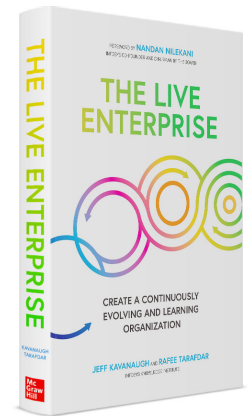


The Live Enterprise

Create a Continuously Evolving and Learning Organization

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THE SUMMARY IN BRIEF

For decades, leaders have been encouraged to run their organizations like lean, agile startups. They often place their bets on trends like digital transformation or design thinking. This is well-intended, but in isolation these trends are not enough.

There's another, better way to drive durable, effective change in your organization, and it's been proven by global IT and business consulting leader Infosys. *The Live Enterprise's* operating model provides a clear path to transform large complex businesses into agile, digital ecosystems that evolve with changing market needs and scale to any size.

In *The Live Enterprise*, you'll learn how to apply the benefits of the startup operating model—and go much further. This essential guide can help you create groundbreaking structures, response capacities, value chains, and more. It can help transform your organization into a constantly learning, ever-evolving industry leader.

IN THIS SUMMARY, YOU WILL LEARN:

- To create an organizational structure that drives collaboration, innovation, strategic alignment, and new culture across distributed, interconnected teams.
- To respond quickly yet thoughtfully to opportunities to create valuable new employee and customer experiences.
- To automate routine decisions with maximum human intuition and minimum human intervention.

The Live Enterprise Model

The promise and peril of the digital future has been forecast for years, from turn-of-the-century dotcom boom and bust, through the rise of mobile applications and social media, and more recently through Industry 4.0.

What's changed is that exponential technologies like the cloud, mobile, AI, open source, and Internet of Things have matured and converged. We are seeing the results of this converged life-cycle maturity at the same time that stakeholder capitalism has come of age: The next generation of customers and employees is more than simply aware of sustainability and equality—they demand action from enterprises.

Globalism has spurred the rise of the corporate city-state, where large enterprises have additional societal responsibilities in addition to, or perhaps even because of, their role as generators of financial returns. And of course, the COVID-19 pandemic was the match that lit the tinderbox and dramatically accelerated change.

Multinational information technology company Infosys developed the Live Enterprise model after they found that the traditional operating model framework does not meet the requirements of a modern, large, complex organization.

To seek nonlinear change, they dismantled old operating models rather than supplementing them. They started with six strategic objectives: agility of a startup; responsive to customer needs; networked and connected ecosystem; velocity of ideas and innovations; competitive advantage through platforms; and extreme automation in everything they do.

These objectives work in concert to accomplish four outcomes:

- **Quantum organization.** Agile organizational structure that drives collaboration, innovation, strategic alignment and new culture across distributed interconnected teams.
- **Perceptive experiences.** Respond quickly, yet thoughtfully and scientifically, to opportunities to create valuable new employee and customer experiences.
- **Responsive value chains.** Repurpose, reimagine, and reengineer the value chain to see what is not there, can be improved, or can be eliminated.
- **Intuitive decisions.** Automate systems and activate intelligence so that routine decisions and responses can be acted upon with maximum human intuition

and minimum human intervention, so that humans can focus on higher-order analysis and decisions not suited for machines.

These outcomes are made possible through four ingredients:

- **Hybrid talent;**
- **Design to evolve;**
- **Digital runway;**
- **Micro is the new mega.**

Taken together, the eight elements—the four outcomes and four ingredients—can be seen as the leverage points in the enterprise operating model. These eight themes offer guidance on how to change perspective and view the enterprise as a living organism, enabled by technology.

Given the pressures leaders face to survive, they need new models to address the challenges. Let's now explore each of the eight Live Enterprise model themes.

Quantum Organization

Uncertainty about the future is a particularly unnerving aspect of the new normal. To mitigate, the entire enterprise needs to move quickly together and evolve.

Large enterprise responses to the pandemic demonstrated that companies can be lifelike, responsive, evolving entities at enterprise scale—and any company, however large and complex, can transform to be adaptive and resilient. In fact, they may have no alternative in order to survive.

A quantum organization is not linear like traditional models but drives nonlinearity by enabling multiple organizational initiatives at any given point in time. These initiatives run in parallel and at scale to drive results that show up in operations, not just project readouts.

Shared digital infrastructure enables ideas to become teams and experiments to become offerings, following an organic, market-driven drumbeat.

Amazon is arguably the best-known example of a quantum organization. In the words of noted tech analyst Benedict Evans, “Amazon is a machine to make a machine—it is a machine to make more Amazon.”

In other words, the business model itself creates more effective businesses.

In the Live Enterprise model, perceptive experiences are delivered by blending the capabilities of heart, brain, and machine together in an integrated way.

The key characteristics of the quantum organization are as follows:

User at the heart of all initiatives. Fundamental questions are asked at the beginning of each project. “Why are we doing this, and how will this help the user (who could be a customer, employee, or partner)?”

Hyper-productive collaborative teams. This connects the silos that exist in any organization, guided by value stream and user journey. This requires formation of agile cross-functional teams that take an end-to-end view of the value stream, business metrics, KPIs, and user experience.

Rapid experimentation and innovation. Instead of long delivery times and quest for perfection, teams rapidly experiment with new ideas and roll them out to users quickly. They introduce new features every few weeks with rapid releases and then mature and scale over a period of time.

Shared digital infrastructure. Shared digital infrastructure connects humans, data, and things across the ecosystem and makes this available to the team to build contextual and intelligent products for its users. It also jump-starts the entire product to be delivered in weeks, rather than months or years.

Micro-change management. In a quantum organization with high innovation velocity and frequent feature release, adoption must also occur rapidly. This change is fundamentally different than the traditional new product or program roll-out, where a single large campaign is expected to drive change.

Instead, a frequent series of small interventions is needed to drive adoption, and this is called micro-change management.

This agile approach to change is both simple and profound, accommodating pace of change and accepting the inherent uncertainty of future requirements.

Perceptive Experience

Compared to just a decade ago, today’s corporate experience landscape is radically different, with COVID-19 pressing the button on even faster, more fundamental

changes. The field of experience design has been reshaped by the tremendous success of design thinking, enabling the creation of products and services that better serve both customer expectations and employee needs.

However, to continue to meet these rising requirements, a new approach is needed. In the Live Enterprise model, perceptive experiences are delivered by blending the capabilities of heart, brain, and machine together in an integrated way. Every user is a unique cosmos, with emotion, ambitions, and potential. At the core, there is an inherent human nature, surrounded by the wider environment and the context in which they operate.

To significantly enhance user experience, we need to understand their emotional state and contextualize the experience to make it personalized and useful for their needs. The enterprise digital brain constantly senses the signals emitted by users as part of their experiential actions and events to anticipate their needs and recommend actions that optimize their productivity.

Design thinking needs to be complemented by a new model to maintain current momentum and to meet growing stakeholder expectations and company responsibilities. The required changes can be understood in terms of three macro-level challenges, each of which will affect all organizations in the decade ahead: change is the only constant, evolving expectations, and a growing appetite for evidence.

The New Paradigm

Computational design addresses these macro-level design challenges. This represents a pivotal change in the way products and services are designed, and the approach is based on three principles: design adaptable, design inclusive, and design measurable. When adopted together, these principles provide designers and businesses an approach to address the challenges.

Design adaptable. The current view that change is a risk to be mitigated gives way to a new paradigm that sees change as an opportunity to embrace. Design solutions need to be adaptable so organizations react to change in a

fast, frictionless, and cost-effective way.

Design inclusive. The current belief that sees a single-best design solution yields to a new paradigm that sees design manifest itself in a thousand variants, customized to the user on the basis of a deep understanding of who they are.

Design measurable. The current view that sees measurement as an activity undertaken after release gives way to a new approach that sees measurement as core to design, built into its DNA from inception.

Experience is the new frontier of value creation, a frontier that continually expands. In this landscape, organizations create value by adopting principles of computational design—adaptive, inclusive, measurable—and deliver experiences that meet growing customer and employee expectations and lead to better business outcomes.

Organizations that embrace this new reality will receive an abundance of valuable data points for customers, employees, and users overall.

Responsive Value Chains

By 1926, Yellowstone's last wolf pack had been hunted to elimination, relieving pressure on the elk population, the wolf's main prey. This caused the elk to stay sedentary and overgraze on willow trees, which beavers needed to survive the winter.

On January 12, 1995, eight lupus (gray) wolves were reintroduced to Yellowstone, with an additional 23 reintroduced by the end of the following year, and they galvanized the park's ecosystem. The sole beaver colony in 1995 grew to nine by 2020, thanks to predatory wolves keeping elk on the move, halting the overgrazing and granting beavers an abundant source of food.

It didn't end there. More beavers meant more dams and ponds, meaning a recharged water table in streams, and shaded water for fish. Elk populations avoided the cycle of boom and bust, with more willow creating homes for songbirds. Eagles, ravens, coyotes, and bears benefited, too, free to scavenge the elk carcasses in winter helpfully left by wolves.

In Yellowstone, the gray wolf acts as a "keystone" species, critical to health of the wider ecosystem. Much like the Yellowstone lupus, responsive value chains are the keystone species that provide stability directly and through their beneficial secondary and tertiary impacts. The value chain

across the enterprise ecosystem depends upon change and stability, reimagining and resilience.

Sentience is a state of awareness with perception. To deliver the outcomes of the Live Enterprise model, the architectural layers should have a state of awareness that provides them the ability to sense, process, and respond to changes in state. In the traditional systems, only the user state is maintained and managed and only for a specific interaction channel; however, to be sentient, state awareness at multiple levels is required.

The Five Sentient Principles

Live Enterprise process analysis and reimagining is accomplished through five sentient principles.

- **Proximity to source.** Users should be provided with all the information and insights required for them to make a decision, at the interaction point where a decision needs to be made.
- **Zero latency.** Zero latency identifies how a company arrives at straight through processing across the value chain with the minimal number of steps and approvals required to complete the interaction. Put simply, zero latency is response following input, without delay.
- **Instant simulation.** Instant simulation provides the ability to not only conduct traditional what-if analysis but also explore alternatives and simulate to make the correct decision. It requires running simulations, practicing the process and predicting potential futures. Users evaluate alternatives at the point of decision making.
- **Micro-feedback.** Micro-feedback is user feedback gathered in the work flow. At the end of each user interaction, ask a simple question to understand their overall experience for this interaction.
- **Guided practice.** Guided practice provides a well-defined user pathway to complete a specific task or activity. The best practices get codified into the interaction flow itself. This is essential to develop new routines and drive behavior change.

Intuitive Decisions

It takes 302 neurons to keep a worm's nervous system ticking, while the capuchin monkey has around 3.7 billion neurons. For us humans, the magic number is 100 billion neurons—about the same number of stars in the Milky Way.

Those 100 billion neurons spark more than 100 trillion connections, called a “neuron forest” by the experts, where information runs at up to 250 miles an hour inside our skulls.

Thanks to those 100 billion neurons, the human mind is wired to see patterns, an essential aspect of intelligence. The mind processes information in conjunction with insights from past experiences to create intuition, and intuition guides much of our decisions.

Maximum Intuition, Minimum Intervention

Leading organizations are developing a similar intuition to drive decisions swiftly and accurately, and to act with resilience in the face of disruption. Sentience enabled by AI and automation are fundamental to this capability so that decisions and responses to data-led insights are acted upon with maximum human intuition and minimum human intervention.

This manifests in an ecosystem of tools that captures and maps complex and vast process environments. Businesses rely on historical and live data, both qualitative and quantitative, to learn from and then guide the formation of patterns that automatically detect, classify, and resolve problems.

These patterns also help companies see opportunities to improve the things they already do. Organizations use process and mining tools to digitize existing manual and semiautomated processes, and also capture variants and flow. Robotic process automation and similar tools have created digital workers, worker bots, and micro-bots that automate, optimize, and take on much of the deterministic decision load.

AI and related tools of machine learning (ML), deep learning (DL), and natural language understanding (NLU) allow businesses to automate routine and deterministic decisions, while at the same time provide instant simulation capabilities for users to experiment and test. Then users can make more complex decisions about what and how to adapt, like in response to disruption that emanates after a crisis situation.

Knowledge Graphs and Digital Brains

The knowledge graph links all data-spanning employees, customers, partners, networks, and devices, plus the interactions in between. An AI-driven core connects these islands of information in real time, allowing enterprises to make data-driven decisions, plus sense, process, and adapt to changing business stimuli.

The digital brain uses machine learning and deep learning as a nexus for continuous, automated learning from data

across business units and product lines. The digital brain processes this input to determine if any action is required and, if so, aids users through nudging and guided feedback. It then monitors the responses to learn and evolve from them, providing the enterprise with higher cognition.

The knowledge graph and digital brain continuously curate organizational knowledge to create perceptive experiences and make intuitive decisions. They capture and analyze enterprise data using automated reasoning to orchestrate intelligent responses to emerging events.

Hybrid, modular, or quick-assembly talent is the future of the workforce.

Hybrid Talent

Hybrid, modular, or quick-assembly talent is the future of the workforce. Beyond an individual “full-stack” worker with both STEM skills and empathetic creativity, hybrid talent is also defined as a seamless mix of humans, machines, and the gig economy to bring the right talent at the right time for the task at hand.

The hybrid talent model is built on three pillars:

- Promote micro-change routines, which over time build a culture of lifelong learning, and emphasize micro-feedback, helping people improve through small changes on a continuous basis.
- Adopt an open, collaborative, and multi-experience learning mindset across multigenerational learners, as they seek guided practice and experiences with tech trends such as edge computing, hyper-automation, and practical blockchain.
- Elevate corporate trainers to learning champions, viewing their roles differently to simulate learner behaviors and learning patterns, enabling them to provide learning with minimal latency and instant simulation.

Establishing a Talent Model

Lifelong learning is the North Star for organizational talent development. These forces are disrupting and changing the talent needs of every industry, with the frequent introduction of emerging technologies, new delivery models, changing talent demographics, and geopolitical challenges.

As a result, the core principles in establishing a talent model are as follows:

Motivate employees to learn. Ensure learners are able to access resources anytime, anywhere, and on any device—taking complete control of how they manage their individual learning journeys.

Leverage the manager-employee relationship. For learning efforts to be effective, an active role for managers should be created to help support and guide their teams in their learning journeys.

Anywhere, just-in-time learning. Trends indicate that employees prefer to learn on the go, at their convenience, and just in time.

Learning experience. Most employees are used to digital experiences on platforms like YouTube, Netflix, Amazon Prime shopping, and learning platforms like Udacity. Digital learning solutions must be designed to provide similar experiences and feel.

Future ready, while excellent today. Learning programs and courses must be forward-looking to excite digital native learners with fresh content and exciting formats, yet also designed to meet the needs of those who are less tech-savvy and need to learn mature, well-established capabilities.

Design to Evolve

While enterprises continue to leverage technology to improve productivity, the most successful businesses also transform to improve customer experience and employee engagement. Many companies deal with the duality of accelerating digital initiatives while maintaining operations stability in their new normal. The enterprises that survive will be those that navigate this duality and become resilient.

Business resilience means the ability to respond to market changes and uncertainty, without stepping off the treadmill of continually rising expectations.

For Infosys, this duality required defining and developing an

evolutionary architectural approach using Live Enterprise principles with the goal to make the existing IT landscape robust and resilient, abstract complexity, and establish a foundation to build new capabilities.

The reference architecture for a Live Enterprise augments an existing IT landscape and creates new services around it, and in the process transforms it into a Live Enterprise model. The model includes five elements:

Enterprise IT systems. These are the systems that run older, mission-critical applications and tend to be part of systems of record. A big bang modernization approach is not recommended, given the risk and complexity involved. Instead, consider an evolutionary approach to modernize core systems to simplify and reduce technical debt, improve efficiency through automation, optimize run cost, and make them resilient.

Interact layer—driving connections and collaboration. In the Live Enterprise, all users cooperate rapidly to visual and system cues across a range of channels. A Live Enterprise is connected, and this connectedness drives interactions and collaboration between humans, things, and data.

Process and serve layer—orchestrating and powering interactions. The process and serve layer acts as the glue that connects and powers the user experience by enabling and orchestrating the application programming interfaces (APIs) provided by the intelligence layer, core systems of record, and the digital runway.

As organizations start reimagining the experience, it also requires the underlying processes to be reimagined, re-configured, and orchestrated to enable anytime, anywhere perceptible experiences.

To provide this flexibility, it is important to unbundle the entire business process, features, and functionality into a set of services that can be developed by independent teams to provide discrete functionality and can be stitched together in different combinations over time to enable the continuous evolution of experience and features.

Intelligence layer—driving sentience. Data is the next degree of connectedness. For a Live Enterprise, connected real-time data is required to be able to sense, process, and respond to evolving events, situations, and user needs. Once an organization connects humans, data, and things, it can then observe the data streaming from each of these inputs.

The digital runway requires a significant cultureshift in corporate mindset.

Once organizations start observing, then they can also sense, process, and respond—gaining sentience. If sufficient signals are in place, they can be acted upon.

Digital runway—shared digital infrastructure for the company. In the Live Enterprise model, getting the architecture right is critical, and it starts by developing a shared digital infrastructure for the company, determining which platforms, features, and functions can be developed in the future. The shared digital infrastructure for the company is called a “digital runway” that helps increase the velocity of developing new ideas and innovations and taking them to the market in a shorter span of time.

All five layers of Enterprise IT systems, intelligence, process and serve, interact, and digital runway layers consume the services provided by the digital runway.

Digital Runway

In large global organizations, very good ideas and innovation tend to happen on a regular basis but in isolated pockets. It is straightforward to rapidly experiment, innovate, and develop point solutions.

However, it becomes a significant challenge when one has to unbundle them into shared digital infrastructure services and then scale, productize, and roll it out across the global organizational footprint. Few companies are able to do this successfully so that global users can use these unbundled services to rebundle and solve problems specific to their customers, lines of business, and geographies.

Amazon has developed digital platforms for their company using their famous two pizza team size rule, and innovates at a rapid pace to develop newer platforms, features, and functionality. The digital platform provides the tools that can be used by hundreds of independent and globally distributed teams to rapidly experiment and roll out successful ideas to their entire customer base.

The digital runway provides the tools to scale ideas and innovations, and also provides the ability for teams to inde-

pendently use these tools to solve their customer problems in their context and part of the business.

Through digital runways, curating and organizing knowledge, platforms and services, processes and playbooks, data and AI services, and other resources come together in a cohesive manner and in a scalable model that drives the velocity of new ideas and innovations.

This also enables ideas that have worked well in one area of business or platform to be quickly scaled to the rest of the organization, as they are based on the same digital infrastructure.

The digital runway has five categories: knowledge, platform services, process, data and AI, and resources.

An architecture-first and platform mindset should be applied to ensure the platforms are designed for evolvability rather than features and functions. An architecture fitness function should be defined to continuously measure platform quality, plus include playbooks to define and codify guided practices.

The digital runway requires a significant culture shift in corporate mindset. To deliver a change in culture and drive the business, there should be a persistent focus on the consumption, coverage, adoption, business impact, and usage of shared infrastructure.

Micro Is the New Mega

Micro-change management is how the Live Enterprise model operates. The vision and aspirations are big, but the organization thinks “micro.” Agile teams work on micro-problems, and they pivot to address user needs and develop a minimum viable product (MVP).

These micro-problems are addressed by small, hyper-productive teams working on micro-releases to rapidly experiment and take concepts to market in weeks.

Micro is the new mega, with agile predisposed to small teams working on rapid learning and decision cycles. Agile evolu-

tion is broken down into incremental micro-projects pulled together with a micro-front end and micro-service architecture, to create an environment of frequent micro-gains.

In effect, micro-change management ultimately helps organizations evolve enterprise agile.

Frameworking Change, Impact, and Scale

For the Live Enterprise model to be successful within an organization, the employees and teams working to define and execute the vision and strategy should believe in it and implement it effectively. One of the objectives is also to bring about cultural change, so that during transformation to a Live Enterprise, this changes employee routines and eventually their behavior.

Consider this simple framework to drive micro-change across the organization:

Micro-changes: Break down strategic initiatives into multiple micro-change programs, with each having a well-defined objective and outcome. Ask why a change is required, whether incremental or exponential, what value it will deliver, and what change in behavior is needed. These micro-change programs will lead to a sigma of micro change programs to accomplish the mega vision.

Routine + 1. Each micro-change management program should drive a small change in a routine. Periodically augment with similar adjacent changes (Routine + 1). Eventually create a new routine and achieve behavior shift with minimal resistance.

Behavioral approach to change management.

Behavioral approach is a combination of cues, hints, and suggestions. Positively nudge the impacted stakeholders,

and supplement with rewards and incentives which create excitement and improve outcomes.

Continuously measure, learn, and evolve. As micro-change programs are rolled out, continuously measure to ensure they accomplish desired outcomes. If not, analyze data, rethink, and improve through iteration.

Each new micro-change initiative within the organization follows this four-step process.

While technology and market forces are disruptive, leaders have a choice in how they approach the future. The Live Enterprise model offers a science-based yet uplifting mindset to create an enduring, prosperous company.

It also provides a blueprint for individuals, governments, and society to evolve purposefully while addressing the structural problems and opportunities that will define the future of business and, ultimately, life itself.

IF YOU LIKED THIS SUMMARY, YOU MIGHT ALSO LIKE:

- *Ruthless Consistency: How Committed Leaders Execute Strategy, Implement Change, and Build Organizations That Win* by Michael Canic
- *Next Is Now: 5 Steps for Embracing Change—Building a Business that Thrives into the Future* by Lior Arussy



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