality of a vendor (Deloitte, 2022) (1).
- 78% of businesses that outsource have a positive attitude towards their vendors (Zippia, 2023) ($\underline{5}$).

Global IT Spending Landscape

Unit: million USD

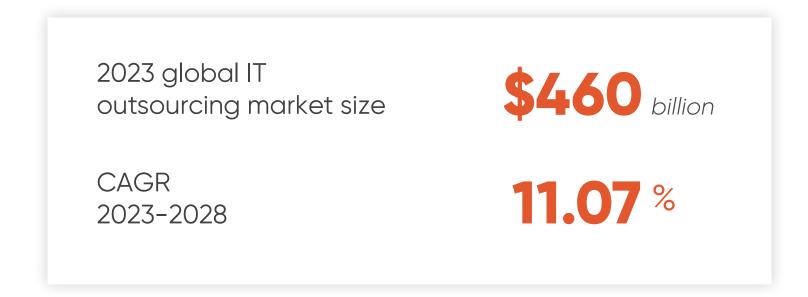
	2022 Spending	2022 Growth (%)	2023 Spending	2023 Growth (%)	2024 Spending	2024 Growth (%)
Data Center Systems	227,021	19.7	237,703	4.7	260,221	9.5
Devices	766,279	-6.3	689,288	-10.0	722,472	4.8
Software	811,314	10.7	916,240	12.9	1,042,386	13.8
IT Services	1,305,699	7.5	1,401,038	7.3	1,547,349	10.4
Communications Services	1,423,128	-1.9	1,449,286	1.8	1,497,345	3.3
Overall IT	4,533,441	2.9	4,693,556	3.5	5,069,773	8.0

Source: Gartner (2023) (<u>6</u>)

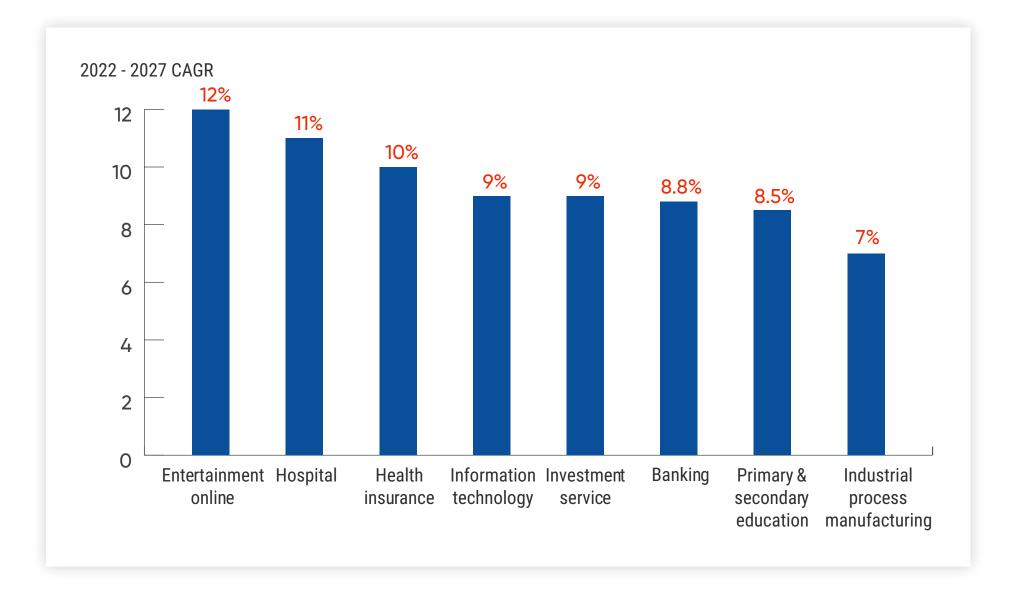


Global IT outsourcing landscape

Global IT outsourcing demand



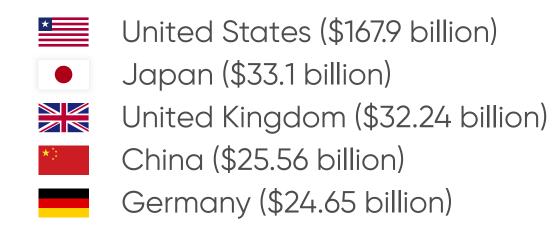
Top sectors embrace IT outsourcing service



Source: Gartner (2023) (<u>8</u>)

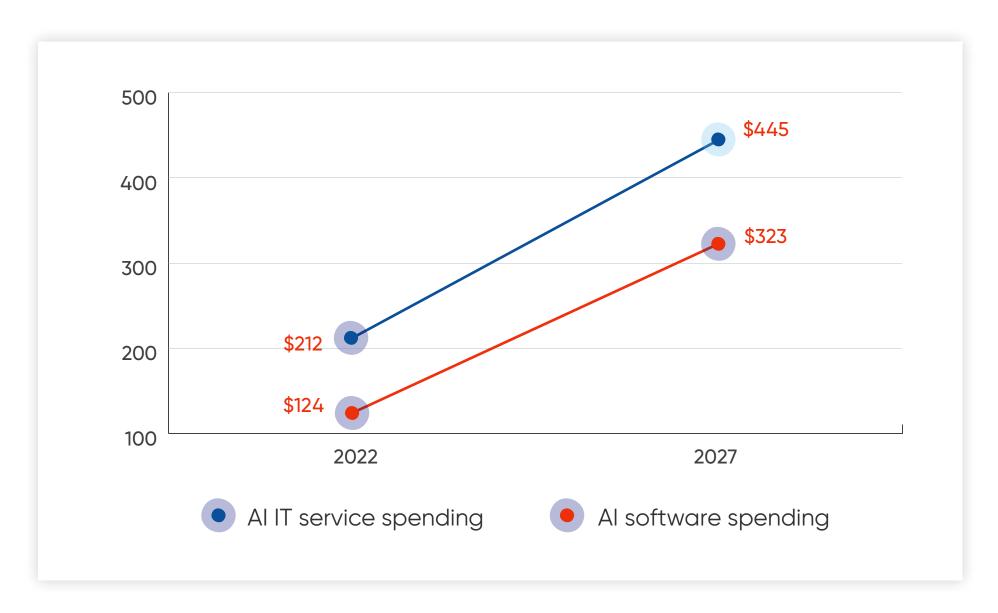
MLTS GROUP

Top countries by 2023 IT outsourcing spending



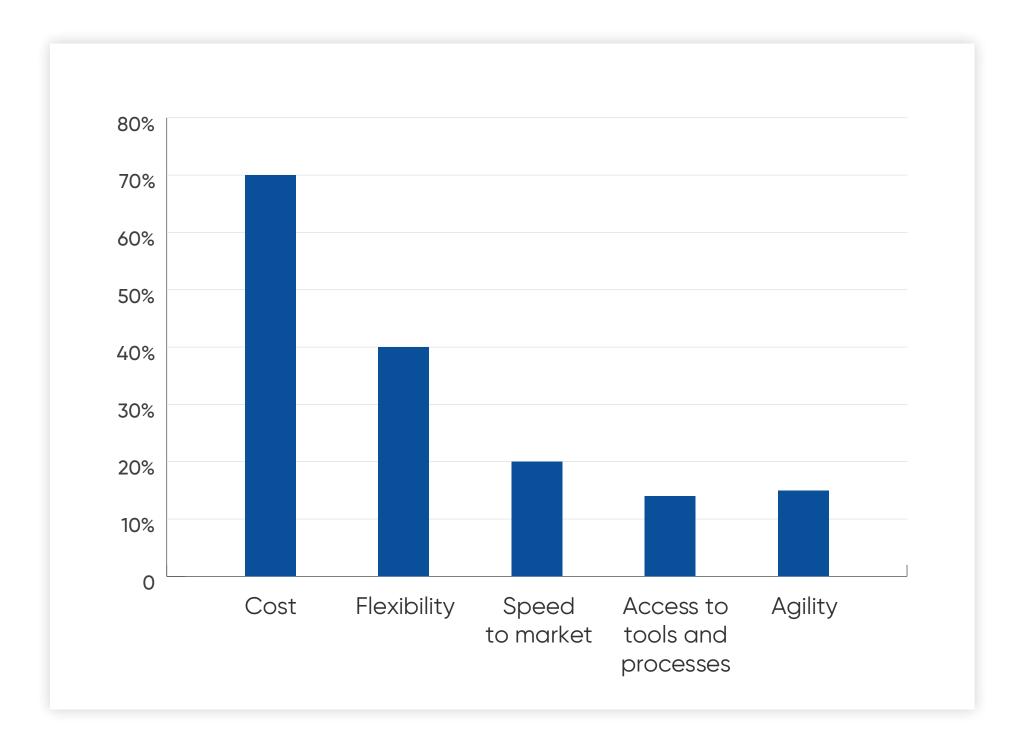
Source: Statista (7)

Al & GenAl spending



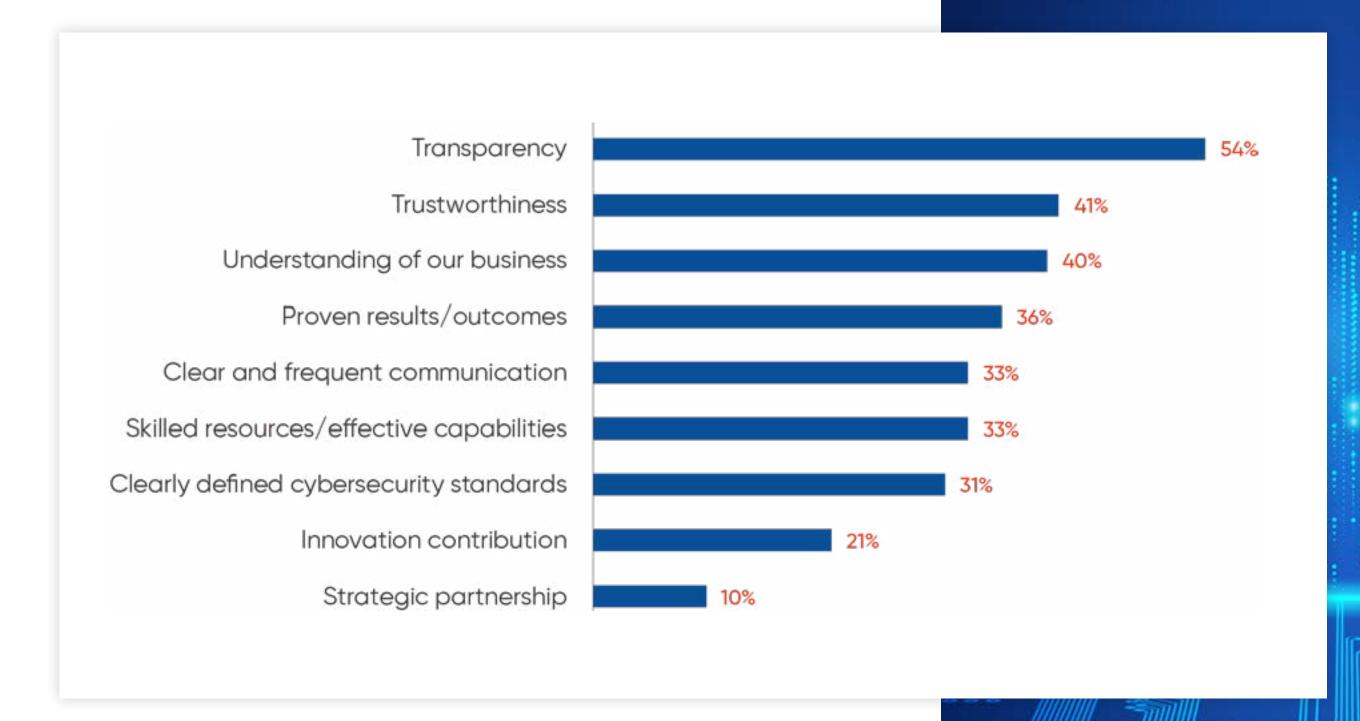
Source: Gartner (2023) (<u>8</u>)

Major outsourcing objectives



Source: Deloitte (2020) (9), % respondents

The most significant vendor selection criteria











37% of IT operations being outsourced and an average IT outsourcing budget of 13.6%. Let's zoom in on the preferences in IT outsourcing regarding:

- Technology
- Tech Stacks
- Services

MLTS GROUP

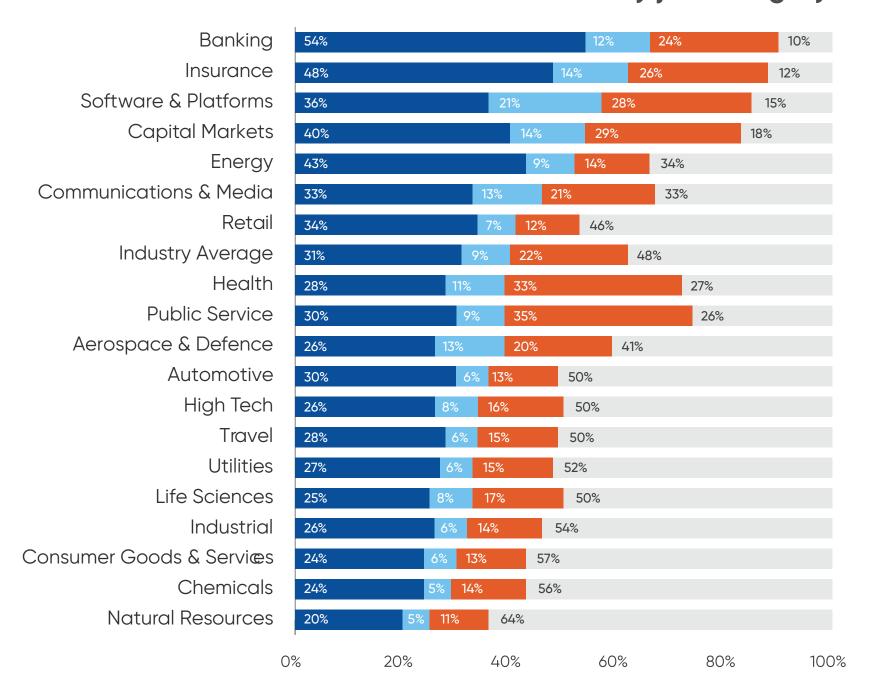
- Human Resources
- Countries for IT Outsourcing

The rise of advanced technology

Al and machine learning

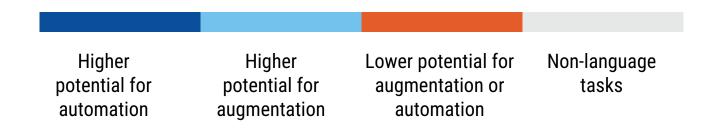
Artificial Intelligence (AI) and machine learning (ML) are closely related fields within the broader domain of computer science that focus on creating systems and algorithms capable of performing tasks that typically require human intelligence.

Generative AI will transform work across every job category



Work time distribution by major occupation and potential Al impact

Based on their employment levels in the US in 2021



40% of working hours across industries can be impacted by Large Language Models (LLMs)

Source: Statista (2023) (<u>10</u>)

Al and machine learning is shaping the future

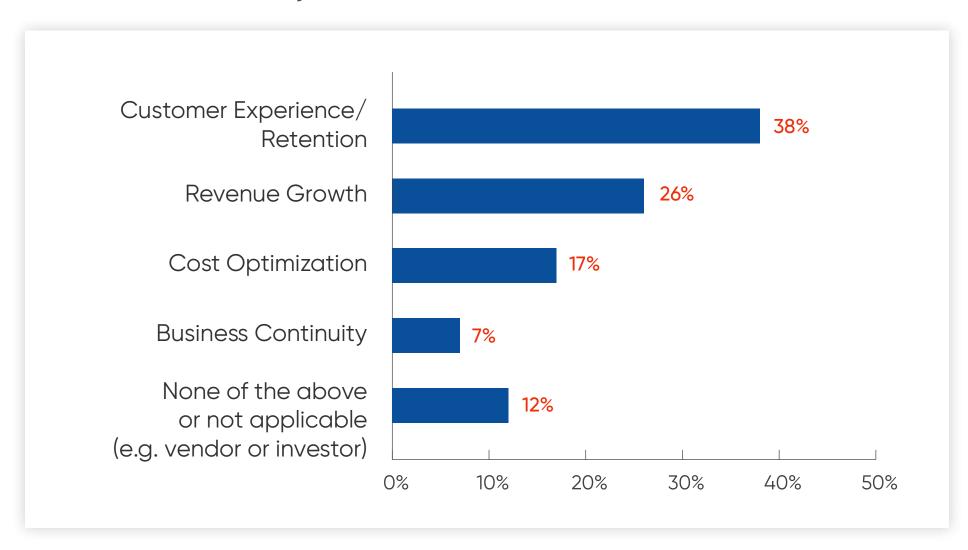
With the launch of generative AI, ChatGPT, in November 2022, 2023 became a start for new era of widespread use of AI in various applications, from the mundane tasks like composing an email to creating travel itinerary and even generating complex programming code.

This groundbreaking technology innovation has also led to a boom of integrating AI into umpteen systems and applications in industries of BFSI, healthcare, energy, eCommerce, etc. to improve accuracy, performance and provide personalization at scale.



In a recent survey conducted during a Gartner webinar with over 2,500 executives, 38% expressed that their main focus for investments in generative AI is enhancing customer experience and retention. Following closely behind are objectives such as driving revenue growth (26%), optimizing costs (17%), and ensuring business continuity (7%).

Primary Focus Of Generative Al Initiatives



Source: Gartner (2023) (11)

Cloud computing

Cloud computing is a technology paradigm that involves the delivery of computing services, including computing power, storage, databases, networking, analytics, software, and more, over the internet (the cloud) to offer faster innovation, flexible resources, and cost savings. Instead of owning and maintaining physical servers or infrastructure, users can access and utilize these services on a pay-as-you-go basis, often referred to as a "utility" or "on-demand" model.



Cloud computing is a predominant technology

Gartner anticipates that the total ubiquitous spending on public cloud services will remarkably rise 20.4% to \$678.8 billion in 2024, up from \$563.6 billion in 2023. These figures point out that businesses will keep achieving more cloud breakthroughs and adopting novel practices in the near future.

Here come all segments of the cloud market expected to see growth in 2024.

	2022	2023	2024
Cloud Application Infrastructure Services (PaaS)	119,579	145,320	176,493
Cloud Application Services (SaaS)	174,416	205,221	243,991
Cloud Business Process Services (BPaaS)	61,557	66,339	72,923
Cloud Desktop-as-a-Service (DaaS)	2,430	2,784	3,161
Cloud System Infrastructure Services (IaaS)	120,333	143,927	182,222
Total Market	478,315	563,592	678,790

Source: Gartner (2023) (12)

The dominance of cloud computing can be explained by its scalability, cost-effectiveness, accessibility, security, speed of deployment, ranges of services, and more than that, the growth of harnessing AI in business processes.

IoT

The internet of things (IoT) refers to the **network** of interconnected physical devices, vehicles, appliances, and other objects embedded with sensors, software, and network connectivity. These devices, often referred to as "smart devices" or "connected devices," can collect and exchange data over the internet, enabling them to communicate and interact with each other.

IoT is changing workplaces and residences

The IoT has emerged as a transformative force, weaving its connectivity threads across industries and daily life. Its application spans a spectrum from smart residences and urban environments to industrial processes and healthcare, heralding a paradigm shift in human interaction with the environment.

Within residences, IoT manifests in thermostats adjusting intuitively, refrigerators autonomously procuring groceries, and security systems integrating seamlessly. In the industrial realm, IoT practices optimize operational processes, elevate efficiency, and forecast maintenance requisites through the integration of connected sensors and devices.

The ubiquity of IoT is underscored by estimations from Statista, with approximately 15,14 billion IoT devices operational globally as of 2023, and projections suggesting an increase to over 29,4 billion by 2030.

Businesses are embracing IoT for its ability to provide real-time insights, improve decisionmaking, and unlock new revenue streams. As the world becomes increasingly interconnected, the practices and applications of IoT continue to shape a future where our environments, both personal and professional, are smarter, more responsive, and ultimately, more connected than ever before.

\$29.42 30 \$27.31 \$25.21 \$23.14 \$21.09 \$19.08 20 \$17.08 \$15.14 15 \$13.14 2025 2027 2021 2023 2024 2019 2020 2022 2026 2028 2029 2030

Source: Statista (2023) (<u>13</u>)

Robotic process automation (RPA)

Robotic process automation or RPA refers to **the** use of technology and systems to perform tasks or processes with minimal human intervention. The goal of RPA is to streamline and optimize repetitive or complex tasks, making them more efficient, accurate, and consistent. RPA can be applied to various industries and activities, ranging from manufacturing and IT operations to business processes and household chores.

Leveraging RPA helps reach greater goals

Businesses worldwide are embracing automation to reduce costs, enhance accuracy, and increase productivity.

A recent study conducted by Gartner, Inc. unveiled that 80% of executives believe automation is applicable to every business decision (14). The survey sheds light on the integration of RPA into digital business practices and explores how organizations are adapting and incorporating Al within their automation strategies.

As organizations continue to unlock its potential, the ripple effect of RPA extends beyond efficiency gains-ushering in an era where creativity, problem-solving, and human ingenuity take center stage, fueled by the tireless algorithms and machines that make it all possible.





Cybersecurity

Cybersecurity is defined as the practice of protecting computer systems, networks, and data from theft, damage, unauthorized access, or any form of unauthorized exploitation. It involves implementing measures, technologies, and best practices to ensure the confidentiality, integrity, and availability of information in the digital realm.

Prioritizing security investments will reduce breaches

The rise of advanced technologies such as Al, IoT, and other digital innovations has brought unprecedented benefits, but it has also heightened concerns about cybersecurity. As these technologies become integral to daily life and business operations, the increasing interconnectivity and data sharing create new vulnerabilities that cyber threats exploit.

Here comes a future outlook of cybersecurity market shared by McKinsey

Cyberattacks are on the rise. and market indicators reflect a fear of further increases

Future outlook of cybersecurity market











\$101.5

15%

85%

3.5

+21%

billion in projected spending on service providers by 2025 (*)

annual increase of costs related to cybercrime; will reach \$10.5 trillion a year in 2025

of small and midsize enterprises intend to increase IT security spending until 2023

million cybersecurity positions now open worldwide (**)

forecast of compound annual growth for direct cyber insurance premiums until 2025

(*) Service providers include consultants, hardware support, implementation, and outsourcing.

(**) Steve Morgan, "Cybersecurity jobs report: 3.5 million openings in 2025," Cybersecurity Ventures, November 9, 2021. Source: Center for Strategic & International Studies; IBM; Identity Theft Resource Center; Kaspersky Lab; National Cyber Security Centre; press; PurpleSec data survey; Statista McKinsey Cyber Market Map

Source: McKinsey & Company (2022) (<u>15</u>)

Facing the proliferation of cyber threats, their complexity and their long-term implications down the road, organizations resorts to hire cybersecurity professionals or outsource the cybersecurity validation to specialized service providers.





Popular tech stacks

A technology stack, often referred to as a "tech stack," is a combination of software tools, programming languages, frameworks, libraries, and other technologies that developers use to build and maintain a software application.

Global search volume on Google of specific tech stacks in 2023

Term	Global Search Volume
LAMP stack	18K/month
ASP.NET	26K/month
MEAN stack	32K/month
MERN stack	56K/month
MEVN stack	1.6K/month
Ruby on Rails	88K/month
Serverless stack	1.1K/month
Python stack	11K/month
Java stack	18K/month

The term "stack" implies that these technologies are stacked on top of each other, forming a cohesive structure.

A typical tech stack is divided into several layers, each serving a specific purpose in the development process. The three primary components of a tech stack are the frontend, backend, and database layers.

Software stack, the collection of technologies you employ to build your application, is more than just a collection of tools - it's the blueprint that determines the performance, maintainability, and overall trajectory of your project.

Here come the seven tech stacks and variants that are dominant in the IT world. We sort out these stacks by tracing back the global search volume of each term reported by Ahrefs as of November 2023 and popular requirements from job descriptions of our clients collected throughout 2020-2023. Also, we validate their currency by listing out well-known platforms and websites leveraging those stacks.

Source: Ahrefs



LAMP stack

The LAMP stack is a group of open-source software that is commonly used to build web applications. The acronym LAMP stands for

• Linux: The operating system · Apache: The web server • MySQL: The database

• PHP: The programming language

These four components work together to provide a complete and cost-effective solution for building web applications.

The LAMP stack provides a cost-effective and reliable solution for developing and hosting web applications. It is particularly popular for building content management systems (CMS), e-commerce platforms, and other dynamic websites. The flexibility of the stack allows developers to choose alternatives for each component.

Platforms and websites that harness LAMP stack

- Facebook
- Wikipedia
- WordPress
- Drupal
- Joomla

ASP.NET stack

The ASP.NET stack is a set of technologies and tools associated with building web applications using Microsoft's ASP.NET framework. ASP.NET is a serverside web application framework that is part of the larger .NET framework. The ASP.NET stack typically includes the following components:

- ASP.NET: The core framework for building web applications on the .NET platform.
- C#: The programming language used to develop ASP.NET applications.
- IIS: The web server used to host ASP.NET applications.
- SQL server: The database used to store data for ASP.NET applications.

In addition to these core components, the ASP.NET stack can also include a variety of other technologies, such as:

- Microsoft Azure: The cloud computing platform used to deploy ASP.NET applications.
- Entity framework: The object-relational mapper (ORM) used to map data between ASP.NET applications and SQL Server databases.
- jQuery: The JavaScript library used to add interactivity to ASP.NET applications.

Platforms and websites that harness ASP.NET stack

- Stack Overflow
- Microsoft
- GoDaddy
- Dell
- NASA





MEAN stack and variations

The MEAN stack is a JavaScript-based framework for developing dynamic web sites and web applications. The acronym MEAN stands for MongoDB, Express, Angular, and Node.js, the four key technologies that make up the layers of the stack. This stack is becoming increasingly popular due to its ease of use, scalability, and performance.

The MEAN stack consists of the following components:

- MongoDB: MongoDB is a NoSQL database that stores data in a JSON-like format. It is known for its flexibility and scalability, making it well-suited for modern web applications that handle large amounts of data.
- Express.js: Express.js is a web application framework for Node.js. It provides a robust set of features for building web applications, including routing, middleware, and templating.
- Angular: Angular is a JavaScript framework for building single-page applications (SPAs). It provides a comprehensive set of tools for building dynamic and interactive web applications.
- Node.js: Node.js is a runtime environment for JavaScript that allows JavaScript code to be executed outside of a web browser. It is a popular choice for building server-side applications and real-time web applications.

It's worth noting that there are variations of the MEAN stack, which are **MERN** (MongoDB, Express. js, React, Node.js) and **MEVN** (MongoDB, Express. js, Vue.js, and Node.js). The choice among MEAN, MERN and MEVN may depend on developer preferences, project requirements, and the specific features offered by each framework.

Platforms and websites that harness MEAN stack	Platforms and websites that harness MERN stack	Platforms and websites that harness MEVN stack
• Netflix	• Airbnb	• Yelp
• Uber	• Instagram	• GitHub
• PayPal	• Pinterest	• Twitch
• Slack	Uber Eats	
• Craigslist		



Ruby on Rails stack

Ruby on Rails, often abbreviated as RoR, is a full-stack web application framework written in Ruby. It is designed to make the process of developing, deploying, and maintaining web applications easier and faster. RoR is based on the Model-View-Controller (MVC) architectural pattern, which separates the application's logic into three interconnected parts:

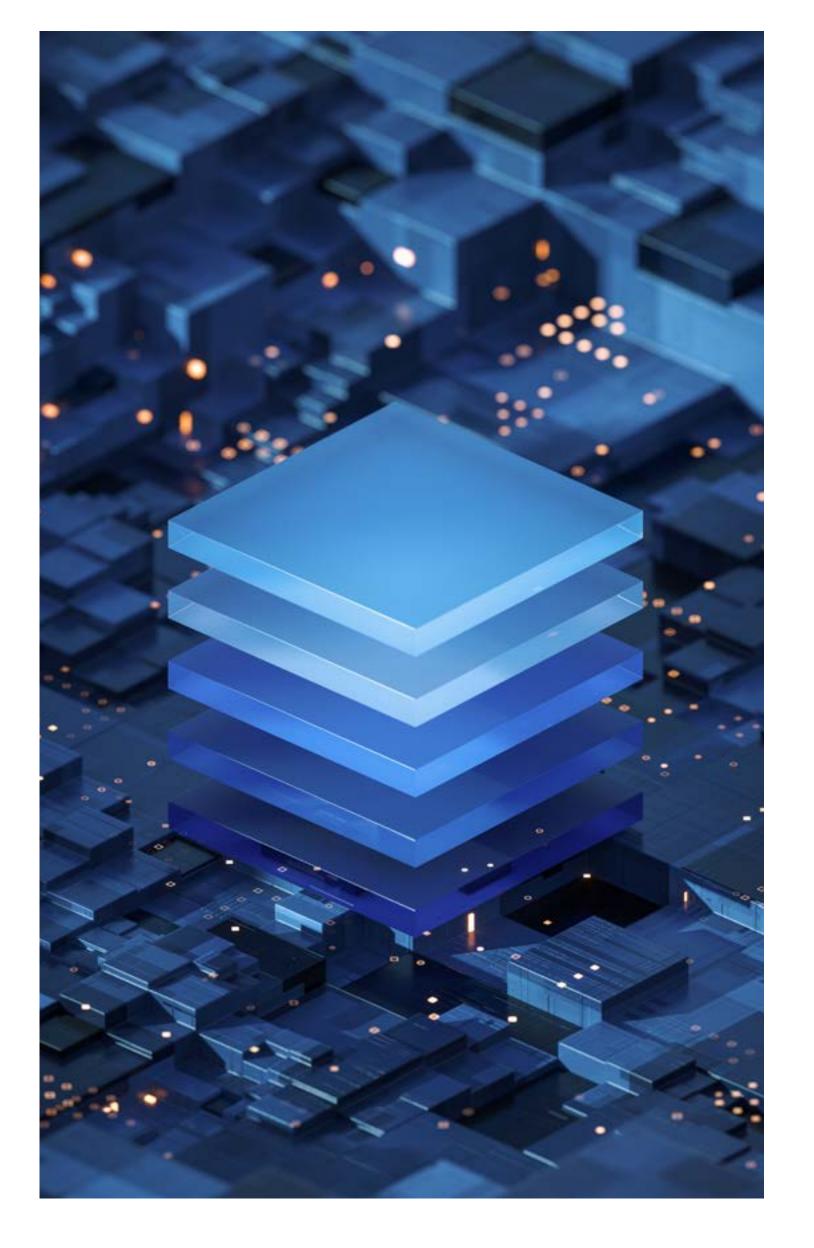
- Model: The model represents the data of the application. It stores and manages the data, and it provides an interface for accessing and modifying the data.
- View: The view represents the user interface of the application. It is responsible for rendering the data from the model in a way that is understandable to the user.
- Controller: The controller acts as a bridge between the model and the view. It receives requests from the user, interacts with the model to retrieve or modify data, and then sends the data to the view for rendering.

If you are considering developing a web application, RoR is a great option to consider. It is a powerful, flexible, and mature framework that can be used to build a wide variety of web applications.

Platforms and websites that harness RoR stack

- Shopify
- Zendesk
- Bloomberg
- Dribble
- Goodreads







Serverless stack

A serverless stack is known as a collection of **cloud-based services** that empower developers to build and run applications without the need to provision or manage servers. This approach, often termed "serverless" architecture" or "serverless computing," aims to streamline the development and deployment process by offloading server management responsibilities to the cloud provider.

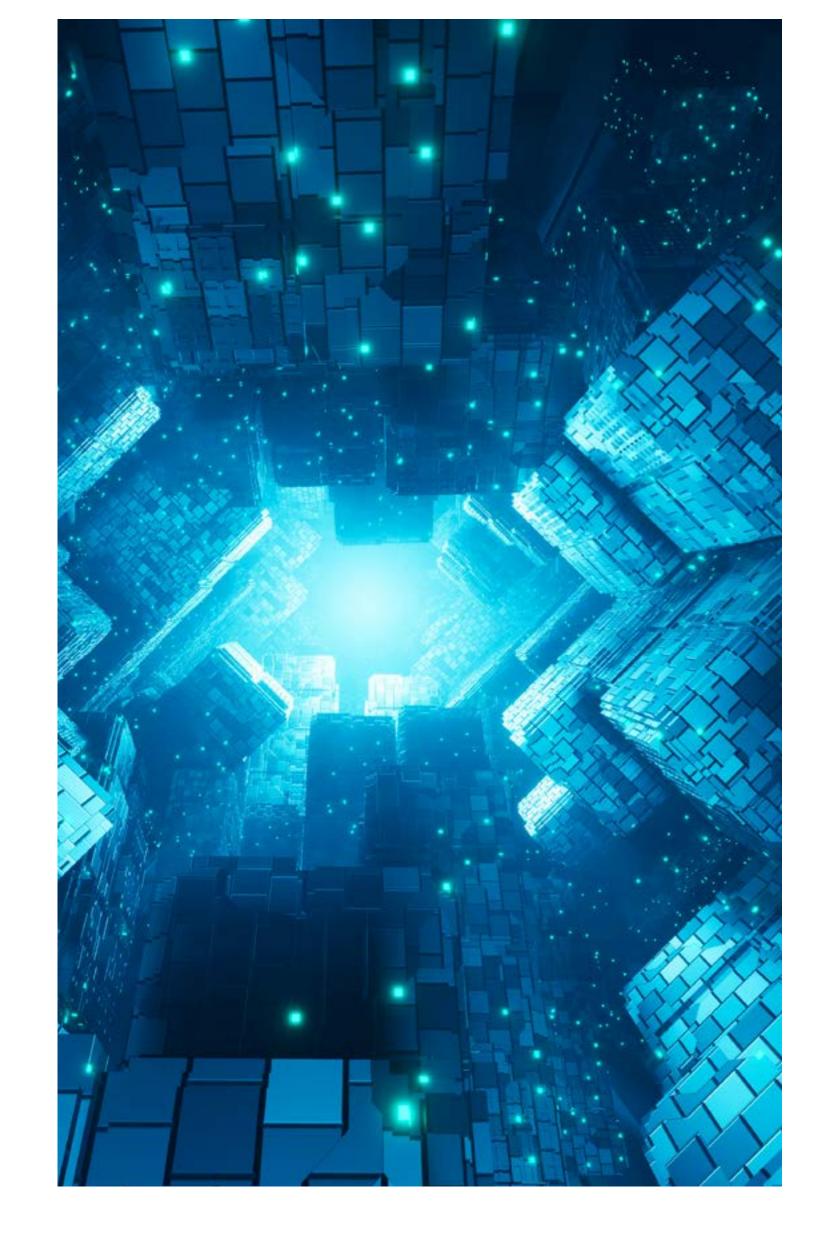
Common components of a serverless stack are

- Cloud functions: These are short-lived, stateless functions that execute application code in response to events. They are typically deployed to cloud platforms like AWS Lambda, Azure Functions, or Google Cloud Functions.
- API gateways: These act as the entry points for applications, receiving requests from users and routing them to the appropriate cloud functions. They handle tasks like authentication, authorization, and load balancing.
- Databases: Serverless applications often utilize managed databases provided by cloud providers, such as Amazon DynamoDB, Azure Cosmos DB, or Google Cloud Firestore. These databases are optimized for serverless workloads and offer scalability and high availability.
- Object storage: Cloud storage services like Amazon S3, Azure Blob Storage, or Google Cloud Storage provide durable and scalable storage for application data.
- Monitoring and logging services: Cloud providers offer tools for monitoring application performance, resource utilization, and error logs. These tools help developers identify and troubleshoot issues quickly.

Platforms and websites that harness serverless stack

- AWS Lambda
- Coca-cola
- GoPro
- Doulingo







Python stack

To develop and deploy Python-based applications, developers have a tendency to harness Python stack in light of its compatibility.

The foundation of a Python stack typically includes the following core components:

- **Python programming language:** The core element of the stack is the Python programming language itself. Python is a versatile, high-level language known for its simplicity, readability, and extensive library support.
- **Web frameworks:** For web development, Python offers a range of frameworks, such as Django, Flask, and Pyramid, that provide a structured approach to building web applications. These frameworks handle tasks like routing, templating, and form handling.
- **Data management**: Python applications often interact with databases to store and retrieve data. Common database choices include MySQL, PostgreSQL, and MongoDB. Python provides libraries like SQLAlchemy and peewee to facilitate database interactions.
- **Testing frameworks**: For ensuring the quality and reliability of Python applications, testing frameworks like unittest, pytest, and doctest are widely used. These frameworks provide tools for writing test cases and automating the testing process.
- **Deployment tools**: Deployment tools like Fabric, Ansible, and Chef are used to automate the process of deploying Python applications to production environments. They streamline the configuration and management of servers and applications.

Beyond the core components, a Python stack may also include **various additional tools and technologies** depending on the specific needs of the project, such as data analysis libraries, graphic libraries, API development tools and DevOps tools.

Platforms and websites that harness Python stack

- Dropbox
- Reddit
- Quora
- Mozilla





Java stack

In case of Java-based applications, particularly enterprise-level applications, IT engineers are inclined to build and deploy them with a Java stack.

Java stack encompasses:

- Java programming language: The central element of the stack is the Java programming language itself. Java is a versatile, high-level language known for its object-oriented approach, platform independence, and extensive library support.
- · Java Enterprise Edition (EE): Java EE is a suite of APIs and technologies specifically designed for developing enterprise applications. It provides components like JavaServer Pages (JSP) for web development, Enterprise JavaBeans (EJB) for business logic, and Java Message Service (JMS) for messaging.
- Application servers: Application servers like JBoss, WebLogic, and GlassFish provide the runtime environment for Java EE applications. They handle tasks like resource management, security, and deployment
- Databases: Java applications often interact with databases to store and retrieve data. Common database choices include MySQL, PostgreSQL, and Oracle Database. Java provides libraries like JDBC and Hibernate to facilitate database interactions.
- Testing frameworks: For ensuring the quality and reliability of Java applications, testing frameworks like JUnit, Mockito, and Selenium are widely used. These frameworks provide tools for writing test cases and automating the testing process.

Besides the core components, developers may make full use of suite of tools and technologies to carry out IT projects. These include:

- Web frameworks: For web development, Java offers a range of frameworks, such as Spring MVC, Struts, and JavaServer Faces (JSF), that provide a structured approach to building web applications.
- Data analysis libraries: For data analysis and machine learning tasks, libraries like Apache Spark, Hadoop, and TensorFlow are commonly used.
- Business process management (BPM) tools: For managing complex business processes, BPM tools like jBPM and Activiti are used to automate and optimize workflows.
- DevOps tools: DevOps tools like Docker, Kubernetes, and Jenkins are used to automate and streamline the development, deployment, and management of Java applications.

Platforms and websites that harness Python stack

- eBay
- LinkedIn
- Amazon
- Yahoo





Commonly outsourced services

Types of service

IT outsourcing services can be divided into two segments: professional and managed.

Professional services

Professional services are delivered by skilled professionals and often involve specialized expertise and consultancy. This category typically includes IT consulting & implementation and application outsourcing (requirement assessments, system design, software development, software QA, project management, etc.).

Managed services

Managed IT services often involve administration outsourcing services like setup, configuration, network monitoring, security management, data backup, and technical support. Normally, they are provided on a subscription or contracted basis. So, what services will continue to thrive in 2024 and the coming years?

Trending services

1. Multiple studies have suggested that **application** development and maintenance have become the

most frequently outsourced functions. (16)

- 2. The trend of **digitalization and the emergence** of industry 4.0 technologies like Al and digital twins have significantly boosted the demand for IT consulting & implementation, application development, application modernization, and cloud migration services.
- 3. The increasing need for business process automation and optimization, alongside the advancement in data science and availability of big data, makes up the key to the growing demand for consulting, development, and data services related to Al and RPA.
- 4. "Cloud native" will also become the new normal within the cloud-based service market. (17)

Backing these trends with numbers	Market size (2023, billion USD)	Market growth (2023)	CAGR (2022 - 2027)
Application implementation & managed services	118,7	~7,5%	~7%
IT consulting & implementation	67,82	~10%	~12%
Infrastructure as a service (IaaS)	154,7	20,5%	23%
Cloud-native applications	6,63	25,2%	25,2%
Al service	212 (2022)		

Data source: Statista (2023) (7), Gartner (2023) (8), Allied Market Research (2023) (18)



Author's opinions

The advancements in the technology space in recent years, namely the spread of digital transformation and the emergence of Industry 4.0 technologies that enable improved efficiency and customer experience, have driven businesses to embrace IT applications to stay competitive.

However, **increasing IT spending** alone is not enough to win the race. **Speed** is another crucial factor, especially in fast-paced industries like eCommerce where competition is intense

and margins are thin. Moreover, 'traditional' industry verticals, such as retail, healthcare, and manufacturing, face challenges in implementing digital transformation initiatives by themselves.

That's why businesses opt for **IT consulting** to assess their technology readiness and draw the digitalization and/or modernization roadmap, especially for those related to modern technologies like AI and cloud. They also utilize **software development and cloud-based service**

providers like LTS Group to improve access to advanced technologies and accelerate time-to-market while maintaining cost control.

Meanwhile, data services such as data collection and processing, as a sub-segment within the Al market, are and will be increasingly outsourced due to their significant yet labor-intensive nature. Take our subsidiary LTS GDS as a data processing partner for instance, the company has witnessed an impressive 3x average annual growth with a client retention rate of ~ 80%.



Countries for IT project outsourcing in 2024

In the vast landscape of global possibilities for IT outsourcing, choosing the right destination is like navigating a treasure map, with each location holding its unique blend of opportunities and advantages. As businesses set sail for the perfect outsourcing partner, the question becomes not just where, but where their projects can find the optimal choice to unlock a trove of success.

LTS Group has compiled facts, statistics and analysis of auspicious destinations for outsourcing that can give businesses a leg up in settling on which country is ideal for IT projects. Let's dig in!

India - long-established destination for IT outsourcing

Known for its large pool of skilled IT professionals, India has been a prominent destination for outsourcing. Costeffectiveness, a strong educational system, and English proficiency make it a top choice.

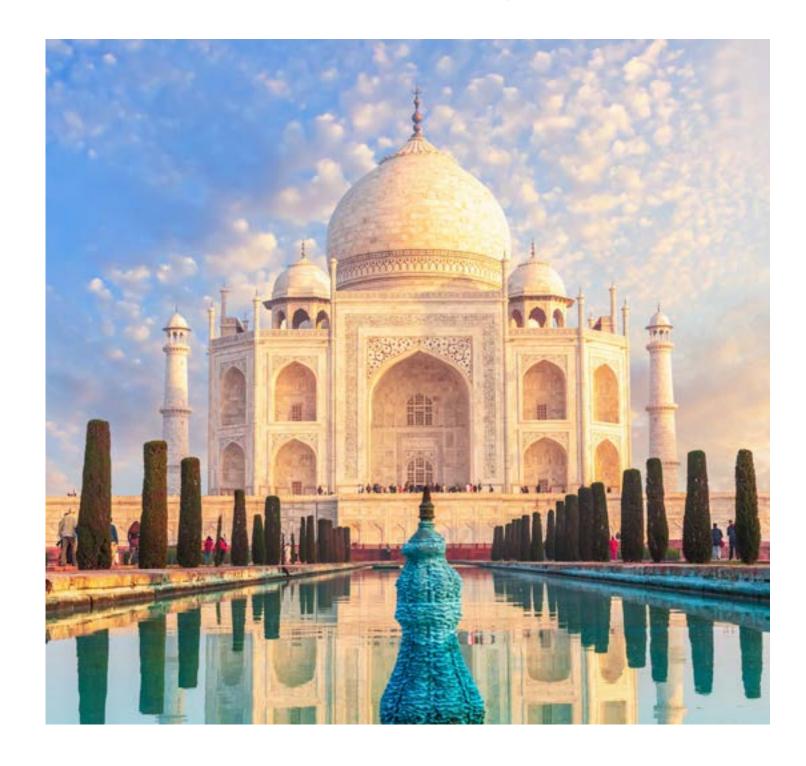
- **IT export value:** over USD 178 billion (2022) (<u>19</u>)
- Offshore development rates: \$19 \$50/hr
- The largest IT hubs: Bangalore, Mumbai, Hyderabad, Chennai, Kolkata.

Why choose India?

- · Large and skilled workforce: India boasts a substantial and highly skilled IT workforce, with millions of tech graduates each year contributing to a diverse talent pool.
- · Cost-effective solutions: Indian outsourcing agencies offer competitive rates, providing businesses with cost-effective solutions without compromising on quality.
- English proficiency: English is widely spoken in the Indian IT sector, facilitating effective communication with clients from Englishspeaking regions.
- Time zone alignment: India's time zone overlaps with European and American working hours, enabling efficient collaboration across different regions.

Considerations when selecting India

- · Cultural differences: Businesses should be mindful of potential cultural differences and take proactive measures to ensure effective communication and collaboration.
- **High competition:** The high number of outsourcing providers in India requires careful evaluation to choose a reliable and suitable partner.



Vietnam - the next "Silicon valley" in Southest Asia

Vietnam is gaining popularity for software development outsourcing. Choosing Vietnam as a destination for IT outsourcing is akin to unlocking a treasure trove of technological prowess and cost-effective solutions. With a young, dynamic population that is inherently tech-savvy, Vietnam offers a skilled workforce fueled by a robust education system.

The country's stable socioeconomic status, marked by consistent economic growth and political stability, lays a solid foundation for businesses seeking reliable long-term partnerships. Vietnam's government actively supports the IT industry through strategic initiatives, fostering innovation and creating an inviting business environment.

Beyond the economic advantages, Vietnam's cultural adaptability, English proficiency, and favorable time zone make collaboration seamless for global clients. The nation's active participation in international trade agreements further positions it as a global player.

With a great number of trusted IT outsourcing companies, namely LTS Group, FPT, CMC, Sotatek, NTQ, etc., Vietnam is becoming one of the auspicious options for both professional services and managed services.

- Offshore development rates: \$14 \$45/hr
- The largest IT hubs: Hanoi, Ho Chi Minh City, Da Nang.



Why choose Vietnam?

- · Skilled IT workforce: Vietnam has a growing and skilled IT workforce, with a focus on education and a young, tech-savvy population.
- · Cost-effectiveness: Vietnamese outsourcing agencies offer competitive rates, providing businesses with cost-effective yet high-quality IT solutions.
- · Geographical proximity: Vietnam's location in Southeast Asia facilitates communication and collaboration, particularly for clients in the Asia-Pacific region.
- · Government support and initiatives: The Vietnamese government has implemented initiatives to support the IT industry, fostering growth and innovation.
- · Stable socioeconomic status: When outsourcing IT projects to Vietnam, businesses can rest assured that there is no turbulence or strike that may negatively affect the project timeline and outcomes.

Considerations when selecting Vietnam

Language proficiency: Businesses should assess the English proficiency of the workforce to ensure effective communication. However, to tackle this issue, brands should choose reliable partners with vast talent pool, to handpick candidates that have good command of English, Japanese, Korea and other languages.

At LTS Group, we provide human resources that are fluent in English, Japanese, Korean and Chinese to streamline the communication and avoid misunderstanding during the collaboration. In some particular cases, BrSEs, IT comtors or interpreters will be allocated into projects to ensure the highest efficiency in communicating between teams.

China - a growing outsourcing country in Asia

China has emerged as a key player in IT outsourcing, offering a vast talent pool, especially in manufacturing-related IT services. It is a preferred destination for companies looking to tap into the Asian market.

- Software export value: almost USD 71 million (2022)(20)
- Offshore development rates: \$30 \$50/hr
- The largest IT hubs: Shenzhen, Hangzhou, Guangzhou, Wuhan, Chengdu, Tianjin.

Why choose China?

- · Abundant talent pool: China produces an impressive 1.4 million tech graduates annually (21), offering a vast and diverse talent pool for IT projects.
- Cost-effectiveness: Chinese outsourcing agencies provide services at a lower cost compared to many other countries globally, enhancing the economic appeal for outsourcing.
- Technical competence: Acknowledged for technical competence and skills, China's IT professionals contribute to high-quality software development and IT services.

Considerations when selecting China

- Language barrier: The low proficiency in English among the Chinese population can pose communication challenges for international companies.
- IP law concerns: China's reputation for lax enforcement of Intellectual Property laws raises considerations for businesses regarding the protection of proprietary information and innovation.





Ukraine – a star among the most popular IT outsourcing countries

Ukraine has a rapidly growing IT industry, with a focus on software development and IT services. It boasts a large number of highly skilled engineers and competitive rates.

- **IT export value:** USD 7 billion (2022) (<u>22</u>)
- Offshore development rates: \$30 \$50/hr
- The largest IT hubs: Kyiv, Kharkiv, and Lviv.

Considerations when selecting Ukraine

- Geopolitical considerations: The occasional geopolitical tensions may introduce an element of instability that businesses should factor into their decision-making.
- Language proficiency: While English is widely used in the IT sector, clients should assess the language capabilities based on their specific project requirements.

Why choose Ukraine?

- **Highly skilled workforce:** Ukraine boasts a well-educated and skilled IT workforce, with a substantial number of tech graduates each year.
- Cost-effectiveness: Ukrainian outsourcing agencies offer competitive rates without compromising on the quality of services, making it an economically attractive option.
- Cultural proximity: The cultural alignment with Western Europe facilitates effective communication and collaboration, particularly for clients from this region.
- Convenient time zone: Ukraine's time zone aligns well with European working hours, minimizing challenges related to time differences.





Brazil - the preferred destination to outsource software development

Brazil has a strong IT sector, and it is often chosen for outsourcing services in areas such as software development, IT consulting, and application support.

- **IT export value:** over USD 8.4 billion (2023) (<u>23</u>)
- Offshore development rates: \$18 \$60+/hr
- The largest IT hubs: São Paulo, Belo Horizonte, Curitiba.

Considerations when selecting Brazil

- · Bureaucratic hurdles: Businesses should be prepared for potential bureaucratic challenges and complex tax regulations, necessitating local expertise for compliance.
- · Language proficiency: According to EF English Proficiency, Brazil ranks 70th (24) in the world with a moderate proficiency level.

Why choose Brazil?

- Skilled IT workforce: Brazil has a growing and skilled IT workforce, capable of delivering high-quality software development and IT services.
- · Cultural affinity: Cultural alignment with Western countries facilitates effective communication and collaboration, particularly for clients from the Americas and Europe.
- Proximity to North America: Geographical proximity to North America reduces potential challenges related to time zone differences.
- · Cost-effectiveness: Brazil offers competitive rates for IT outsourcing while maintaining a focus on delivering quality services.





The Philippines - budget-friendly IT outsourcing country

The Philippines has a growing IT outsourcing industry, with a workforce that is well-versed in English and has strong technical skills. It is particularly known for customer support and business process outsourcing (BPO) services.

- Offshore development rates: \$25 \$50/hr
- The largest IT hubs: Manila, Bonifacio Global City, Cebu City, Davao City.

Why choose Philippines?

- **Skilled IT workforce:** The Philippines has skilled IT workforce, proficient in software development and other IT services.
- Cost-effectiveness: Filipino outsourcing agencies offer competitive rates, providing businesses with cost-effective solutions and overall savings.
- **English proficiency:** Strong English proficiency of Filipinos contribute to effective communication, making it seamless for clients from English-speaking regions.
- **Time zone alignment:** The Philippines' time zone aligns well with Western working hours, facilitating efficient collaboration.

Considerations when selecting the Philippines

- Infrastructure and connectivity: Businesses should assess the infrastructure and connectivity, especially in rural areas, to ensure the reliability of services.
- Limited IT talent pool: the Philippines offer approximately 200,000 IT engineers for outsourcing, which may lead to snags when organizations attempt to pick a suitable vendor.



The US - the juggernaut among the top IT outsourcing countries

Even though the USA is not the major player in the global map of IT outsourcing countries in terms of cost, it is famous for top-notch quality for many kinds of services.

For many years, the U.S. has always been one of the leading places for the most ground-breaking technologies. The application of the latest technologies in the U.S. is the most advanced. Unconsciously, the work quality in the U.S. is the standard for every other country to follow as this country has a high level of professionalism.

- Offshore development rates: \$62 \$209/hr
- The largest IT hubs: New York, San Francisco, Chicago, Boston, Atlanta, Seattle.

Why choose the United States?

- **Highly skilled and innovative workforce:** The U.S. offers a workforce known for its expertise in cutting-edge technologies, software development, and IT services.
- Cultural alignment: Shared language and business culture enhance collaboration and understanding, reducing communication barriers.
- Intellectual property protection: The U.S. has robust intellectual property laws, providing a secure environment for protecting proprietary information and innovations.

Considerations when selecting the US

- Cost consideration: While the U.S. provides a highly skilled workforce, businesses should weigh the overall cost, considering the value proposition and proximity.
- Skills shortages in certain regions: Businesses should assess the availability of specific skills in their chosen region, as some areas may experience shortages in niche skill sets.







Trending preferences for outsourced IT staffs

During over 6 years of providing highly-experienced developers and testers for companies worldwide, LTS Group realizes that certain soft skills are listed in almost all of job descriptions regardless of the position and seniority. Not only our clients require these qualities, but also other key players in technology field, such as Google, seek for candidates that possess

Problem-solving aptitude

Businesses seek IT engineers and coders with strong problem-solving aptitude on account of the nature of their work, which often involves addressing complex technical challenges and developing innovative solutions.

McKinsey underlines the priority for this characteristic by creating a test assessing candidate's ability to solve problems (25) using deductive, inductive and quantitative reasoning.

Detail-oriented

Attention to detail is a foundational attribute that contributes to the overall success of projects, the reliability of systems, and the security of data.

IT engineers often write complex lines of code, where even a small error can have significant consequences. Detail-oriented individuals meticulously review and debug their code, ensuring accuracy and minimizing the likelihood of introducing bugs.

Simultaneously, in data-intensive applications, accuracy is paramount. Detail-oriented IT engineers ensure the accuracy of data handling, preventing data corruption, loss, or inaccuracies that could compromise the integrity of information.

Analytical thinking

Analytical thinking is the bedrock of effective problem-solving and decision-making in the realm of IT. In an environment where intricate systems, vast datasets, and diverse challenges abound, analytical-minded engineers possess the ability to deconstruct problems, discern patterns, and derive insights. Their capacity to approach issues methodically allows them to not only identify root causes but also to optimize systems, bolster efficiency, and anticipate potential issues.

Adaptability

In an industry where innovation is constant, adaptability ensures that IT engineers can tackle emerging challenges, stay ahead of industry trends, and embrace evolving best practices.

Whetherit's adjusting to shifting project requirements, adopting novel programming languages, or navigating changes in the IT infrastructure, engineers with adaptability thrive in the face of uncertainty, contributing to the agility and resilience of technology-driven initiatives.

Team collaboration

often require interdisciplinary Projects collaboration and shared expertise. Engineers who excel as team players bring effective communication skills, a collaborative mindset, and a willingness to share knowledge. They contribute to a positive team dynamic, which facilitates the exchange of ideas, and supports their colleagues. Team players can seamlessly integrate into collaborative efforts, ensuring that the collective expertise of the team is harnessed for optimal outcomes.

Their ability to work harmoniously with others enhances project success, fosters innovation, and promotes a positive and inclusive workplace culture within an organization.

Curiosity and continuous learning

The IT industry is characterized by constant innovation and emerging technologies, making a curious mindset essential for exploring new possibilities.

IT engineers with a natural curiosity are not only motivated to understand how things work but are also driven to seek out novel solutions and approaches. Additionally, the commitment to continuous learning reflects that IT engineers can adapt to new tools, programming languages, and methodologies.

Creativity

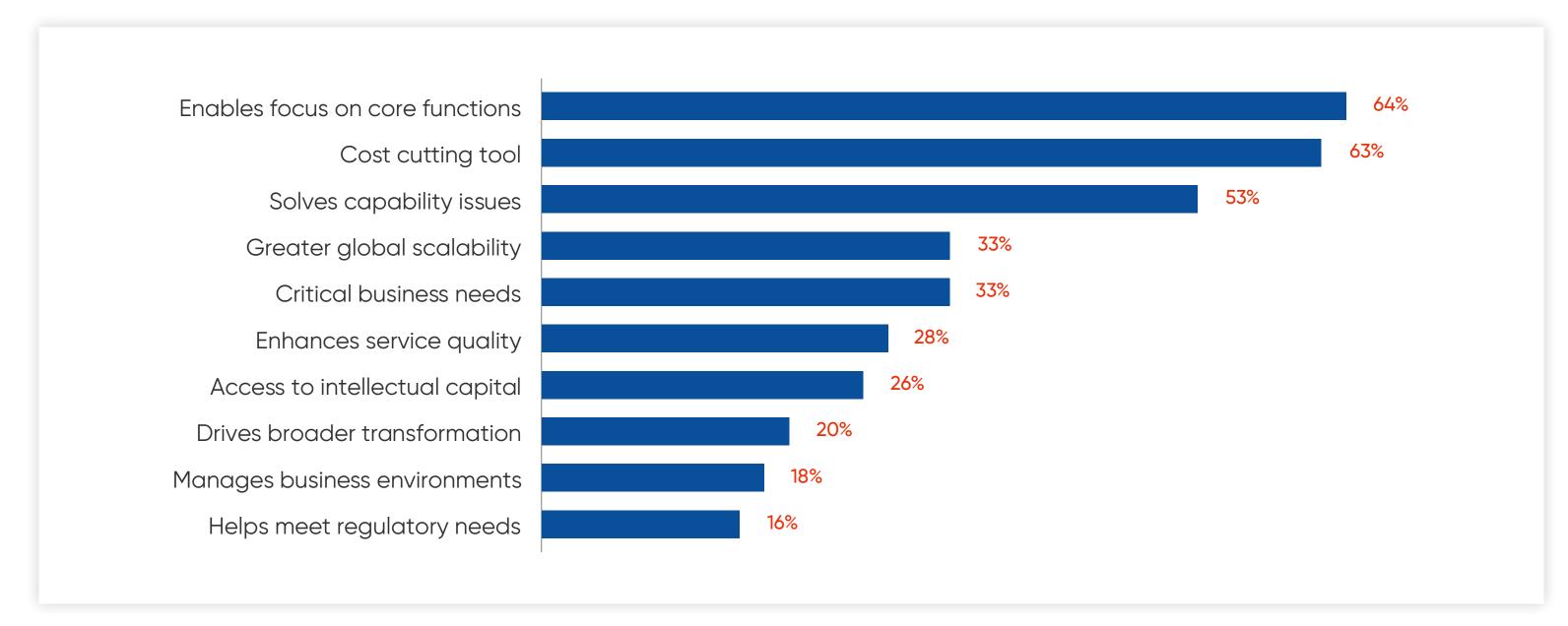
Creativity in IT goes beyond coding; it involves the ability to approach problems with fresh perspectives, devise inventive solutions, and think outside conventional paradigms.

Creative IT engineers bring a valuable dimension to projects, introducing innovative ideas and methods that can lead to breakthroughs in software development, system architecture, and problem-solving. In a field where innovation is a driving force, creative engineers contribute to the development of unique and efficient solutions, giving organizations a leg up in staying ahead of the curve.

As the matter of fact that the demand for particular combinations of hard skills and soft skills for specific vacancies vary, organizations may consider several reliable partners in IT outsourcing to get access to ranges of vast talent pools to hand-pick the most suitable engineers for upcoming projects.

Navigating Change: Why Smart Companies Embrace IT Outsourcing for Growth

How does your organization perceive the benefits of outsourcing



Source: Deloitte (2016) (27)

Focus on core competencies

IT outsourcing allows organizations to concentrate on their core competencies by **delegating non-core functions to specialized service providers.**

This approach helps businesses optimize their internal resources by freeing up some manual and repetitive tasks.

A global outsourcing survey from Deloitte (<u>26</u>) found that 65% of respondents believe outsourcing gives them **a competitive advantage** by allowing them to focus on their core business functions.



Cost efficiency

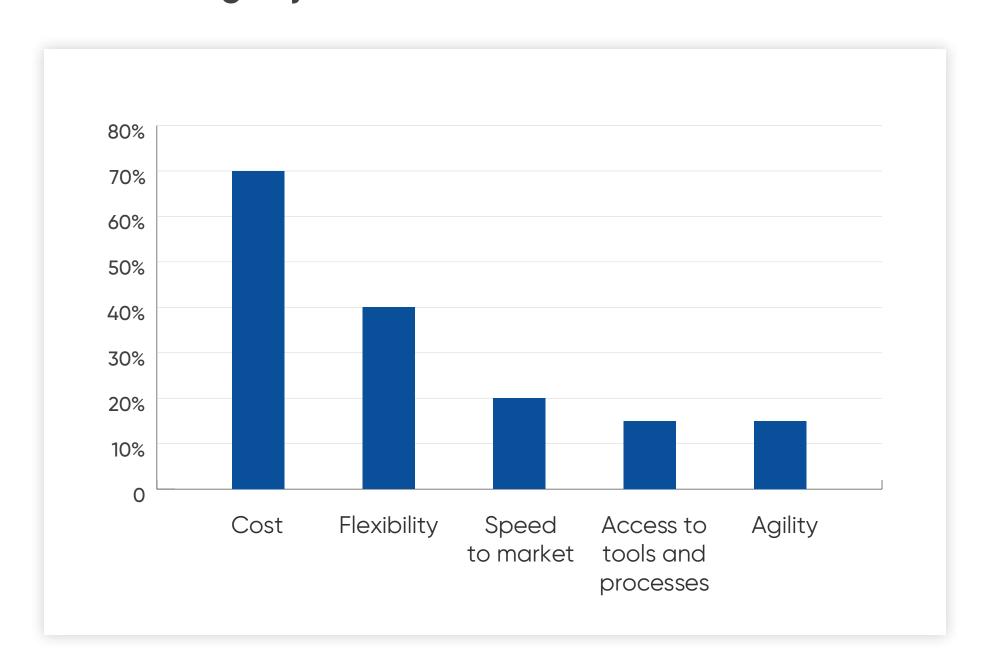
Outsourcing IT services significantly reduces operational costs for businesses. Labor cost arbitrage and the elimination of substantial investments empower businesses to optimize operational expenses.

One of the most significant contributors to cost efficiency is the difference in labor costs between countries. Outsourcing to regions with lower labor costs allows businesses to take advantage of cost savings. The hourly rates for skilled IT professionals in certain offshore locations may be significantly lower than those in developed countries.

Another factor contributing to cost efficiency is outsourcing eliminates the need for considerable overhead investments for businesses, namely in HR training, headhunting services, technology infrastructure, office space, and maintenance. This can be especially advantageous in regions where the cost of living and operating a business is high.

The Deloitte global outsourcing survey for 2020 (<u>28</u>) notes the number one objective for any outsourcing project is to reduce costs. In another latest report of Deloitte's Global Outsourcing Survey 2022, traditional outsourcing remains focused on cost reduction (<u>1</u>).

Outsourcing objectives



What are the primary drivers behind your growing use of each delivery model?





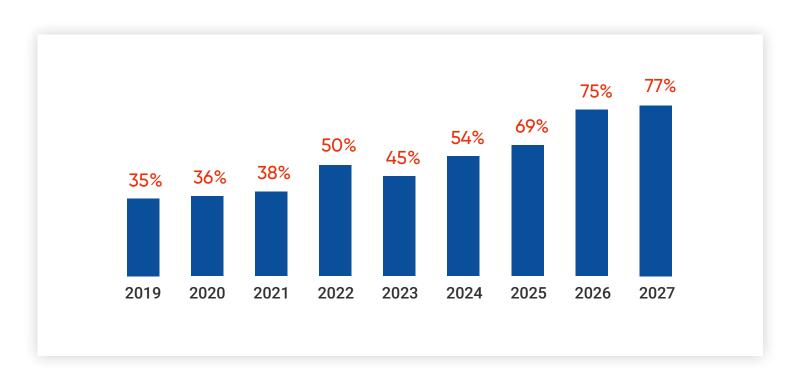
Access to global professionals pools

IT outsourcing grants businesses access to a diverse pool of global talent, overcoming tech talent shortages, fostering innovation, and driving business growth.

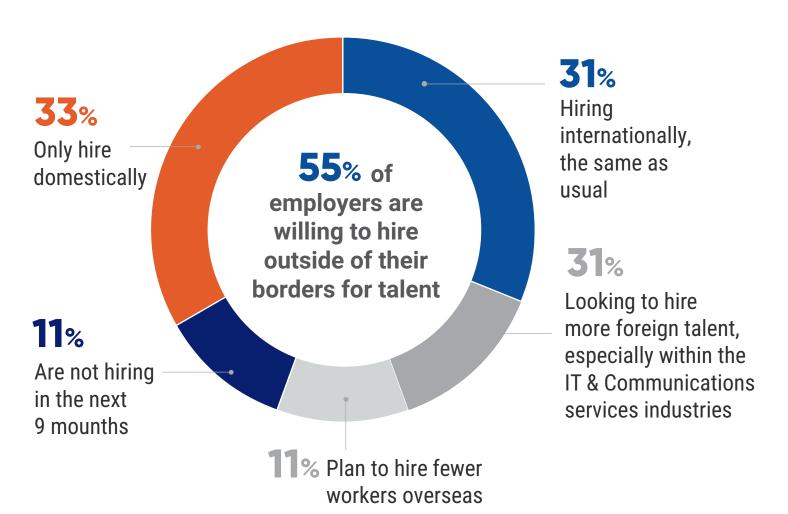
The demand for skilled IT professionals has been consistently outpacing the available talent pool globally. According to a 2021 survey conducted by Gartner (29) among IT executives, a majority of 64% view the persistent shortage of tech talent as the foremost obstacle to embracing emerging technologies. By 2030, Korn Ferry (30) predicts that over 85 million jobs may remain unfilled due to a lack of skilled individuals to take them, potentially resulting in a loss of \$8.5 trillion in annual revenue for companies that are devoid of this essential workforce.

Another report from Manpower Group (31)reveals that nearly 4 in 5 employers globally report difficulty in finding the skilled talent they need in 2023, strengthening +2 percentage points year-over-year and more than double the difficulty in 2015 (38%).

Global Talent Shortage Reaches a 17-Year-High



This scarcity poses a significant challenge for businesses striving to meet their IT needs with inhouse teams. By tapping into the global talent pool, businesses can overcome local shortages promptly and access a diverse range of skilled professionals.



Embracing IT outsourcing to countries with vibrant and highly skilled workforces like Vietnam is a way to further enhance this strategy. As of 2023, Vietnam has approximately 1.3M employees (32) in the IT industry, 148 universities providing IT training, and about **50,000 - 57,000 IT graduates each year** (33).

Tech/ Digital Labor Force Working In **Computer Science & IT - Related Sectors**

530,000

Based on the estimated ratio (1.0%+) of Tech & IT related sectors labor force on total labor force from 15 years & above.

Annual Students Enrollment (Computer Science & IT - Related Major)

50,000 - 57,000

Based on annually report from MOET from 2019 - 2022 in ratio of Information Technology related majors on annual general universities/ colleges enrollment quotas.



Quick specialized expertise adoption

In an era where technology evolves rapidly, staying ahead of the curve is crucial for sustained competitiveness. Outsourcing can help level up your game with a shortcut to technological advancements by leveraging external vendors' domain expertise and specialized technologies.

IT outsourcing offers businesses access to niche industry knowledge that may be challenging to cultivate internally. Beyond technical expertise, outsourcing connects organizations with providers, experts, and engineers who possess a deep understanding of specific industries.

According to Deloitte Insights (34), despite layoffs in the sector, tech companies still face not only human shortages but also skill shortages. According to the article, enterprises are still struggling to find senior technical roles (such as system architects, cybersecurity specialists, Al expertise), and to connect to the next Gen-Z talents.

Deloitte also suggests some tactics for technology industry leaders to overcome this challenge, and project-based outsourcing is regarded as one of the optimal options for well-defined projects or pilots.

Competitive edge gain

Leveraging IT outsourcing empowers businesses with flexibility, adaptability, scalability, faster delivery, and a continuous improvement cycle.

- Flexibility: IT outsourcing enables businesses to swiftly adapt to changing market conditions or project requirements by leveraging external partner's diverse frameworks, workflows, perspectives and methodologies.
- · Adaptability: IT outsourcing allows organizations to quickly integrate emerging technologies, foster innovation, and maintain a competitive edge by tapping into the specialized expertise of external partners who stay updated with the latest advancements.
- Scalability: IT outsourcing provides a scalable solution, allowing organizations to swiftly scale up or down team size, and allocate resources based on the project's demand without compromising the performance.
- Faster time-to-market: IT outsourcing accelerates time-to-market by quickly adapting to changing requirements with around-the-clock development and leveraging external's proficiency, ensuring a faster transition from concept to market.





How to Effectively Manage IT Outsourcing?

Effective IT outsourcing management is crucial for ensuring that the outsourced activities align with your business goals, maintain high-quality standards, and provide value for money. Here are some key strategies to effectively manage IT outsourcing:



Define clear objectives and requirements

Clear communication right from the start is paramount in successful IT outsourcing management. When objectives and requirements are explicitly defined, it's like setting a solid roadmap for everyone involved.

In the IT outsourcing strategy, this means identifying **project goals** and **specific requirements** in meticulous detail. It's not just about **avoiding misunderstandings**; it's about **giving your outsourcing partner a clear view** of the destination.

Studies consistently show that projects with well-defined goals have a significantly higher success rate. Particularly, a study by the Project Management Institute (PMI) highlights that 37% of projects fail (35) due to the lack of defined project objectives and milestones.

Choose the right vendor

Selecting the appropriate vendor is a critical determinant of a successful IT outsourcing management strategy. It goes beyond the surface-level evaluation and involves a comprehensive understanding of the **vendor's** track record, expertise, and client feedback.

In-depth research and assessment are essential components of this process, ensuring that the chosen vendor aligns with the specific requirements and goals of the outsourcing initiative.

How to Find an IT Vendor with Minimum Risk: 5 Steps

Prepare your project specifications

Search for vendor candidates with experience in similar projects

Contact firms and get information on their rates, expertise, security meadures, etc

Discuss your project with selected candidates in detail

Test the candidate by offering them a relevant task

Assessing a vendor involves a detailed process; here are essential factors to take into account:

- Reputation and track record: Evaluate the vendor's reputation in the industry and review their track record to ensure reliability and credibility.
- Experience and expertise: Consider the vendor's experience in providing IT solutions and their expertise in the specific technologies or services you require.
- Scalability: Assess the vendor's ability to scale their services to meet your organization's growing or changing needs over time.
- Security measures: Examine the vendor's security protocols and measures to ensure the protection of sensitive data and compliance with industry standards.
- Cost and pricing structure: Analyze the overall cost of the vendor's services, including any hidden fees, and ensure that their pricing structure aligns with your budget.
- Customer support and communication: Consider the quality of the vendor's customer support, communication channels, and responsiveness to ensure effective collaboration.
- Innovation and future roadmap: Assess the vendor's commitment to innovation, and inquire about their future roadmap to ensure that their solutions align with your organization's long-term goals.
- Compliance and regulatory adherence: Verify that the vendor complies with relevant regulations and standards applicable to your industry, ensuring legal and regulatory alignment.

At LTS Group, we've been working closely with over 60 businesses globally for over 7 years. Thereby, we deeply understand how our clients dignify these key criterias while choosing IT outsourcing vendors.

To consistently meet and exceed our clients' expectations, we prioritize continuous improvement by actively seeking feedback through comprehensive surveys after each project. This commitment ensures that we stay aligned with industry standards and deliver the reliability, expertise, and innovation that our clients opt for.





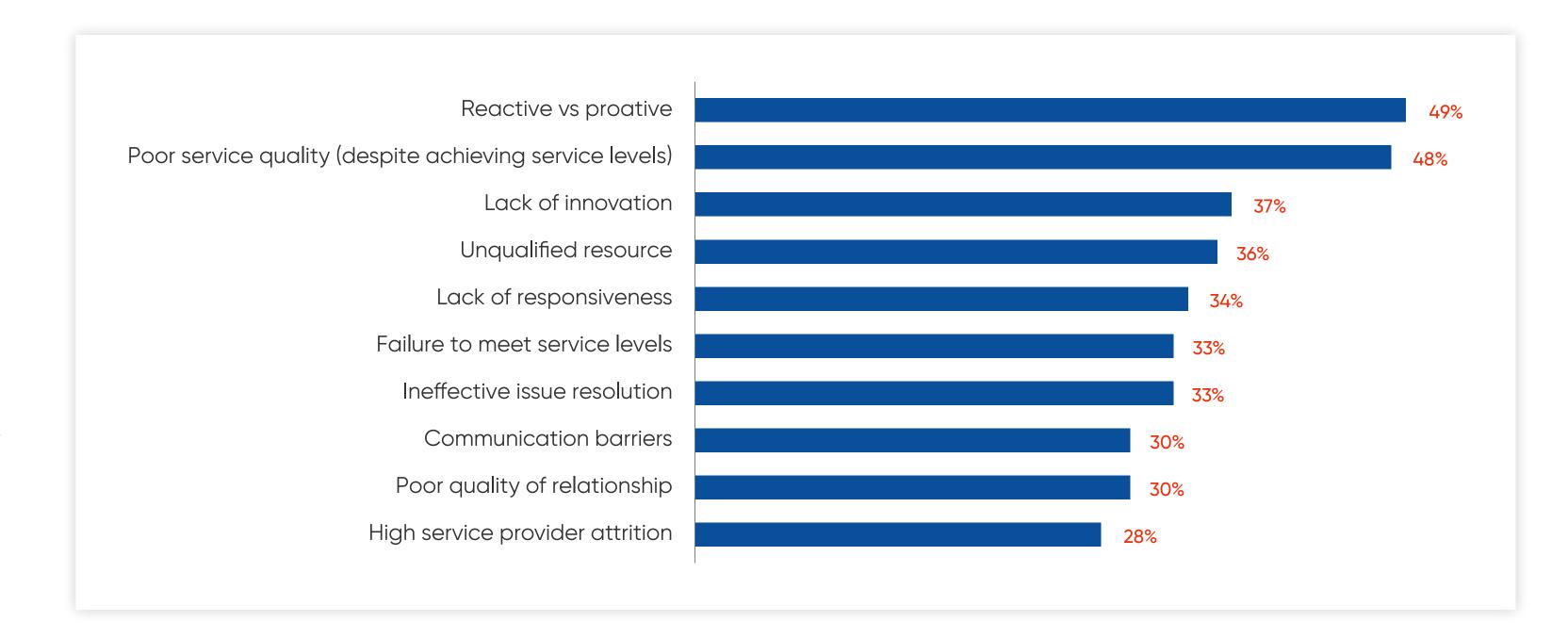
Establish strong communication channels

Establishing and maintaining strong communication channels is not just about conveying information but fostering transparency, understanding, and trust.

Beyond routine interactions, it necessitates the strategic integration of communication tools tailored to enhance clarity and understanding. Platforms such as Slack, Microsoft Teams, and Zoom facilitate real-time discussions, enabling quick and direct communication. Additionally, project management tools like Asana and Trello provide a structured framework where communication is seamlessly intertwined with task management.

To mitigate language barriers and promote cultural sensitivity, regular video conferences become an indispensable component. These virtual face-to-face meetings transcend written or verbal communication, allowing for the exchange of non-verbal cues crucial for mutual understanding.

According to a report about the leading issues with outsourcing providers in 2014 by Statista (36), 30% of 157 respondents cited poor communication or communication barriers as the issues faced when dealing with outsourcing providers.



The establishment of strong communication channels isn't just about the tools used; it's about tailoring those tools to transcend language and cultural differences. It's about creating an environment where understanding thrives, ensuring that both in-house and outsourced teams are on the same page and responsive to the nuances of effective collaboration.

With over 214 successful outsourcing IT projects completed globally, LTS Group brings extensive expertise in overcoming language and cultural challenges. We offer 24/7 support and foster effectivecollaborationthrougharangeofinnovative communication tools.

Our commitment to improvement is evident in regular internal training sessions that enhance the proactive and transparent communication skills of our project managers and team members. Embracing an open mindset and flexibility, we swiftly adapt to different cultures and working styles, ensuring a seamless and accelerated collaboration process.



Ensure security and compliance

IT outsourcing often requires the exchange of **sensitive and confidential information** between the client and the outsourcing partner. **Security breaches are costly**, both financially and in terms of reputational damage.

According to IBM, the global **average cost of a data breach in 2023 was USD 4.45 million** (37), a 15% increase over 3 years. Hence, **51% of organizations are planning to increase security investments** as a result of the rise in data breaches.

Numerous enterprises grapple with concerns about increased vulnerability to security breaches and related.

issues while managing IT outsourcing. To address this challenge, it is critical for businesses to establish a **strict security protocol** designed to efficiently mitigate potential risks. This includes implementing **security measures** to safeguard confidential information and preventing unauthorized access, breaches, or leaks.







Legal Confidentiality



Network Security

Besides that, **compliance with data protection regulations and confidentiality assurance**, such as GDPR (General Data Protection Regulation) and non-disclosure agreements (NDAs), is essential to **avoid legal consequences and protect privacy.**

Start with a pilot project

Kicking off an IT outsourcing project with a pilot project is a strategic move, like trying on shoes to ensure they fit comfortably before embarking on a long walk. The pilot project offers you a chance to **evaluate** whether the outsourcing vendor is a good match for your organization, or whether the current outsourcing model meets your project's requirements.

Moreover, this approach is an effective way to manage your IT outsourcing projects by allowing you to spot and fix potential issues on s smaller scale before they become big headaches. From there, real-time adjustments and optimizations could be made in the early phase to mitigate costly risks.

Last but not least, a pilot project is a valuable opportunity for both in-house and outsourced teams to experience a demo game before diving into the main event, figuring out how things work, and getting used to each other's working styles and culture.

A successful pilot project is a **methodical**, **data-driven**, **proof-driven**, **and practical process** that not only minimizes risks and evaluates compatibility but also establishes a foundation of trust for a successful outsourcing journey.

Collaborating with LTS Group, our clients can get beneficial from a 2-week free pilot. This allows both parties evaluate the suitability, establish a foundations of collaboration method, and address potential barriers and make early adjustments and optimizations before diving into the bigger project.

When collaborating with LTS Group, our clients can take advantage of a compelling offer – a complimentary 2-week pilot. Based on our best practices, this enables both parties to evaluate suitability, establish a collaborative foundation, and proactively address potential obstacles. In addition, It provides a valuable opportunity for early adjustments and optimizations, ensuring a smoother and more successful outsourcing experience.





Innovate, Adapt, Succeed with LTS Group's IT Outsourcing

In today's dynamic business landscape, leveraging IT outsourcing has become a strategic imperative for companies striving to be competitive and agile. LTS Group, as a trusted IT partner, stands out as a beacon of excellence in providing not only comprehensive solutions but also a journey of continuous innovation.

This chapter explores the compelling reasons to choose LTS Group for IT outsourcing and illustrates how partnering with us can not only address your immediate business needs but also propel your organization towards sustained success.











LTS Group's overview

Established in 2016 as a dedicated quality assurance company in Vietnam, LTS Group has become a dynamic force in the IT outsourcing space, firmly establishing its reputation for excellence. Our journey has been marked by continuous adaptation to technological advancements and a commitment to meeting diverse market demands. This evolution has led us to expand our services and presence, resulting in the establishment of subsidiaries in Japan and the United States.

Main services

- Software Development
- Software Testing
- Business Processing Outsourcing (BPO) (Al Data Annotation, Data Collection, Data Transformation, RPA)
- HR Solution

To explore our IT services in more detail, <u>please visit</u> our website.

Core markets

America, Japan, South Korea, England, Switzerland, China, Vietnam, Singapore, Australia

Key clients

Toshiba, Panasonic, SK Telecom, Qualcomm, MB, LG Electronics, Baoviet, VNPT, SQC, Hexabase, Incubit, Datatang, Golden Gate etc

LTS Group's achievements

Over the years, LTS Group has been recognized for our outstanding achievements in IT outsourcing, receiving acclaim from industry experts and cementing our reputation as a trusted partner. Below, we highlight some of our most notable achievements, awards and certifications.

Outperforming results



Certification



Award and certification

- Top 10 ICT Companies in Vietnam in Digital BPO
- Sao Khue Award in Software testing services
- Top Staffing Agencies in Vietnam by Clutch
- Top .NET Developers in Vietnam by Clutch
- Top Web Developers in Education in Vietnam by Clutch
- Top Software Testing Companies in Vietnam by Clutch
- No.1 Software Testing Company in Vietnam certified by Clutch
- Top Web App Development Companies in Vietnam by GoodFirms
- Top BPO Company by GoodFirms
- Top reviewed web & mobile app developers in Vietnam by Manifest



LTS Group's strengths

To achieve the remarkable milestones, expansion, and reputation that define LTS Group today, we attribute our success to several key strengths, with a primary focus on such as human resources, technology prowess, and innovative processes. These elements collectively contribute to delivering the best outcomes for our clients.

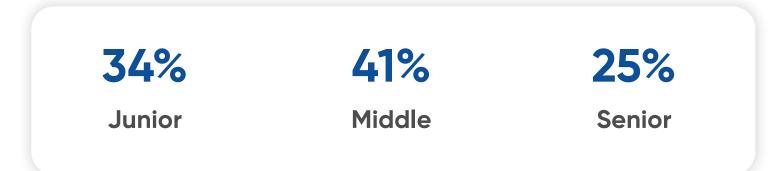
Talented and skilled technical human resources

LTS Group's proficiency lies in our team of more than 300 competent developers and testers, who demonstrate excellent skills across a wide range of technology stacks. Our technical proficiency is demonstrated by the following analysis.

Professional certificate



Seniority



With over 60% of our IT engineers in middle and senior positions, LTS Group has a team with extensive experience. Our workforce includes a significant number of technical professionals with distinguished certifications in testing and development, highlighting our firm commitment to maintaining exceptional project quality. Besides, our skilled Project Management Professionals (PMPs) diligently oversee project progress, ensuring smooth and effective project execution, and unwavering compliance with global standards.

Tech stack



Our team possesses a diverse array of tech stacks, enabling us to adeptly handle a broad spectrum of projects that align precisely with customer expectations. Noteworthy is our expertise in programming languages, including React JS, .Net, Node.JS, Vue.JS, Java, React Native, and Flutter.

Language competence

Effective and clear communication is fundamental in the global landscape, and LTS Group excels in language competence. Our workforce comprises IT communicators, BrSEs, and numerous IT engineers fluent in multiple languages to facilitate the collaboration and adaptation for global projects.

25%	5%	
Japanese	Korean	

Cost-effectiveness

LTS Group leverages Vietnam's competitive labor costs and global project execution experience to provide customized solutions that meet client budget requirements. Our solutions guarantee clients receive high-quality services without surpassing their financial expectations.

A case in point is our automation testing services. We not only boosted test coverage significantly but also **reduced testing time by up to 65% for a prominent insurance company**. This achievement resulted in substantial savings in testing and labor costs of the project. In another case, we delivered an impressive cost savings of up to 30% on an ERP system development project for a US client.

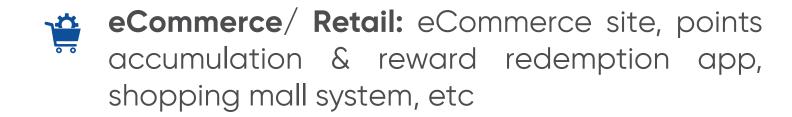
For more information about our successful projects, please check out our portfolio.

Industry specialization

Over the years, LTS Group has gained significant experience in industry specialization by creating solutions that meet our clients' unique needs. We have expertise in various sectors such as healthcare, education, construction, eCommerce, insurance, banking, automotive, and more. This approach enables us to offer profitable solutions that align with specific business requirements.

Expertised domain

- Education: Program finding app, e-school mobile app, school activities management system etc, exam and learning system, etc
- Healthcare: Clinic management system, book services and purchase medicine system, patient-doctor communication app, doctor and customer management system, well-being measurement, etc.



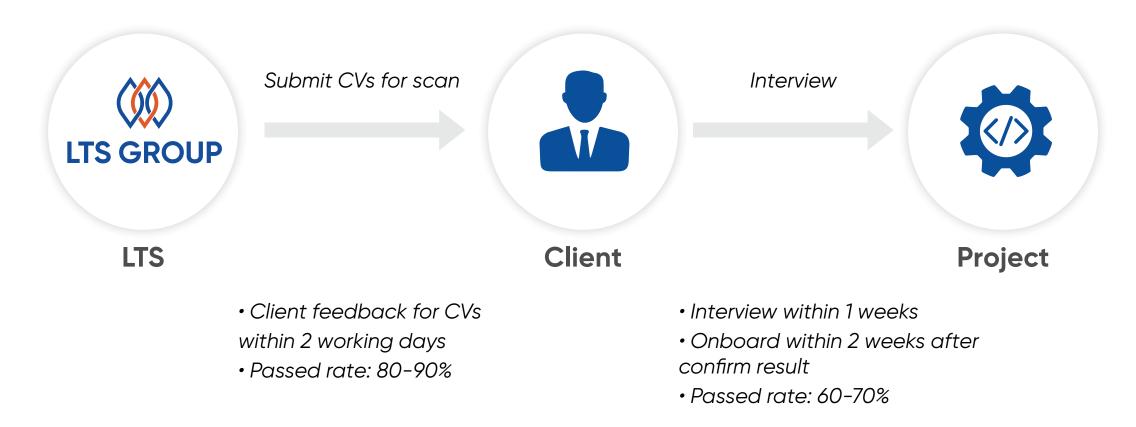
- Game: Exchanging reward app, wheel game, multiplayer game, etc
- Construction: Resource management system, release management, human resources management system, etc
- Logistic: Truck booking system, car wash booking app, etc
- Automotive: Migration to SharePoint, audio visual navigation (AVN)
- **BFSI:** Fintech app for loan & investment, cryptocurrency exchange, banking app, trading platform
- **Media Entertainment:** Purchase and exchange social platform

HR solution and IT academy

As part of our strategic drive to cultivate high performing talent and provide customized HR solutions, LTS Group has established LTS Edu, an academy focused on IT training and education, and ManNet, which specializes in innovative HR solutions.

The combined efforts of LTS Edu and ManNet ensure a constant flow of fresh talent, quick team ramp-up, and seamless integration of experienced professionals into client-specific teams.





Continuous innovation

LTS Group is steadfastly committed to ongoing improvement of our human resources, working processes, and product development.

We embrace leading methodologies such as CI/CD, agile and design thinking, as well as emerging technologies such as AI/ML and blockchain to not only adapt to our clients' current needs, but also to anticipate and prepare for future challenges. We also continually reassess and fine-tune our methods and processes, to achieve maximum efficiency and adaptability to evolving demands.

Additionally, our commitment to fostering innovation extends to our workforce. Through regular training sessions, knowledge-sharing, and an emphasis on continuous learning and contribution, we cultivate an environment of perpetual growth within our organization.

Utmost security

At LTS Group, we recognize that in the digital era, security is not just a feature—it's a fundamental commitment to preserving the trust our clients place in us. Our robust and meticulous security measures ensure that every interaction, process, and piece of data is completely shielded.

Physical security layers

- CCTV system: Modern surveillance cameras are strategically placed within office areas.
- Safe guards: High-security separate office zones are implemented. Fingerprint scanners: Biometric scanners control access at entrances.
- ODC security: Private centers with highly secured layers are set up as required.

Legal confidentiality

- * NDA agreements: Non-disclosure agreements are signed to clearly outline terms related to security and confidentiality between LTS Group and clients.
- · Staff confidentiality: Employees undergo training in security policies, with an ISMS team dedicated to information security.

Network security

- VPN setup: Virtual Private Network ensures private and protected network connections when communicating with clients.
- · Data leak prevention: Internal systems for data management and authorization prevent data leakage.
- · Continuous monitoring: Developer and QA teams continuously monitor and detect risk issues to maintain a secure environment.







- CCTV system with modern surveillance cameras is set up within affice areas.
- Safe Guards: Separate office zones with high security are prepared.
- Fingerprint: Biometric scanners are at entrances to allow access to facilities.
- ODC: We set up private centers with highly secured layers as required.
- NDA is signed between two parties of LQA and the client, clearly stating the terms concerning the secunty matter and confidentiality.
- Staff Confidentiality: Employees are trained with security polcies to know the dos and don'ts. We also nave an ISMS team for this.
- VPN: We set up a Virtual Private Network for a private and protected network connection when communicating with clients.
- Data Leak Prevention: Aninternal systemof data management and authorization is set up to prevent data leakage.
- Continuous monitoring from developer team and QA team detect risk issues.





The Future of IT Outsourcing

The IT outsourcing scene will keep flourishing, broadening its service options to impact diverse business areas. Furthermore, IT service providers won't just focus on cost cutting, they'll strive for impactful solutions that are aligned with the customer's overall business goals.

With the booming IT outsourcing market, numerous vendors are available to meet demand. Therefore, businesses should thoroughly assess a vendor's credibility, capability, and suitability before contracting. Proper project management practices are also essential to make your outsourced project a success.

LTS Group as a Vietnam-based IT outsourcing vendor is here to help any business wishing to leverage the power of external IT resources. We are open to service discussion or simply a catch-up about the market insights.

Appendix

(1). Deloitte (2022) - Global outsourcing survey https://www2.deloitte.com/us/en/pages/operations/articles/global-outsourcing-survey.htm

(2). Deloitte - Offshoring - How to ensure success https://www2.deloitte.com/content/dam/Deloitte/se/Documents/strategy/Offshoring%20-%20How%20to%20ensure%20success%20130902.pdf

(3). United nation (2018) - Tax incentives in developing in developing countries https://www.un.org/esa/ffd/wp-content/uploads/2018/02/tax-incentives_eng.pdf

(4). Global reach local knowledge (2022) The Global Business Complexity Index 2022 https://www.tmf-group.com/en/news-insights/publications/2022/global-business-complexity-index/#down-loadnow

(5). Zippia (2023) – 40 Vital Outsourcing Statistics https://www.zippia.com/advice/outsourcing-statistics/

(6). Gartner (2023) - Gartner Forecasts Worldwide IT Spending to Grow 8% in 2024 https://www.gartner.com/en/newsroom/press-releases/2023-10-18-gartner-forecasts-worldwide-it-spending-to-grow-8-percent-in-2024

(7). Statista (2023) - IT Outsourcing - Worldwide https://www.statista.com/outlook/tmo/it-services/it-outsourcing/worldwide

(8). Gartner (2023) - IT Spending Forecast, 3Q23 Update: The Impact of GenAl https://webinar.gartner.com/540525/agenda/session/1223155

(9). Deloitte (2020) - Deloitte Global Outsourcing Survey 2020 https://www2.deloitte.com/content/dam/Deloitte/us/Documents/process-and-operations/us-how-much-disruption.pdf



- (10). Statista (2023) In Which Industries Could AI Do Most of the Heavy Lifting? https://www.statista.com/chart/30160/impact-of-ai-on-work-in-selected-industries/
- (11). Gartner (2023) Top Generative Al Questions for Your Enterprise https://www.gartner.com/en/topics/generative-ai
- (12). Gartner (2023) Gartner Forecasts Worldwide Public Cloud End-User Spending to Reach \$679 Billion in 2024 https://www.gartner.com/en/newsroom/press-releases/11-13-2023-gartner-forecasts-worldwide-public-cloud-end-user-spending-to-reach-679-billion-in-20240
- (13). Statista (2023) Number of Internet of Things (IoT) connected devices worldwide from 2019 to 2023, with forecasts from 2022 to 2030 https://www.statista.com/statistics/1183457/iot-connected-devices-worldwide/
- (14). Gartner (2022) Gartner Survey Reveals 80% of Executives Think Automation Can Be Applied to Any Business Decision https://www.gartner.com/en/newsroom/press-releases/2022-08-22-gartner-survey-reveals-80-percent-of-executives-think-automation-can-be-applied-to-any-business-decision
- (15). McKinsey & Company (2022) Cybersecurity trends: Looking over the horizon https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/cybersecurity/cybersecurity-trends-looking-over-the-horizon
- (16). Yahoo Finance, ReportLinker (2023) IT Outsourcing Market Size & Share Analysis Growth Trends & Forecasts (2023 2028) https://finance.yahoo.com/news/outsourcing-market-size-share-analysis-121600118.html
- (17). Forrester, 2022 The State Of Cloud In North America, 2022 https://www.forrester.com/press-newsroom/the-state-of-cloud-in-north-america-2022/
- (18). Allied Market Research, Cloud Native Applications Market Research https://www.alliedmarketresearch.com/cloud-native-applications-market-A210373
- (19). Statista (2023) Value of export revenue of the IT sector across India from financial year 2016 to 2022, with an estimate for 2023 https://www.statista.com/statistics/719128/india-value-of-export-revenue-in-it-bpm-sector/



(20). Statista (2023) - Value of software exports from China between 2012 and 2022 https://www.statista.com/statistics/686317/china-software-export-value/

(21). Statista (2023) - Number of undergraduate engineering graduates from Chinese higher education institutions from 2011 to 2021 https://www.statista.com/statistics/610751/china-engineering-undergraduate-graduates/

(22). Statista (2023) - Value of IT services exported from Ukraine from 2017 to 2022 https://www.statista.com/statistics/1306077/export-value-of-it-services-from-ukraine/

(23). Statista (2023) - Software - Brazil https://www.statista.com/outlook/tmo/software/brazil

(24). EF (2023) – The world's largest ranking of countries and regions by English skills https://www.ef.com/wwen/epi/

(25). McKinsey Problem Solving Test https://www.mckinsey.com/~/media/mckinsey/careers%20redesign/interviewing/main/problem%20solving%20test%20pdfs/practice-test-a.ashx

(26). Deloitte (2019) - Outsourcing and Shared Services 2019-2023 Global, Middle East and UAE industry outlook https://www2.deloitte.com/xe/en/pages/technology/articles/outsourcing-shared-services-2019-2023.html

(27). Deloitte (2016) - Global outsourcing survey 2016 https://www2.deloitte.com/ro/en/pages/operations/articles/global-outsourcing-survey-2016.html

(28). Deloitte (2020) - 2020 Global Outsourcing Survey https://www.deloitte.com/global/en/services/consulting/perspectives/gx-global-outsourcing-survey.html

(29). Gartner (2021) - Gartner Survey Reveals Talent Shortages as Biggest Barrier to Emerging Technologies Adoption https://www.gartner.com/en/newsroom/press-releases/2021-09-13-gartner-survey-reveals-talent-shortages-as-biggest-barrier-to-emerging-technologies-adoption



(30). Korn Ferry - The \$8.5 Trillion Talent Shortage https://www.kornferry.com/insights/this-week-in-leadership/talent-crunch-future-of-work

(31). Manpower (2023) - 2023 Global Talent Shortage https://go.manpowergroup.com/hubfs/MPG_TS_2023_Infographic_FINAL.pdf

(32). TopDev (2022) - Vietnam IT Market Report Tech Hiring 2022 https://topdev.vn/page/vietnam-it-market-reports#2022

(33). TopDev (2023) - Vietnam IT Market Report 2023 | Vietnam Tech Talents Report https://topdev.vn/vietnam-tech-talents-report-topdev-2023

(34). Deloitte (2023) - Tech talent is still hard to find, despite layoffs in the sector https://www2.deloitte.com/us/en/insights/industry/technology/tech-talent-gap-and-skills-shortage-make-recruitment-difficult.html

(35). Project Management Institute (2017) - Pulse of the Profession 2017 https://www.pmi.org/learning/thought-leadership/pulse/pulse-of-the-profession-2017

(36). Statista (2014) - Which identify issues are you currently facing with your outsourcing providers? https://www.statista.com/statistics/496527/outsourcing-providers-leading-issues/

(37). IBM (2023) - Cost of a Data Breach Report 2023 https://www.ibm.com/reports/data-breach

