



## Perform AI

Mobilizing the Enterprise and its Stakeholders to  
**Realize Superior, Sustainable and Trusted Business  
Performance** from the Market's Preeminent  
Technology Disruption

Artificial intelligence (AI) has emerged as arguably the most debated, disruptive, and transformative business and technology trend facing today's enterprise. While the opportunities for material business performance improvement abound, the challenges to confidently realize the upsides and the multitude of risks along the way are far from insignificant<sup>1,2</sup>. Perhaps unlike any other technology-driven business and commerce disruption in our lifetimes, AI can be viewed as a vast source of competitive strength, business dislocation, and potentially market dominance. Yet, while enterprises across the globe acknowledge the importance of AI and most indicate they have some form of AI-related initiative underway, the gap between preparation and readiness for "AI industrialization" and the level of "AI industrialization" required to operate in even the most modest of AI-influenced or AI-driven enterprise future state scenarios is massive. When the stakes are what most believe them to be, this gap is all the more serious and creates a level of urgency undeniably extreme.

## A New Performance Paradigm

Under most circumstances, we tend to view performance from two primary vantage points. Simply put, the first, a historical representation of how something was or wasn't accomplished. The second, a description of the means and intended results of going from Point A to Point B. With artificial intelligence, we see a more expansive and strategic paradigm due to the breadth and levels with which AI and its attendant technologies can be applied. In this paradigm, performance manifests itself in the following three ways:

- The ability to **execute** in a new, better, and/or different manner;
- The ability to **accomplish**, achieve, and gain new business outcomes; and
- The ability to **effect**, transform to, and realize new business future states and future state models.

Execute, Accomplish, Effect. This is the expansive, strategic, and transformative performance paradigm that AI enables. As a market disruption, AI is performance-based and performance-centric. The challenge is gaining the performance advantages, impacts, and outcomes that AI enables. And, it is the ability to confidently pursue and achieve **superior, sustainable, and trusted business performance** that will determine winners and losers, those who thrive and those who only survive, dominators and the left behind in an AI-enabled, global business environment. A rich and comprehensive solution portfolio consisting of the enterprise architectural and operational framework, design, build and run platforms, competencies, global ecosystem, industrialization models, and re-useable asset base to

leverage and apply AI to simultaneously execute, accomplish, and effect. This is **Perform AI by Capgemini**. The goal is simple: apply AI to perform at the most competitive and highest levels of business impact: superior, sustainable, and trusted business performance. This is why **Perform AI by Capgemini**. However, the journey to establish an agile, durable, scalable and secure enterprise-grade AI fabric is far from simple. The challenges and risks are many. **Allow Perform AI by Capgemini to be your guide.**

## AI and Business Impact in Today's Enterprise

Perform AI by Capgemini has been architected, designed, and now deployed to address the most critical requirements for enterprises to exploit AI for competitive advantage, market impact, and business results. Unlike many approaches available in the market today, Perform AI does not place the multitude of technologies that are typically classified as artificial intelligence at the core of its approach, solutions, or operating model. Rather, these technologies are accessed and applied as necessary to address specific use cases and target outcomes. Fluency and mastery of these technologies are essential but are the means by which the intended business results are achieved. Further, we remain at the early stages of AI technology development and even earlier when it comes to adoption, regardless of a greater maturity along the hype cycle. Hence, an approach that leads with, depends on, or places such nascent technologies at its core will be outdated quickly. Particularly given the extremely rapid pace with which AI technologies are evolving.

For the foreseeable future, expertise and proficiency in applying and implementing AI-based solutions using these technologies will constitute true differentiation. Industry-specific use cases are virtually endless and as AI "moves to the edge", these use cases will continue to multiply in number. As the market has seen numerous times in the past, technology seduction goes hand in hand with exorbitant expenditures and oftentimes disappointing returns<sup>3</sup>. Perform AI places business outcomes, impacts, and performance as the objective and works responsibly, expeditiously, and solely toward these objectives. **This more future-proof approach to AI solutioning, application, deployment, management, and evolution will ensure resiliency in ROI and longevity and durability in architecture choices and technology commitments.**

To this end, the following represents the strategic requirements for AI in the enterprise and the broad architectural and operational framework components of Perform AI by Capgemini:

- Enterprise Industrialization
- Focus and Application

- Solution Portfolio
- Design Principles
- Asset Platform
- Enterprise Infusion.

These six domains are described below.

## Industrializing for Scale and Evolution

To realize the long-term and sustainable benefits of AI, the enterprise must acknowledge that an approach that involves only a series of one-off AI initiatives or production instances is far from ideal, let alone form the basis for the kind of strategic business transformation that AI affords. Rather, a more comprehensive set of enterprise capabilities, processes, and assets are required to ensure the foundation is present upon which legitimate and durable AI enablement can be realized and sustained for the long-term. Perform AI considers this foundation as AI industrialization. It provides the assurance that the AI fabric is enterprise-grade: agile, durable, scalable and secure. Its components are presented in the Perform AI Portfolio later outlined under Perform AI Activate.

## Intensity of Focus, Agility in Application

Perform AI by Capgemini is highly-focused on addressing business use cases that possess either of the following attributes:

- Mission-critical or strategic process for a specific industry vertical (or cross-industry horizontal process) with clear business impact or performance objectives, or
- Social impact priority designated by the enterprise as strategic to its business mission.

Perform AI addresses the application of AI technologies by leveraging a slightly higher level of abstraction than the individual technologies that are more typically espoused. More specifically, the involvement of knowledge workers or the need for social engagement forms one dimension of determining the application of AI technologies while the ability of machines to learn and to optimize the consumption of data forms a second dimension. With this framework, AI technologies can then be considered in the following four application areas:

**Assist** – the most basic of AI applications which leverages more traditional data analysis, analytics, and presentation technologies in support of knowledge workers or users (e.g., analytics to support financial analysts)

**Automate** – tasks previously performed by knowledge workers or users are now performed in full by the technology using routine business rule logic (e.g., manufacturing assembly lines using robotics, robotic process automation for back office functions)

**Augment** – the activities of knowledge workers or users are appreciably enhanced or expanded, made more productive, accelerated, experience higher quality, etc. as a result of automated access to a steady accumulation of data for analytics and proactive decisioning (e.g., fraud detection analytics for risk managers, process control and engineering support applications for plant managers and engineers)

**Disrupt** – processes, products, services, or experiences are transformed and fully turned over to the technology without the engagement of a knowledge worker or intermediary between the AI-based solution and the end user (e.g., self-driving vehicles, lights-out warehousing).

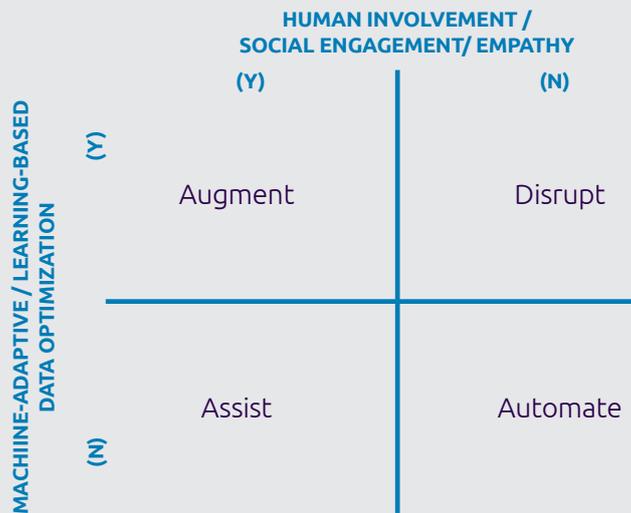
See Figure 1 overleaf.

## Power of the Portfolio

The Perform AI service and solution portfolio has been designed to address 3 mission-critical AI domains:

1. The industrialization of core enterprise processes necessary for an AI-first or AI-driven business to take root and be sustained. Absent a keen focus and the ability to activate these processes, the enterprise is at best left to deploying point solutions oftentimes with redundant effort and costs. At worse, the enterprise can be subject to undue risk and exposures, excessive investments with nominal ROI, and nominal business impacts if any.
2. The transformation of strategic enterprise processes and operations by applying AI-based solutions and technologies. Of particular note here is that while much of AI current state is addressing cost reductions and other operational efficiencies, the opportunity to transform for step-change process and operational improvements, stakeholder engagement, and growth are becoming increasingly achievable<sup>4</sup>.
3. AI, perhaps like no other technology-driven disruption yet, affords the opportunity to fundamentally recreate or introduce entirely new ways of working, products and services, and business models. In this context, legacy enterprises have the opportunity to leapfrog their current market positions and/or business and financial performance by re-imagining and achieving future states previously reserved only for digitally native enterprises.

Figure 1: Framework to address business use cases and AI technology applications



Sources: various

The Perform AI service and solution portfolio is described and illustrated below:

### Perform AI ACTIVATE

If we accept the conventional wisdom across the market today in that AI will become pervasive across industries, processes, products, services, experiences, and business models,<sup>5</sup> the enterprise will be compelled to go through a transformation of sorts to ensure its near-term and long-term ability to compete in an AI-infused world. Models continue to emerge suggesting AI-first, AI-centric, and AI-embedded businesses will become the norm<sup>6</sup>. This suggests that something substantially more than the ability to spin-up an AI prototype, pilot, and production release will be adequate. In fact, far from it. Rather, Perform AI uniquely addresses an array of enterprise functional and competency domains that require a more formidable re-making to enable a reliable base – or the industrialization of the enterprise for AI – to be established upon which AI can take root, be applied, and reliably deliver the business outcomes and performance impact the enterprise requires on an on-going bases. In other words, the **enterprise AI fabric**.

The functional and competency domains included here can be seen in Figure 2 overleaf. Addressing each of these domains through the lens of providing an “industrialized enterprise AI superstructure”

provides the **Activation** necessary for AI to become pervasive across the business.

Briefly:

**Strategy and Roadmap** – provides the overall direction and blueprint for where and how AI will be applied in the enterprise and in what timeframe, and with what use-case/business outcome/risk prioritization.

**Data Engineering** – provides arguably the most important dimension of AI which is establishing and managing the data estate necessary for any and all AI applications to perform.

**Architecture** – provides the logical and physical models for integrating AI services into the current digital core of the business and establishing the framework for interfacing with AI and other relevant services both internally and externally. Essential here is to ensure adoption of architecture design principles for evolution, change and agility given the infancy of AI technologies.

**Software and Platforms** – provides the directions and choices for what to build, to buy, and/or to rent recognizing the pace of new AI software and platform introductions and the need to future-proof the enterprise at this stage of the AI adoption curve.

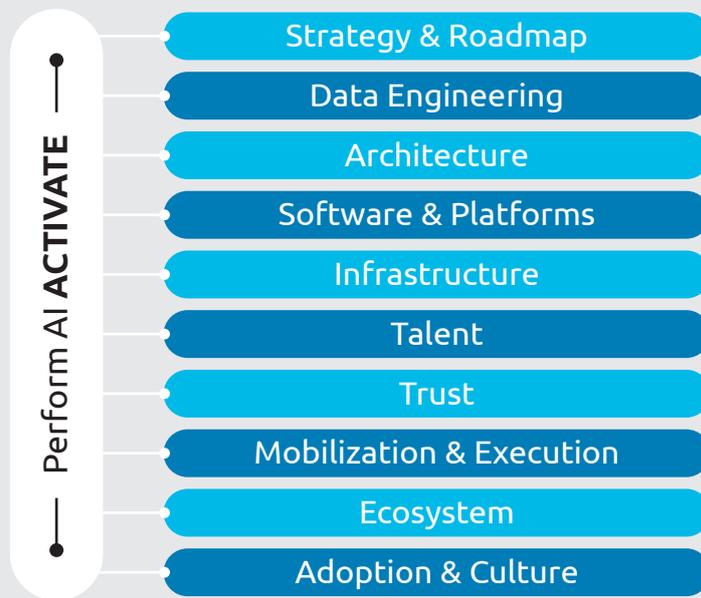
**Infrastructure** – provides the direction for where and how compute, storage, and networking will be supported in this data volume- and throughput-intensive AI digital fabric. Hybrid and multi-cloud choices and supporting AI “at the edge” architecture models are examples of the decisions to be addressed here.

**Talent** – provides the analysis and decisions regarding access to the myriad of new and scarce skills necessary for AI. Attracting and retaining talent take on difficult dimensions

**Mobilization and Execution** – provides the direction, governance, leadership, and measurements for moving the enterprise, its key stakeholders, and its primary constituencies to its AI future state.

**Ecosystem** – AI forces the enterprise to move outside of its four walls and into a world of collaboration, partnerships, and new relationships. For most, this is new territory especially when it comes to many small, niche, and oftentimes unproven players with radically different culture paradigms.

Figure 2: Functional & Competency Domains for Stable and Long-Term Leverage of AI



when it comes to human capital management<sup>7</sup>. Hiring, contracting, partnering and reskilling talent are examples of what will be confronted.

**Trust** – Among many elements of Perform AI that makes Capgemini’s market response unique is the intense focus on trust. Here, new dimensions of risk, privacy, security, transparency, ethics, bias, reproducibility, regulation, compliance, corporate responsibility, social good, etc. come under intense levels of exposure, judgment and expectations from a plethora of important stakeholders. AI without a comprehensive trust posture introduces a level of reputational, fiduciary, and legal risk that will only grow as adoption increases. Further, these considerations take on even greater complexity as geographic, regulatory, and cultural/social variations are introduced.

The ability to curate and orchestrate a more “extended enterprise” will be core to activating AI.

**Adoption and Culture** – provides the means, from the outset of the enterprise’s AI journey, to assess, understand, and address barriers to broad adoption and what oftentimes can run counter to prior cultural norms in the enterprise. Questions of task displacement, new job assignments, acquiring new skills, working hand in hand with machines, relying more extensively on data analytics and insights are all internal people disruptions that can slow, or even undermine, an otherwise well-planned and well-intended AI strategy.

Perform AI ACTIVATE is the basis for predictably, confidently, and safely realizing and sustaining the business performance results of the enterprise’s AI directions and investments.

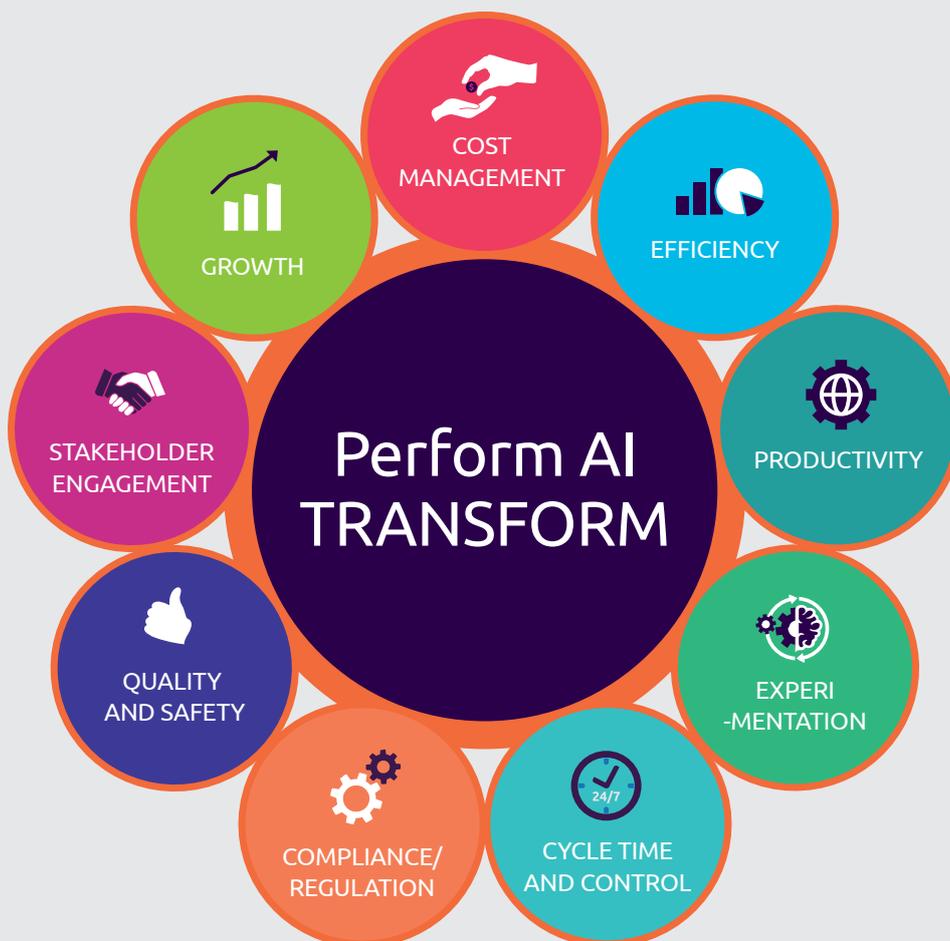
## Perform AI TRANSFORM

At the core of Perform AI is the application of AI technologies to specific process domains or use cases in order to create a new way of conducting the process, in order to create a material performance improvement in business outcome and impact. The design of the TRANSFORM services in the Perform AI portfolio is unique in its ability to address a broad range of business impacts from cost reduction to growth. Today's AI market has been biased greatly in automating tasks primarily for the purposes of reducing costs – largely those associated with human labor. While cost reduction through automation has its place, an AI strategy that addresses only these opportunities is exposed

The following graphic illustrates a value-impact continuum of performance impact categories (moving clockwise) that are available to the enterprise and should be an integral part of its AI strategic planning and adoption.

Viewed from the perspective of high priority mega-process domains, the performance impact and potential step-change improvement and transformational opportunities enabled by Perform AI TRANSFORM are also significant. The value-impact categories highlighted above align directly to the mega-process domains identified here. Together, they provide a comprehensive approach to use case and business

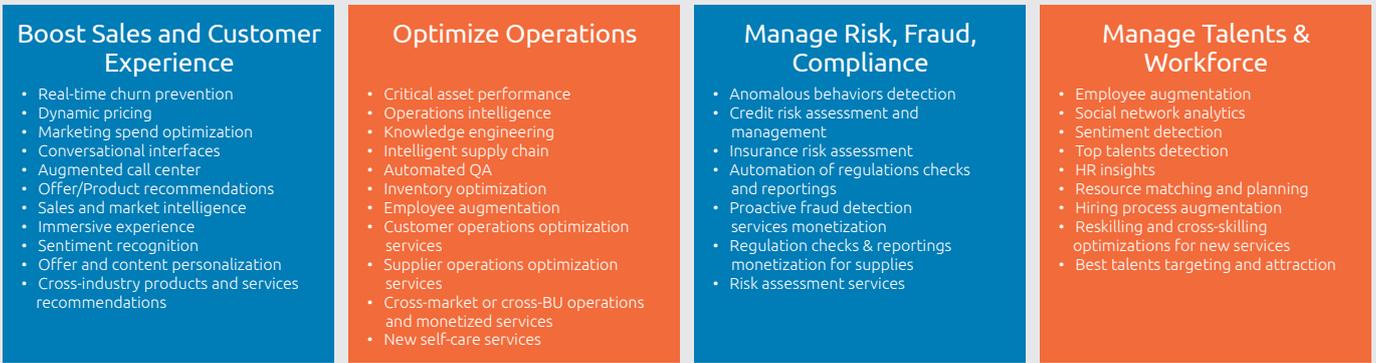
Figure 3: AI value-impact continuum



to scrutiny and controversy. More importantly, however, are the immense opportunity costs and material performance improvements to be gained by taking a much more expansive and strategic view of AI and its benefits to the enterprise.

outcome targeting and prioritization, by establishing a primary focus on several of the most opportune enterprise processes and an inventory of key value and benefit drivers to be considered. In this context, the top and bottom line improvement and outcome opportunities become more evident.

Figure 4: Transformative performance benefits



Evident in Figure 4 are the performance benefits – from the more tactical to the more strategic – that a comprehensive AI approach affords the enterprise. Perform AI TRANSFORM has been designed to assess, build, deliver and manage AI-supported and AI-embedded processes and use cases across this performance- and value- impact landscape

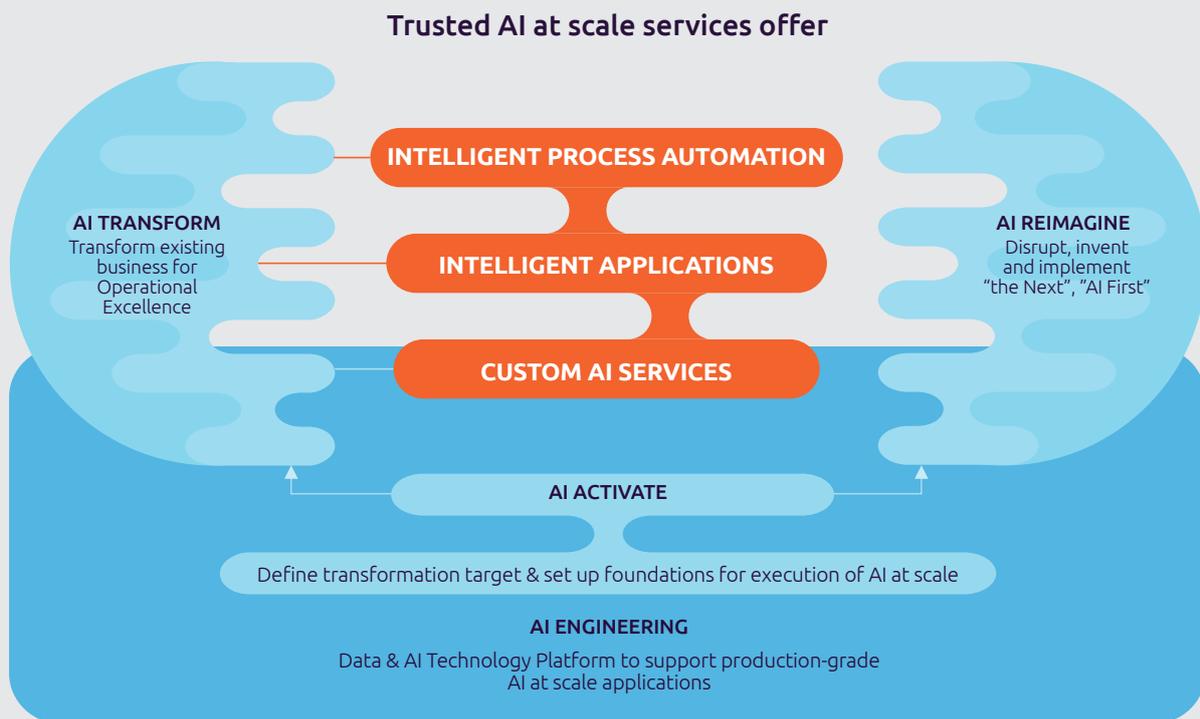
ensuring the enterprise gains the highest order advantages, ROI, and market results available.

To design, build, and run the AI solutions addressed in Perform AI TRANSFORM, three categories of services are prioritized as illustrated in Figure 5 and described briefly overleaf:

Figure 5: Services integral to AI transformation

### Trusted AI at scale services for business transformation & innovation

Realize superior, sustainable and trusted business performance from the market preminent technology disruption



- Custom AI – applying the appropriate AI technologies and processes and leveraging the required data sources and algorithms to address the specific use case requirements and achieve the targeted business objectives and outcomes. The Custom AI service category in Perform AI is relatively broad and enables most industry/process domain use cases to be supported. An example from this service category would be the continuous collection of process cycle-time, machine performance, quality, and safety data to make real-time adjustments to automated manufacturing, inspection, and distribution functions in turn providing dynamic pricing and delivery forecasts.
- Intelligent Applications – creating AI-based solutions that require a much greater infusion of more human-like qualities, experiences, and knowledge application. The Intelligent Application service category exploits five human sense AI technologies – think, remember, watch, listen, and act – independently or in combination to bring human-like sensations to the digital experience. An example from this service category would be the application of auditory monitoring equipment across precision discrete or process manufacturing equipment and lines to detect anomalies for predictive maintenance and defect or waste avoidance.
- Intelligent Process Automation (IPA) – advancing traditional robotic process automation (RPA) applications by leveraging, for example, machine and deep learning technologies, advanced analytics, natural-language processing and generation, and cognitive agents. IPA, with learning and decision-making algorithms extends even more process automation to manually-intensive, mundane, or repetitive document processing use cases. Further, IPA is emerging in its advanced application to more “lights out” use cases such as mining, autonomous long-haul transportation and shipping, and farming.

While over time, Perform AI TRANSFORM will further expand its service focus and priorities, the three categories highlighted above provide coverage for a large majority of the major AI use case opportunities associated with the greatest business impacts in the enterprise. Think 20% of the use cases and 80% of the business performance opportunity and impact.

## Perform AI REIMAGINE

Just as Perform AI ACTIVATE provides a critical dimension of the enterprise’s AI fabric in terms of industrializing the necessary functional and competency domains for the stable and long-term leverage of AI solutions, Perform AI REIMAGINE introduces an equally unique capability to the enterprise for its AI future state.

AI will impact not only how the enterprise performs and executes processes and operations in the future but will also introduce an entirely new set of opportunities as to what products, services, experiences, and business models exist, how they perform, and how they evolve. From autonomous vehicles to bot-operated customer service and from cashier-less retail stores to personalized, tele-medicine, AI is already having major impacts across stakeholder engagement models. Further, in the event the enterprise truly embraces an AI-first business strategy and operating model, even more opportunities will arise to rethink and reimagine what it sells, how it delivers, how it operates, how it engages, and how it contributes to social good. Perform AI ACTIVATE will address the capabilities, assets, platforms, and execution proficiencies to architect, design, build, and run in faster, more agile and scalable, and more secure ways. This will, in turn, enable the work in Perform AI REIMAGINE to be especially relevant and game-changing in enabling the enterprise to achieve a more significant innovation posture, quicker and more sustainable value creation, and mid-term and long-term market performance.

Perform AI REIMAGINE aggregates industry domain experts from across Capgemini and combines them with business and market strategists, process specialists, AI experts, and other operational and mobilization know-how to formulate both new and renewed opportunities across a range of fundamental enterprise revenue generating asset categories and purpose-driven priorities.

This scope is shown in Figure 6:

This dimension of the Perform AI portfolio provides a strategic element that aligns directly with the enterprise’s agenda for growth, competitive advantage, and market leadership.

Perform AI ACTIVATE, TRANSFORM AND REIMAGINE provide a market-first articulation and construct for today’s enterprise to comprehensively address AI and the opportunities for material performance impact it can and will provide - ensuring the enterprise has the industrialized basis for predictably and sustainable impact and the ability to approach process and use case transformation from achieving cost reduction, growth and many performance

benefits in between. And, ultimately establishing a future state that materially changes the game in terms of what the enterprise produces, how it engages with its stakeholders, and what purpose-driven mission it pursues by leveraging AI.

demands is an essential core competence of the enterprise in the future state. Perform AI has been built on the basis of adaptation and enables the enterprise to react quickly and successfully to new demand.

Figure 6: New and renewed opportunities for organizations in their reimagined AI future state



Combined, this is the unique, market-leading, and end-to-end power of the Perform AI portfolio.

## Design Principles

Perform AI has been designed to align to 6 primary principles. These principles inform both how Capgemini executes and delivers the services included in the Perform AI portfolio as well as how an AI-driven future state in the enterprise mobilizes and operates. These principles include the following:

**Speed** – velocity in realizing performance impacts has important and clear value. Hence, the ability to deliver AI solutions in compressed timeframes is an integral part of the Perform AI model.

**Agility** – uncertainty and change have clearly become the new normal for today’s enterprise. The ability to pivot, respond to, and address a regular stream of new business

**Scale** – as with many new technologies and the business processes they address, AI for prototypes, proof of concepts, minimum viable products, and pilots clearly has value. However, the real objectives remain enterprise-wide adoption, consumption, and leverage. Perform AI is informed by the ability of solutions to scale and thereby addresses the numerous elements required to achieve enterprise-grade effectiveness and impact.

**Certainty** – Perform AI “shifts left” as many design, development, and delivery activities as possible so as to limit, if not eliminate, late stage surprises. With this approach, greater rigor is applied earlier in an AI solution development, issues are addressed at a time when defects or issues are less costly to resolve, and predictability in outcome timing, quality, and impact is more assured.

**Trust** – unlike most all other approaches to AI solutioning, Perform AI embeds trust and its related dimensions (privacy,

security, risk, regulation, compliance, ethics, exposure, transparency, etc.) from the first steps of an AI initiative. Little is left to chance or left to be addressed late in the process. Trust has become one of the most important considerations in artificial intelligence<sup>8</sup> and is treated as paramount across the Perform AI portfolio.

**Intelligence** – as was the case with application software over the past couple of decades requiring security and analytics to be integrated in and delivered with the solution, we are now entering a market expectation, and soon a requirement, to embed intelligence in all technologies. In this context, Perform AI aligns to this market reality and addresses for what purpose and how intelligence can be leveraged and applied routinely in the solutions Capgemini delivers.

## Asset Platform

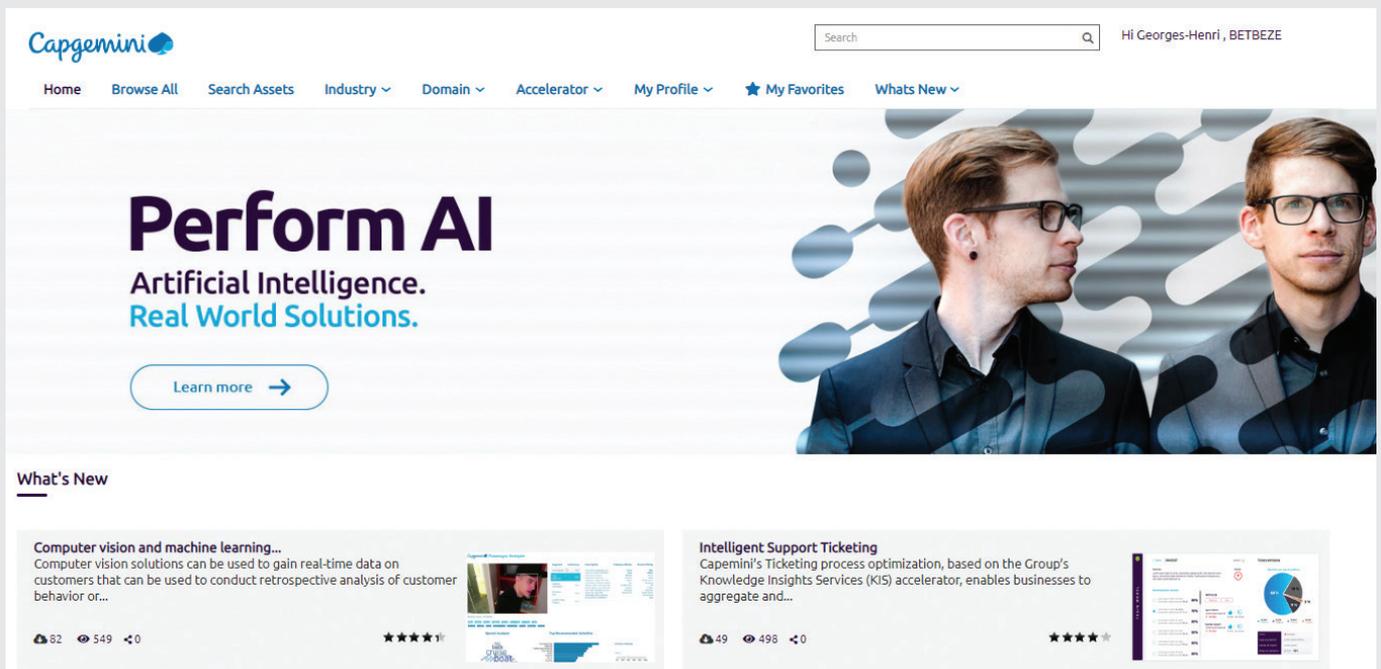
Integral to the ability of Perform AI to deliver on its value proposition and brand promise and to adhere to its design principles, is the broad investment made in a series of assets supporting solution development and delivery, skill access and development and content management and IP. Collectively, this is referred to as the Perform AI Asset Platform and consists of the following 5 components:

**1. Perform AI Intellectual Property** – consisting of an extensive repository of thought leadership and research, methods, tools, techniques, re-useable artifacts and component libraries, accelerators, use case

documentation and prototypes, and other proprietary and “open” content. Contributions are sourced from across the entire Capgemini global organization as well as from the Group’s Capgemini Research Institute, CTO and Chief Innovation Officer Global Network, Sogeti VINT Institute and third-party collaboration initiatives. One notable example is the Perform AI Gallery, an online portal and repository of rich AI value/use case content with both internal and external contributions as well as the ability to grant access to content segments to internal and external stakeholders.

The Perform AI Gallery home page is shown below:

- 2. Perform AI Domain Expertise** – the Capgemini Group including its industry expertise, process domain specialists, AI and related technology talent, and other relevant subject matter experts are fully mobilized in support of Perform AI. Based on use case demand, Perform AI will involve the appropriate expertise wherever and whenever it is required.
- 3. Perform AI Academy** – numerous learning, training, competency development, and reskilling capabilities and centers across Capgemini are mobilized to address the skill demand associated with Perform AI. This includes but is not limited to the Capgemini University, Automation Drive Academy, Insights and Data Academy. Further, access to the AI training services of our global



partners are also integrated into the Perform AI Academy. Serving just-in-time as well as more long-term competency development requirements across the Capgemini Group and expected to touch virtually all employees, the Academy will always be made available to external customer and other stakeholder demand as well.

**4. Perform AI Ecosystem** – the breadth of AI demands the mobilization of a global ecosystem of many constituents including global partners, start-ups and scale-ups, venture capitalists, private equity, academia, government and quasi-government institutions, and various other related entities. Perform AI regularly curates and orchestrates this global ecosystem to ensure the right skills, knowledge, and experiences are available for our customer demand whether these capabilities are resident in Capgemini or need to be leveraged from external sources.

**5. Perform AI Delivery Network** – Perform AI has established a global network of AI solutioning and delivery teams including the Group's extensive India operations, client-site services, near-shore centers, onshore development hubs, design and creative studios, Applied Innovation Exchanges, Accelerated Solution Environments, and recently launched Perform AI Hive(s). By leveraging the right expertise, in the right timeframe, at the right price point, with full global coherence, alignment, and knowledge access and leverage, Perform AI ensures the level of speed, agility, and expertise is available and delivered to our customers.

The Perform AI Asset Platform continues to evolve and expand. As it becomes more industrialized, it will ensure Perform AI continues to broaden its market reach and to deliver even greater levels of AI-driven performance impact expected by its end users.

## Enterprise Infusion

Perform AI was designed and developed to address the market expectation of the pervasiveness of AI in the future state enterprise. In this context, the market is approached with the expectation that AI will inform, infuse, and/or drive what the enterprise markets and sells, how the enterprise operates in its front office, middle office, and back office, and how all stakeholders engage with the enterprise. It will also place heightened demands and expectations on how the enterprise addresses its trust, social good, and market performance expectations. While use case-driven process transformation is key, industrializing the enterprise for its AI future state and rethinking what it offers, how it engages, and its operating and commercial models are now essential as well. This creates a much broader, strategic, and transformative approach to enterprise AI that perhaps heretofore considered. At the same time, more is at stake than perhaps ever before when it comes to disruption, opportunity and challenge especially when considering the impact AI will undoubtedly have. And it is from this vantage point, that infusion of AI across the enterprise must be considered and addressed.

Perform AI by Capgemini is being adopted in a similar fashion within the Capgemini Group. What the Group sells, how it delivers, and how it operates its internal functions will all be influenced, if not transformed by AI. As a result, each operating unit, support function, and mega-process domain will address the role and impact of AI – all with the intent of gaining greater performance impact and outcomes. For this reason, Capgemini has not launched a distinct AI practice. Rather as we advise and support our clients, AI is enterprise-wide and Perform AI is the means to gain AI's performance advantage.

Superior, sustainable and trusted business performance. A new performance paradigm for the enterprise which embraces and exploits artificial intelligence. The opportunities are many, yet the risks and challenges remain significant. Market clutter and controversy abounds at the same time we are confronting the infancy of AI emerging technologies. There are real near-term and long-term gains to be had and pursued. But as with many predecessor technology disruptions, vast investments are no guarantee of meaningful returns.

AI stands to be prominent, pervasive, and perpetual. Pursuing it as another technology shiny object is a useless and worthless strategy. Perform AI by Capgemini provides

the approach, the focus, the confidence, the direction, and the roadmap for the results that matter now and for the foundation for the results to be realized in the future.

Through Perform AI, enterprises are capable of more than they first thought or ever envisioned. In the end, the only thing that truly matters is business performance impact and results – those that create superior returns, competitive advantage, market leadership, institutional trust, and stakeholder benefit. Perform AI by Capgemini is the market's foremost resource for the enterprise's adoption, exploitation, and benefit of artificial intelligence.

Learn Why – Experience How – Perform Now.

# Perform AI

**Artificial Intelligence.**  
**Real World Solutions.**

Immersive, highly personalized experiences. Augmented operations. Empowered employees. Humans and technology working together with transparency and trust. Now is the time to exploit the real world power of Artificial Intelligence.

## References:

**1.** According to Forrester, “AI is transformative, a change agent to future operations”. But in 2018, three items held it back:

- i. AI had insufficient information architecture. AI is data-dependent and data-hungry. But most firms struggle with basic data governance issues. Beyond highly targeted robotic process automation (RPA) efforts and the use of “clean” test data for proofs of concept, firms were not data-ready for AI.
- ii. AI was too horizontal. AI’s big promise is to create powerful efficiency gains and new possibilities. Most proofs of concept either singularly tested the technology or minimally applied AI to the firm’s specific operations.
- iii. AI was too confusing. The ability to explain and audit AI is at best opaque, limiting business leaders’ ability to understand and trust what AI is doing to operations and the customer experience.”

**Source:** “Predictions 2019 Transformation goes pragmatic,” Forrester Research Inc., 8 November 2018

**2.** M.D. Anderson Cancer Center teamed up with IBM Watson in 2013 for cancer treatment, but, after spending \$62M, abandoned the project in light of infrastructure incompatibilities and lack of results. As a result, 12% of purchase influencers in the healthcare industry say their firm intends to decrease its investment in AI in 2018.

**Source:** “AI And Automation Aren’t Quick Wins — Invest Anyway,” Forrester Research Inc., 1 November 2018

**3.** IDC forecasts that “worldwide spending on cognitive and AI systems will reach \$19.1B in 2018, an increase of 54.2% over 2017, and will grow to \$54.2B in 2021 with a CAGR of 46.2% over 2016-2021.”

**Source:** IDC. 22 March 2018. Worldwide Spending on Cognitive and Artificial Intelligence Systems Will Grow to \$19.1 Billion in 2018, According to New IDC Spending Guide [Press Release].

**4.** According to research by Capgemini, more than 7 out of 10 organizations surveyed have achieved significant benefits in various areas of operations.

**Source:** Capgemini Research Institute, Turning AI into concrete value; the successful implementers’ toolkit, September 2017

**5.** Google – an AI First Company: Rajen Sheth, Senior Director, Product Management, Google, states that: “At Google, we emphasize that AI is not something that should be done by only one group. AI is something that should be pervasive. Over the last two years, we’ve gone from around a couple hundred projects at Google using AI to almost 7,500 projects.”

**Source:** Capgemini Digital Transformation Review: Artificial Intelligence Decoded, March 2018

**6.** According to Capgemini Research, 78% of Front-Runners consider an AI-first approach when making organizational decisions.

**Source:** Capgemini Research Institute, The secret to winning customers’ hearts with artificial intelligence, July 2018

**7.** According to Forrester, “Two-thirds of AI decision makers struggle with finding and acquiring AI talent, and 83% struggle with retention.” From Forrester’s Q2 2018 Global AI Online Survey.

**Source:** “Predictions 2019: Artificial Intelligence,” Forrester Research Inc., 6 November 2018

**8.** According to Forrester survey, “45% of the respondents said trusting the AI system was either challenging or very challenging. It was one of the top three challenges firms face when trying to deliver AI capabilities.” From Forrester’s Q2 2018 Global AI Online Survey

**Source:** “Predictions 2019: Artificial Intelligence,” Forrester Research Inc., 6 November 2018



## About Capgemini

A global leader in consulting, technology services and digital transformation, Capgemini is at the forefront of innovation to address the entire breadth of clients' opportunities in the evolving world of cloud, digital and platforms. Building on its strong 50-year heritage and deep industry-specific expertise, Capgemini enables organizations to realize their business ambitions through an array of services from strategy to operations. Capgemini is driven by the conviction that the business value of technology comes from and through people. It is a multicultural company of 200,000 team members in over 40 countries. The Group reported 2017 global revenues of EUR 12.8 billion.

Learn more about us at

[www.capgemini.com/PerformAI](http://www.capgemini.com/PerformAI)

**People matter, results count.**

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