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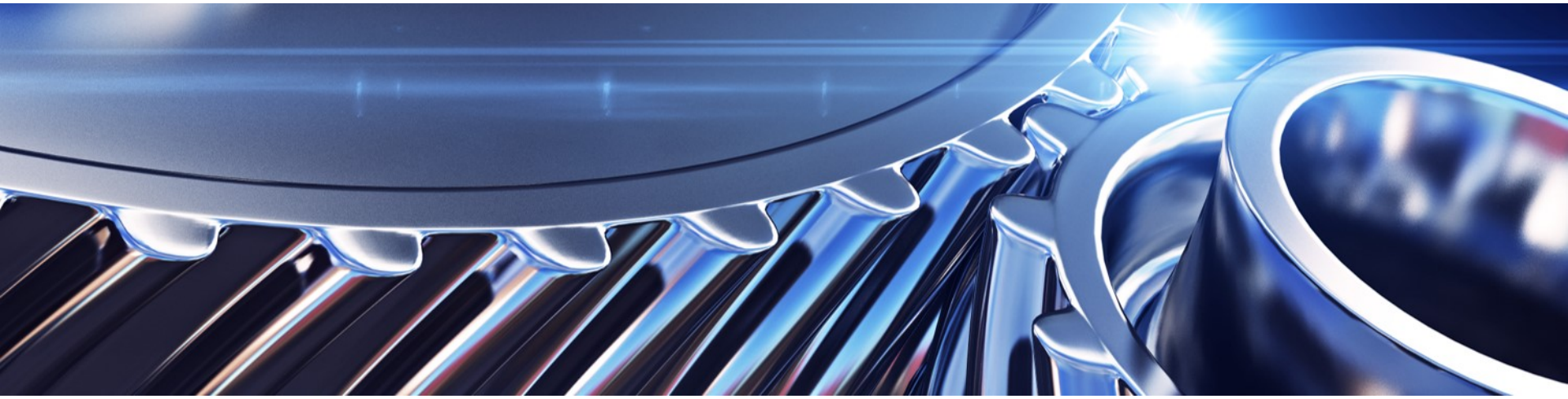

Software Product Engineering Services PEAK Matrix™ Assessment 2019: Engineering for the Digital World

Engineering Services (ES)
Market Report – August 2019: Complimentary Abstract / Table of Contents

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PEAK MATRIX™

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- Benchmarking | Pricing, delivery model, skill portfolio
- Peer analysis | Scope, sourcing models, locations
- Locations | Cost, skills, sustainability, portfolio – plus a tracking tool
- Tracking services | Service providers, locations, risk
- Other | Market intelligence, service provider capabilities, technologies, contract assessment

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Background and methodology of the research

Background of the research

Software is playing an increasingly important role in helping enterprises bring innovation across products and services. It is enabling enterprises deliver a superior user experience as well as introduce new and intelligent products to the market. As enterprises embrace this software-led innovation, they are also looking to drive modularity, scalability, and mass customization in their software products in order to meet the evolving end-user expectations. Leveraging emerging themes such as Artificial Intelligence / Machine Learning (AI/ML) and Augmented Reality / Virtual Reality (AR/VR) to create differentiated offerings, and accelerating the time-to-market for new products and product features are also among their key priorities.

These dynamics have necessitated the adoption of new software architectures and software product engineering best practices by enterprises. Service providers are playing a crucial role in helping enterprises adapt to this changing landscape. Their active investments across talent capabilities, global delivery, and proprietary assets/frameworks are enabling them to effectively partner with enterprises on their software product engineering initiatives.

In this research, we present fact-based trends impacting the software product engineering services market, along with the assessment and detailed profiles of 25 service providers featured on the software product engineering services PEAK Matrix.

Scope of this report

- Services: Software product engineering services
- Geography: Global
- Service providers: 25 leading software product engineering service providers

Methodology:

The assessment is based on Everest Group's annual RFI process concluded over Q4 2018 and Q1 2019, interactions with leading software product engineering service providers, and analysis of the marketplace.

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Overview and abbreviated summary of key messages (page 1 of 2)

This report provides a comprehensive assessment of the software product engineering services market and maps the leading service providers on Everest Group's PEAK Matrix. It also includes detailed profiles of featured service providers.

Some of the findings in this report, among others, are:

Market growth

- Software product engineering services have witnessed a robust growth of over 20% and are among the fastest growing areas in the global engineering services market
- Increase in R&D spending by software and internet companies, coupled with increasing proliferation of software in other verticals, is providing significant impetus to growth in software product engineering services outsourcing

Market trends

- Traditional software architecture is undergoing a fundamental change to facilitate enhanced experience-centricity, agility, modularity, and scalability in software products
- There is also an increasing push among enterprises to transition from software products to platform-based offerings; this is helping enhance the modularity, customizability, and scalability of their offerings while enabling new business models
- The need to continuously enhance software products while accelerating the time-to-market is leading to increasing adoption of DevOps, Artificial Intelligence (AI), and low-code in software product engineering
- Service providers are making active investments to stay at the forefront of software engineering and to meaningfully partner with their customers

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Overview and abbreviated summary of key messages (page 2 of 2)

PEAK Matrix for software product engineering services

- Analysis of the service provider landscape for software product engineering services, leveraging Everest Group's PEAK Matrix, highlights the following categories of service providers:
  - **Leaders:** Accenture, Altran, Cognizant, HCL Technologies, Infosys, TCS, and Tech Mahindra
  - **Major Contenders:** Aspire Systems, Cybage, EPAM, GlobalLogic, HARMAN Connected Services, Infogain, Mindtree, Mphasis, Persistent Systems, RapidValue Solutions, Sonata Software, Tala Elxsi, Virtusa, and Wipro
  - **Aspirants:** Dextra Technologies, Itransition, Happiest Minds, and Sigma Software
- The Leaders are characterized by their ability to offer large-scale software product engineering engagements leveraging their strong project management capabilities and widespread delivery footprint
- The Major Contenders have built meaningful capabilities to deliver software product engineering services. However, their service portfolio is not as extensive as that of Leaders (in terms of presence across the product development value chain, proprietary assets, or delivery capability)
- The Aspirants exhibit strong capabilities in delivering services for specific niches within software product engineering

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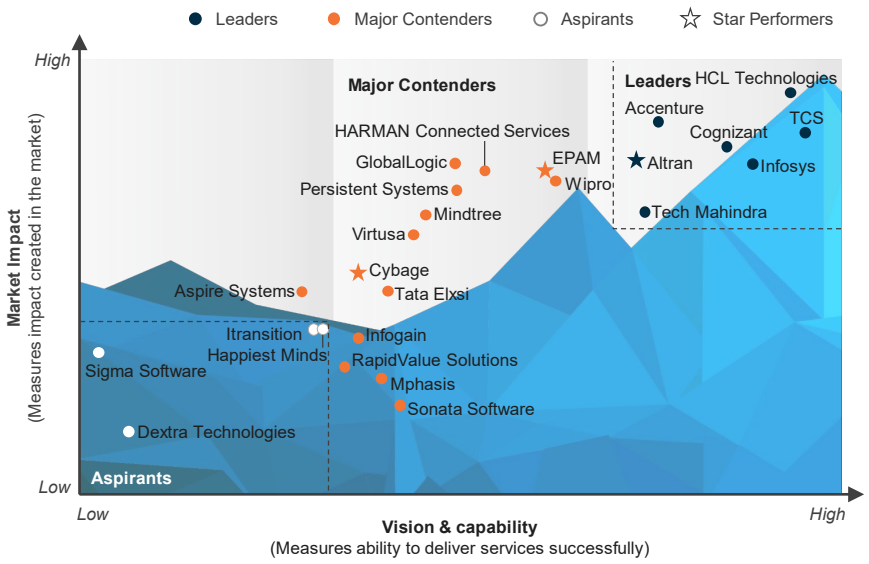
This study provides a deep dive into key aspects of software product engineering services market; below are some charts to illustrate the depth of the report

Assessment of Software Product Engineering Services Providers



Note 1 Assessments for Accenture, Sigma Software, and Tata Elxsi exclude service provider inputs and are based on Everest Group's proprietary Transaction Intelligence (TI) database, service provider public disclosures, and Everest Group's interactions with software product engineering services buyers

Note 2 Analysis for Altran is based on capabilities before its acquisition by Capgemini

Capability assessment

Illustrative example

Measure of capability: High Low

Service provider	Market impact				Vision & capability				
	Market adoption	Portfolio mix	Value delivered	Overall	Scope of services offered	Innovation and investments	Delivery footprint	Vision and strategy	Overall
Service provider 1									
Service provider 2									
Service provider 3									
Service provider 4									
Service provider 5									
Service provider 6									
Service provider 7									
Service provider 8									
Service provider 9									

Everest Group's remarks on service providers

Illustrative example

Measure of capability: High Low

Market impact				Vision & capability				
Market adoption	Portfolio mix	Value delivered	Overall	Scope of services offered	Innovation and investments	Delivery footprint	Vision and strategy	Overall

Strengths

- Superior UI/UX capabilities when compared with competition
- Recognized expertise in engineering and reengineering of products for mobile
- Delivery presence in South America & Eastern Europe is a notable differentiator
- Deep domain expertise helps enhance value for vertical-focused products

Areas of improvement

- Needs to demonstrate a "strategic partnership" mindset to enhance its positioning and value levers for the market
- Should consider enhancing its portfolio of proprietary IP and frameworks
- Needs to be proactive in engaging via new pricing models (e.g., outcome-based)

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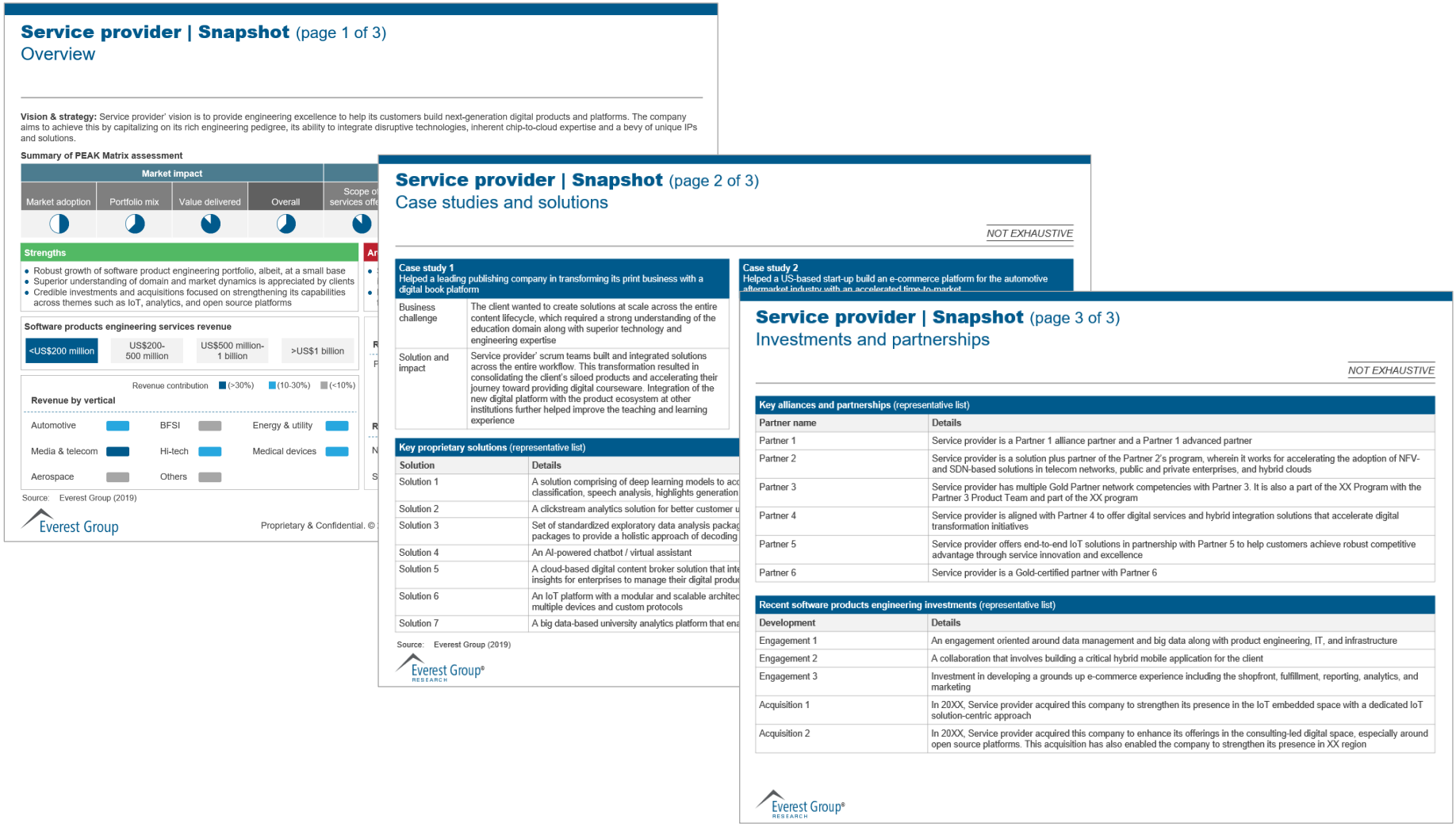
This report has over 25 service provider profiles



Service provider | Snapshot (page 1 of 3)
Overview

Vision & strategy: Service provider' vision is to provide engineering excellence to help its customers build next-generation digital products and platforms. The company aims to achieve this by capitalizing on its rich engineering pedigree, its ability to integrate disruptive technologies, inherent chip-to-cloud expertise and a bevy of unique IPs and solutions.

Summary of PEAK Matrix assessment

Market impact				
Market adoption	Portfolio mix	Value delivered	Overall	Scope of services offe

Strengths

- Robust growth of software product engineering portfolio, albeit, at a small base
- Superior understanding of domain and market dynamics is appreciated by clients
- Credible investments and acquisitions focused on strengthening its capabilities across themes such as IoT, analytics, and open source platforms

Software products engineering services revenue

<US$200 million | US$200-500 million | US$500 million-1 billion | >US$1 billion

Revenue contribution (>30%) (10-30%) (<10%)

Revenue by vertical

Automotive | BFSI | Energy & utility | Media & telecom | Hi-tech | Medical devices | Aerospace | Others

Source: Everest Group (2019)

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Service provider | Snapshot (page 2 of 3)
Case studies and solutions

NOT EXHAUSTIVE

Case study 1
Helped a leading publishing company in transforming its print business with a digital book platform

Business challenge	The client wanted to create solutions at scale across the entire content lifecycle, which required a strong understanding of the education domain along with superior technology and engineering expertise
Solution and impact	Service provider' scrum teams built and integrated solutions across the entire workflow. This transformation resulted in consolidating the client's siloed products and accelerating their journey toward providing digital courseware. Integration of the new digital platform with the product ecosystem at other institutions further helped improve the teaching and learning experience

Case study 2
Helped a US-based start-up build an e-commerce platform for the automotive aftermarket industry with an accelerated time-to-market

Key proprietary solutions (representative list)

Solution	Details
Solution 1	A solution comprising of deep learning models to acc classification, speech analysis, highlights generation
Solution 2	A clickstream analytics solution for better customer u
Solution 3	Set of standardized exploratory data analysis packag packages to provide a holistic approach of decoding
Solution 4	An AI-powered chatbot / virtual assistant
Solution 5	A cloud-based digital content broker solution that inte insights for enterprises to manage their digital produ
Solution 6	An IoT platform with a modular and scalable architec multiple devices and custom protocols
Solution 7	A big data-based university analytics platform that ena

Source: Everest Group (2019)

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Service provider | Snapshot (page 3 of 3)
Investments and partnerships

NOT EXHAUSTIVE

Key alliances and partnerships (representative list)

Partner name	Details
Partner 1	Service provider is a Partner 1 alliance partner and a Partner 1 advanced partner
Partner 2	Service provider is a solution plus partner of the Partner 2's program, wherein it works for accelerating the adoption of NFV- and SDN-based solutions in telecom networks, public and private enterprises, and hybrid clouds
Partner 3	Service provider has multiple Gold Partner network competencies with Partner 3. It is also a part of the XX Program with the Partner 3 Product Team and part of the XX program
Partner 4	Service provider is aligned with Partner 4 to offer digital services and hybrid integration solutions that accelerate digital transformation initiatives
Partner 5	Service provider offers end-to-end IoT solutions in partnership with Partner 5 to help customers achieve robust competitive advantage through service innovation and excellence
Partner 6	Service provider is a Gold-certified partner with Partner 6

Recent software products engineering investments (representative list)

Development	Details
Engagement 1	An engagement oriented around data management and big data along with product engineering, IT, and infrastructure
Engagement 2	A collaboration that involves building a critical hybrid mobile application for the client
Engagement 3	Investment in developing a grounds up e-commerce experience including the shopfront, fulfillment, reporting, analytics, and marketing
Acquisition 1	In 20XX, Service provider acquired this company to strengthen its presence in the IoT embedded space with a dedicated IoT solution-centric approach
Acquisition 2	In 20XX, Service provider acquired this company to enhance its offerings in the consulting-led digital space, especially around open source platforms. This acquisition has also enabled the company to strengthen its presence in XX region

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Research calendar – Engineering Services (ES)

Published | Planned | Current release

Flagship Engineering Services reports	Release date
Software Product Engineering Services PEAK Matrix™ Assessment 2019: Engineering for the Digital World	August 2019
Automotive Engineering Services PEAK Matrix™ Assessment 2019	Q3 2019
Internet of Things Technology Services PEAK Matrix™ Assessment 2019	Q4 2019

Thematic Engineering Services reports	
The Imminent Wave of Consolidation in Industrial Internet of Things (IIoT) Platforms	March 2019
Engineering Services - Top 50	July 2019
Global Technology Centers (GTCs) in India: Software Products Enterprises' Solution to DIY	July 2019
Leading the Pack: Trends for the Top 200 Engineering Research & Development (ER&D) Enterprises	Q3 2019
SDX – The Only Singularity in the World of Digital	Q3 2019
Hybrid Sourcing Models For Engineering Services	Q4 2019
Roadblocks to Realizing the Potential of Industry 4.0	Q4 2019
Leveraging Indian GICs for Delivering the Global Innovation Charter	Q4 2019

Note: For a list of all of our published ES reports, please refer to our website page

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Additional research references

The following documents are recommended for additional insight on the topic covered in this report. The recommended documents either provide additional details or complementary content that may be of interest.

1. **Global Technology Centers (GTCs) in India: Software Products Enterprises' Solution to DIY** (EGR-2019-34-R-3276); 2019. This report explores the landscape of services delivered by software products GTCs in India. It provides an overview of the key trends in this market, the various challenges that they face, and the nature of work that they deliver. It also provides different points of view on how these GTCs can play an even greater role with respect to innovation and increase their strategic presence in global delivery. Lastly, it describes the outlook for the future

2. **The Imminent Wave of Consolidation in Industrial Internet of Things (IIoT) Platforms** (EGR-2019-40-V-3078); 2019. This viewpoint assesses how the IIoT platform landscape, comprising over 350 platforms, is heading toward a foreseeable consolidation. It puts spotlight on the factors that will drive this consolidation, while offering a perspective of other industries that have gone through this process. It also analyzes the phases in evolution of the IIOT platforms landscape through a consolidation framework

3. **Medical Device Engineering Services PEAK Matrix™ Assessment 2019: Navigating the Innovation and Compliance Conundrum** (EGR-2018-40-R-2887); 2018. The medical devices industry is faced with multiple challenges – a shift in the industry from product-centric to patient-centric solutions, increasingly stringent industry regulations, declining margins, and competition from unconventional players – to name a few. In this research, we present fact-based trends impacting the medical devices engineering services market, along with the assessment and detailed profiles of 12 leading service providers in this field, featured on the medical devices engineering services PEAK Matrix

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Everest Group is a consulting and research firm focused on strategic IT, business services, and sourcing. We are trusted advisors to senior executives of leading enterprises, providers, and investors. Our firm helps clients improve operational and financial performance through a hands-on process that supports them in making well-informed decisions that deliver high-impact results and achieve sustained value. Our insight and guidance empower clients to improve organizational efficiency, effectiveness, agility, and responsiveness. What sets Everest Group apart is the integration of deep sourcing knowledge, problem-solving skills and original research. Details and in-depth content are available at www.everestgrp.com.

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