brillio

Master the art of building a composable enterprise

APIs are the digital glue bridging the digital divide by orchestrating various services and functions to achieve optimal business outcomes.

The key to building
future-ready businesses

Today's technology landscape is rapidly changing, and businesses are looking for sharper transformation initiatives fueled by high growth and elevated customer experiences. These expectations have led to a surge in embracing newer technology adoption that compelled many to shift to a digital-first approach. Hence, there is an urgent need to adapt to market turbulence, pushing businesses to be future-ready with flexible and scalable service models.

> Composability is essentially this: a seamless reconfiguration that drives interoperability and decentralized decision-making through the art of composing new systems and applications that co-exist with current systems, cutting across an enterprise's various business functions.

Becoming a composable enterprise empowers businesses to innovate and become modular and blurs the line between business and technology, supporting collaboration that ensures better outcomes in the long run.

One bespoke application → Cluster of applications → Platforms → Composable products → Composable enterprise

The legacy **conundrum**

Point solutions are widely accepted today for their immediacy in solving challenges with quick fixes and rapid deployment. However, they have tradeoffs, considering the integration and data fragmentation issues that may crop up while managing multiple systems. Similarly, legacy systems are entrenched in organizations as well. They support critical functions since their core capabilities are integrated into everyday operations. However, they also present a dilemma regarding digital transformation. Such legacy systems are monolithic, built using outdated tech, and tailored for specific use cases, but they are still crucial to lean on. Also, the dearth of institutional knowledge around their functioning and data integration may be hard to replicate. They lack the flexibility required for today's digital-first climate. In the event of a modification, a complete overhaul may be necessary—something enterprises cannot do in isolation without affecting the overall system.

Legacy systems and point solutions often become bottlenecks due to their high technical debt for enterprises trying to adapt to a paradigm shift. With the worldwide economic slowdown and limited transformation budgets, enterprises must explore the new world of digital through fresher shores. Microservices and APIs offer several roads toward solving the legacy conundrum. They help build composable applications via APIs that decouple systems into smaller units, making it easier to upgrade parts and swap or roll out features swiftly and efficiently. Furthermore, since they are API-driven, integration with cloud services and third-party applications is easier. A microservices architecture allows enterprises to build composable applications where modularity enhances the reconfiguration of services dynamically.

APIs: Change **agents for growth**

The emergence of a robust API economy has made many realize that APIs are critical to transitioning enterprises to a digital service model with faster technology and platform integration with various third-party vendors. Such integrations help them adapt faster, drive better customer value propositions, and enhance experiences without reinventing the wheel. Composable enterprises get a few things right. They are essentially made of building blocks (composable applications) that bundle services atop a stable foundation in a way that meets their and their customers' evolving business and technology needs. These are essentially modular services that are interchangeable, scalable, and customizable to suit various business needs. This approach ensures decision-makers can swiftly pivot to challenges and disruptions without rejigging the entire organization.

Agility and flexibility have become critical talking points for businesses integrating new applications and platforms without overhauling the existing infrastructure. This evolution played a crucial role in supporting companies through the disruption and acceleration toward digital transformation. Composable enterprises thrive on modular, interchangeable, easily reconfigurable components.

Why embrace **composability?**

- One doesn't need a significant amount of capital to drive these transformations.
- One can make small incremental changes in shorter cycles to specific areas that benefit the entire organization significantly.
- With a rapid turnaround, one can continue business-as-usual activities but build certain things that drive much more value.
- Ultimately, composable applications can greatly rewire organizations to the tune of the new world and always be future-ready instead of traditional multi-year digital transformation activities

'Re-wire' instead **of 'Re-vamp'**

Leaders must visualize multiple swim lanes of behavioral shifts in an enterprise to build composable applications. Brillio's philosophy behind composability is bringing new things to the fore while retaining business-as-usual activities that drive critical functions. Rather than bringing in transformation in a big way, enterprises must become more malleable and modernize specific tenets of their business that contribute to overall business outcomes without spending much capital. In other words, designing a product today without being cognizant of future imperatives may lead to more problems down the road.

The idea of a composable enterprise entails a fundamental cultural shift that rewires the thinking in an organization to the tune of the market's demands. It doesn't have to be a massive transformation, but initiatives that can be executed in shorter cycles with a quicker turnaround as opposed to multi-year
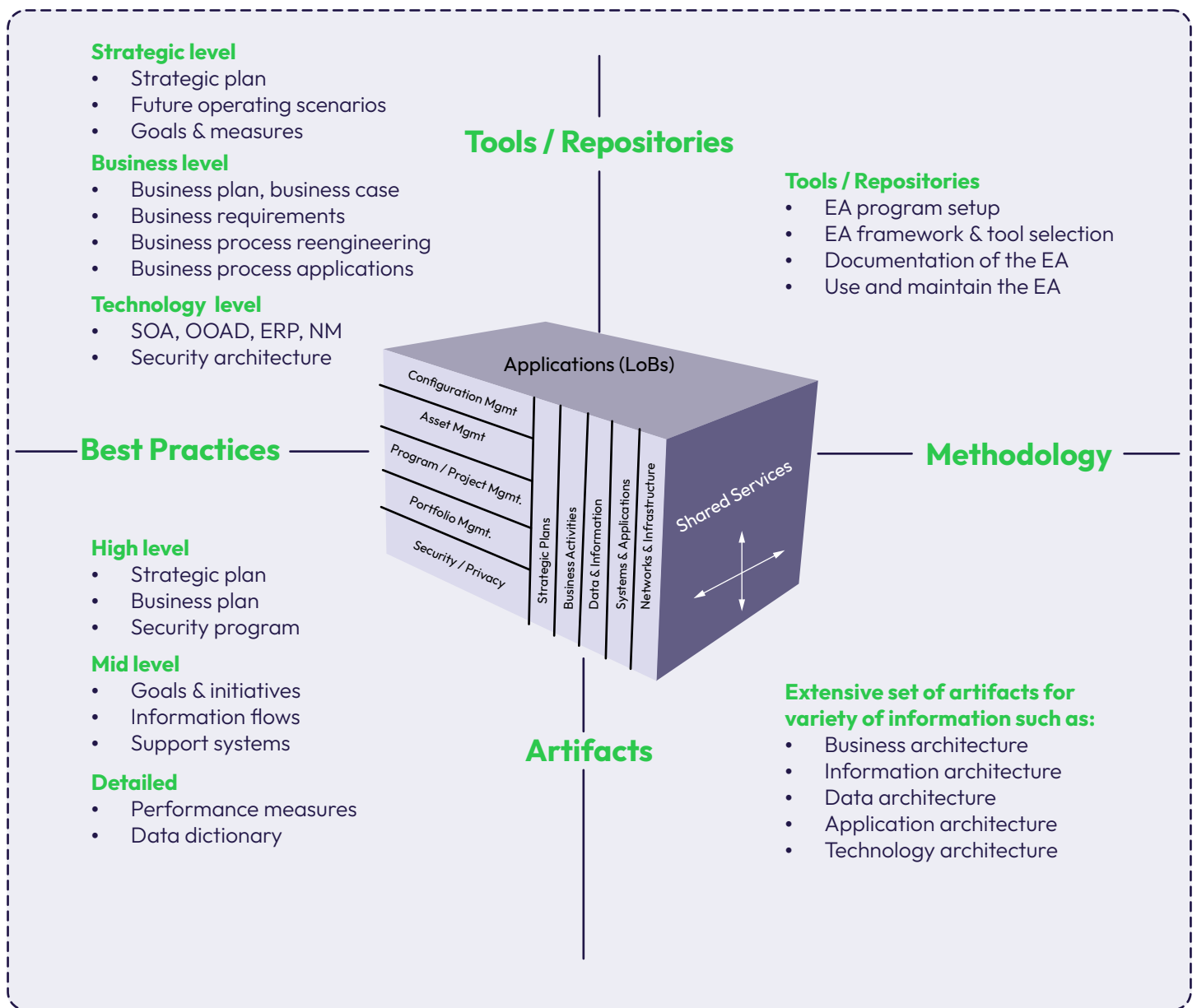
transformation. As one progresses on this journey, there may be increasing levels of integration complexity that one will have to address. Leaders must explore a robust suite of technologies that bundles tools and apps without being bogged down while deciding on a particular vendor or a specific type of technology. Visioning a composable enterprise requires cognizance of several things as follows:

- **Modular technology stack:** Decoupled modular microservices allow businesses to upgrade or swap out components without disrupting the overall operation.
- **APIs and integration layers:** Internal and external services must be integrated by leveraging robust APIs to promote more accessible updates and partnerships.
- **Cloud-native infrastructure:** On-demand, scalable resources reduce infrastructure costs while managing adaptation to business needs seamlessly.
- **AI and automation:** AI integration into processes drives higher operational efficiencies and better insights, leading to better decision-making and responses to market shifts.
- **Ecosystem partnerships:** Collaboration with external vendors allows enterprises to tap into innovation and expand their services without building capabilities in-house.
- **Citizen development:** Low-code/no-code platforms can empower citizen developers to create and modify applications beyond one specific function based on business needs and automate workflows with less reliance on IT intervention.

Brillio's EA cube approach to build **composable applications**

Let's examine the fundamental tenets of enterprise architecture-led transformation. Brillio's vision is to help enterprises identify **feasible** and **profitable** long-term business opportunities and provide a path for execution.

- **Strategy to operations conformity:** Harmony across the business and technology spectrum, maximizing cost benefits for an enterprise.
- **Faster time-to-market:** A pragmatic agile execution model that creates working products every sprint enables shorter go-to-market cycles.
- **Business optimization:** Continuously improve businesses by discovering exciting new things to drive maximum value to end users.
- **Innovation vs cost:** Sound strategy development and excellent business application with agility, availability, and resilience will meet evolving customer demands.
- **Architectural alignment:** Build and reinforce a solid foundation through business, applications, technology, and information domains.
- **Architecture advisory and collaboration:** Architecture is a valuable advisor and decision influencer who supports high-performance teams.

Strategic level
- Strategic plan
- Future operating scenarios
- Goals & measures

Business level
- Business plan, business case
- Business requirements
- Business process reengineering
- Business process applications

Technology level
- SOA, OOAD, ERP, NM
- Security architecture

Tools / Repositories

Tools / Repositories
- EA program setup
- EA framework & tool selection
- Documentation of the EA
- Use and maintain the EA

Best Practices

Methodology

Applications (LoBs)

Configuration Mgmt
Asset Mgmt
Program / Project Mgmt.
Portfolio Mgmt.
Security / Privacy

Strategic Plans
Business Activities
Data & Information
Systems & Applications
Networks & Infrastructure

Shared Services

High level
- Strategic plan
- Business plan
- Security program

Mid level
- Goals & initiatives
- Information flows
- Support systems

Detailed
- Performance measures
- Data dictionary

Artifacts

Extensive set of artifacts for variety of information such as:
- Business architecture
- Information architecture
- Data architecture
- Application architecture
- Technology architecture

Becoming a **composable enterprise**

To remain agile and competitive, enterprises must embrace modularity in technology and organizational structure to mix, match, and scale services that address changing business needs. This strategy enables faster innovation, reduced operational bottlenecks, and better resilience in the wake of uncertainty. Transitioning to a composable enterprise requires cognizance of four crucial steps.

Working beyond silos

a. **Cross-functional teams:** Establish teams and processes that cut across departments like IT, marketing, and product development. This nurtures faster decision-making and innovation since people and processes can run cohesively toward common goals rather than working at cross purposes.

b. **Shared data systems:** Implement shared data platforms to ensure all business units can access the necessary data in real-time. This eliminates information bottlenecks and allows teams to move ahead in sync.

Mixing and matching business streams

a. **Modular capabilities:** Break the business down into discrete capabilities. For example, this could be marketing, logistics, or customer support. Combine different services to create contextualized opportunities tailored to customer needs.

b. **API-driven systems:** Integrate third-party services to enhance capabilities, diversify offerings, enter new markets, and respond swiftly to changing demands.

Orchestrating tangible outcomes

a. **Outcome-driven strategy:** The hallmark of a composable enterprise is its ability to orchestrate business outcomes by aligning modular applications to specific goals—the flexibility of which will turn these outcomes into tangible results.

b. **Agile execution:** Small changes often have significant impacts, and this must be leveraged to experiment and course correct to ensure that desired outcomes are achieved every time. Lastly, don't get lost in the complexity of constant adaptation.

Being a composable enterprise requires a fundamental shift in thinking. It is more than just adopting new technologies. The industry landscape will continue to evolve. The rapid pace at which technologies change will force companies to change and develop services that can be built upon further. Transitioning toward robust digital modularity requires aligning investments with the processes, culture, and architecture necessary to deliver the desired digital capabilities.

About Brillio

Brillio is one of the fastest growing digital technology service providers and the partner of choice for many Fortune 1000 companies seeking to turn disruption into a competitive advantage through innovative digital adoption. We help clients harness the transformative potential of the four superpowers of technology: cloud computing, Internet of Things (IoT), artificial intelligence (AI) and mobility. Born digital in 2014, we apply our expertise in customer experience solutions, data analytics and AI, digital infrastructure and security, and platform and product engineering to help clients quickly innovate for growth, create digital products, build service platforms, and drive smarter, data-driven performance. With 17 locations across the U.S., the UK, Romania, Canada, Mexico, and India, our growing global workforce of nearly 6,000 Brillians blends the latest technology and design thinking with digital fluency to solve complex business problems and drive competitive differentiation for our clients. Brillio has been certified by Great Place to Work since 2021.

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