

HCLTech AI Force: Scalable, modular and backed by proven AI expertise

Authors: Patrick M. Heffernan (patrick.heffernan@tbri.com), Principal Analyst
Kelly Lesiczka (kelly.lesiczka@tbri.com), Senior Analyst

Dec. 5, 2024

TBR perspective

In the software engineering and operations lifecycle, disparate and siloed data, specialized software tools and interrelated processes challenge enterprises to gain real value from AI-enabled solutions. HCLTech's AI Force platform provides visibility into data streams and interdependencies across the software development and operations life cycles — requiring minimal change management but no replacement of existing technology and greatly enhancing an enterprise's existing IT environment. In short, AI Force is a nondisruptive force multiplier of customers' technology investments.

In late September, TBR met with executives from HCLTech to discuss the company's AI Force platform, overall business model, and strategies around AI and generative AI (GenAI). The HCLTech team included Apoorv Iyer, EVP and Global Lead, Generative AI Practice; Gopal Ratnam, Vice President, Product Management, Generative AI Products & Platforms; Alan Flower, EVP and Global Head, AI & Cloud Native Labs; and Rohan Kurian Varghese, Senior Vice President, Marketing. This special report reflects that discussion as well as TBR's ongoing research on and analysis of HCLTech.

AI Force is a GenAI-powered platform that infuses intelligence across every phase of the dev and ops life cycles

HCLTech had an early start in AI, setting up a research team in 2016 and building out its AI engineering strengths around AI silicon; the development of AI-led IP solutions like DRYICE, iAutomate and SDLC (Software Development Life Cycle), which was a precursor to AI Force. This has ingrained AI across HCLTech's portfolio and underpinned transformation projects, allowing customers to seamlessly manage IT and cloud environments. Leveraging this heritage, HCLTech developed AI Force with responsible AI spanning built-in use cases that are scalable and modular and cover the entire software and operations life cycle, such as requirements and analysis (e.g., user story generation,

change impact analysis), development (e.g., code generation, code refactoring), triage (e.g., duplicate defect detection), and technical support.

Through AI Force, HCLTech provides clients with a platform that supports not only software development life cycle, reducing the lift on manual tasks and shortening overall development time, but also the operations life cycle, enhancing overall efficiency and accelerating technology value across an enterprise by reducing accrued technical debt and producing better quality code. As one HCLTech leader described it, AI Force allows an enterprise to “stitch everything [in the IT environment] together and figure out where the issues are.”

Notably, AI Force has been on the market for over a year, is live with more than 25 of HCLTech’s enterprise clients, and serves the broader IT ecosystem within an enterprise, beyond just application development and maintenance teams. An HCLTech leader noted that the AI Force platform “reduces the lift of manual tasks and accelerates the overall service delivery time,” a clear operational and financial benefit for any enterprise and clearly more than simply a collection of software tools. Enterprises can now take intelligent decisions by harnessing data, leading to the accelerated development of products and applications, along with significant cost savings and improved efficiencies.

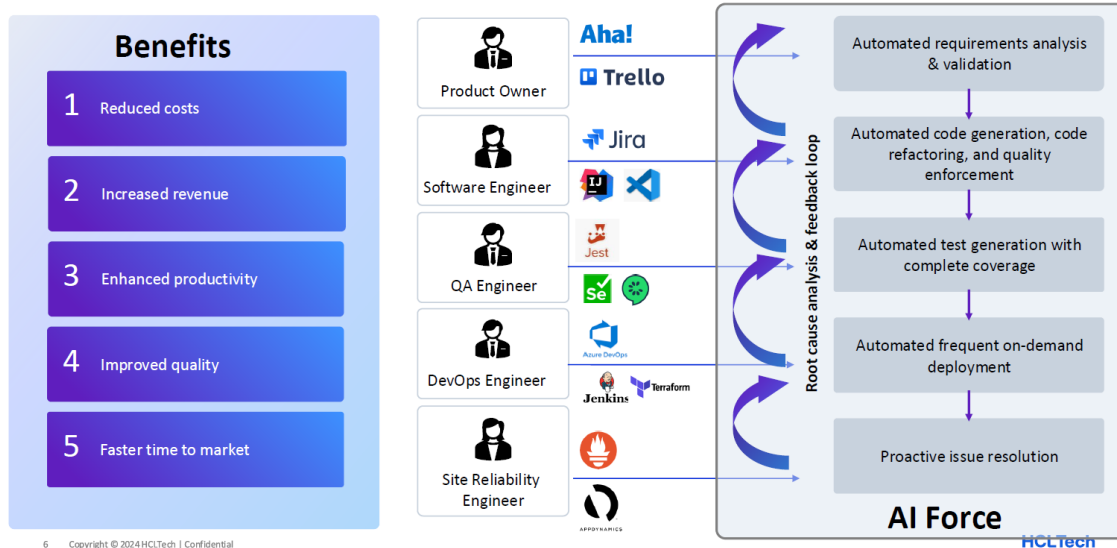
Before diving into specifics around AI Force, HCLTech’s leaders described some of the challenges enterprises face across the software development and operations life cycles, highlighting the complexities inherent in having multiple personas, disconnected processes, siloed data, disparate systems and specialized tools.

According to HCLTech and as depicted in Figure 1, this landscape is missing a digital thread or intelligence hub capable of understanding the entire process end to end, including the data sets generated by specialized tools, and then further unlocking the relationships between the data sets. HCLTech’s AI Force can integrate existing tools — not replace them — and bring data sets together, create a knowledge graph of the relationships between the data sets, and conduct comprehensive root cause analysis.

Figure 1

AI Force

The connective tissue (digital thread) across the software development & operations life cycle



SOURCE: HCLTECH

AI Force’s key characteristics and advantages

In the discussion with TBR and during HCLTech’s presentation of AI Force’s capabilities, HCLTech’s AI leaders walked through AI Force’s go-to-market approach, characteristics, architecture, advantages and use cases. HCLTech conducted a demonstration of AI Force in action before turning to the synergies between AI Force and the company’s global network of AI and Cloud Labs.

At its core, HCLTech’s AI Force features extensibility, modularity and flexibility. It can integrate smoothly with existing IT environments, be leveraged for a large variety of use cases within an enterprise, and be deployed, consumed and priced in different ways that are suitable to an individual customer’s business needs.

Customers deploy AI Force in two consumption models, as a product for enterprisewide usage and/or under HCLTech managed services. HCLTech will continue to enhance large-scale engagements with the capabilities and benefits of AI Force from the start, affording the client immediate cost savings.

For clients already engaging HCLTech for managed IT services, AI Force can be deployed to gain cost savings and efficiencies, directly complementing existing managed services. This last approach, in TBR’s view, reinforces HCLTech’s value proposition around offering innovation, even in established managed services engagements, and expands its remit within the enterprise, from simply IT services to more consultative-outcomes-driven and AI-enabled solutions. As part of this consultative approach, HCLTech undertakes value

stream mapping in the discovery process for deploying AI Force, including a detailed as-is picture, to-be picture, and the true impact at scale. Through this due diligence, HCLTech helps customers select the right projects that can benefit from AI Force.

Appealing broadly across the enterprise and embedding customer context

Recognizing that peers such as Infosys and EY have similarly developed suites of AI-enabled and AI-forward solutions, HCLTech leaders highlighted some aspects they believe distinguish the company's capabilities, particularly AI Force.

First, the solution can be deployed on the cloud, on premises or even in edge-enabled devices, depending on a client's needs and circumstances. The leaders described this aspect as appealing to HCLTech's ecosystem partners, which include Microsoft, Amazon Web Services (AWS), SAP and IBM, further noting the already established integration with Microsoft's GitHub Copilot and being offered as a certified extension.

Second, the HCLTech executives noted AI Force is valuable to more than just coders and enterprise professionals looking for AI-enabled cost- and time-saving assistance. Being extensible and working with multiple large language models (LLMs) made AI Force flexible enough for a broader enterprise workforce audience.

Third, the inclusion of a customer context using enterprise data makes the solution more than simply an addition to an existing LLM accelerator. HCLTech's leaders emphasized the value of customer context inherent to the platform, noting that HCLTech will train AI models on customer-specific data.

On a related note, the HCLTech executives described the underlying AI architecture as "comprehensive, but not complex; unified" and "holistic, therefore not a point solution." According to HCLTech, AI Force has been granted 18 patents, and its batch processing mode reduces the strain on the underlying cognitive infrastructure, leading to reduced energy consumption. In TBR's view, the characteristics and architecture likely resonate with IT professionals and particularly software engineers, while the flexibility and customer context significantly enhance the business value of AI Force.

"Focus on the right use cases, so when we deploy AI Force it's not in isolation, it's not a product deployment only. It's also service transformation. We look at all kinds of service transformation. We look at the life cycle of a project and say, 'These are the areas of highest impact from GenAI.'"

— Gopal Ratnam, Vice President, Product Management, Generative AI Products & Platforms, HCLTech

Building on key characteristics, the HCLTech AI leaders walked through AI Force’s overall advantages, including a single, unified platform, rather than hundreds of solutions; simplified management and budget; built-in use case prioritization, allowing decision-makers and IT support to focus on the use cases that would lead to business transformation; inherently enabled customer context, greatly enhancing the stickiness of AI Force within an enterprise; and built-in data ingestion and storage, significantly diminishing the likelihood of disjointed or counteracting results.

In TBR’s view, AI Force’s advantages play well for different buying and decision-making personas. Procurement, IT operations and even the CFO can appreciate a single solution with simplified management. Business unit leaders can find and deploy uses cases suitable to their specific needs. And the inherent stickiness of AI Force can appeal to executives looking to gain advantages from deploying AI-enhanced solutions and not simply paying for another round of new technologies.

“Once you bring multifaceted, multiformatted data sets inside, we look at how to store them effectively to yield the right results and outcomes. How these data sets integrate with each other, how they are linked together. There is a connection between a piece of code that’s written to the requirement and the test scripts that are run. So, we build these linkages between these different artifacts, and that’s what makes this platform unique, because that intelligence tying in different pieces of information to give a holistic picture isn’t done elsewhere. And we do that as part of our platform engineering, with clients’ own specific data.”

— **Apoorv Iyer, EVP and Global Lead, Generative AI Practice**

Applying GenAI only when and where it is needed

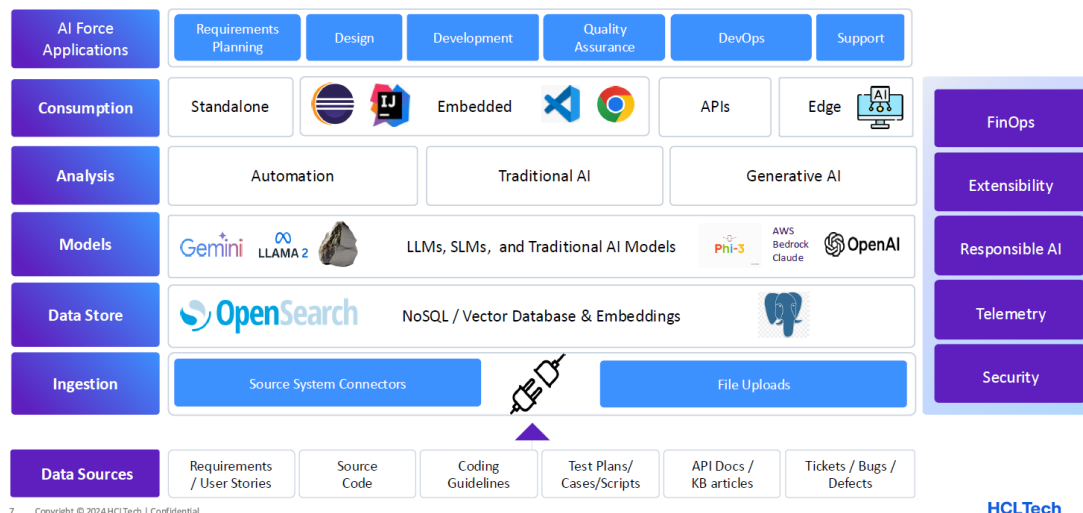
As shown in Figure 2, not every business problem is best solved by deploying GenAI-enabled solutions. HCLTech leaders emphasized that some customer problems can be handled by simple automation, some with traditional AI, and only a niche set through GenAI-enabled solutions.

In TBR’s view, HCLTech’s strategic decision to recognize that customers can solve problems with existing technologies and do not always need GenAI-enabled solutions plays well, given enterprise buyers’ fatigue around the constant carousel of emerging technologies and ever-increasing IT budgets. Simply showing customers that AI Force will help identify where GenAI is best suited and where it is not should resonate with IT decision makers and their C-Suite bosses, all of whom are looking for tangible returns on technology investments. If HCLTech can help get more from existing technologies, AI Force is an immediate value-add.

Figure 2

AI Force architecture

Robust, flexible, and runs anywhere



SOURCE: HCLTECH

Notably, HCLTech works with a wide variety of models and is model agnostic. The choice of model depends on a client’s business problem and the context of the client’s own data. Rather than recommending a model based on technical specifications or a familiarity with a particular model, HCLTech centers the decision on the client’s specific business problem.

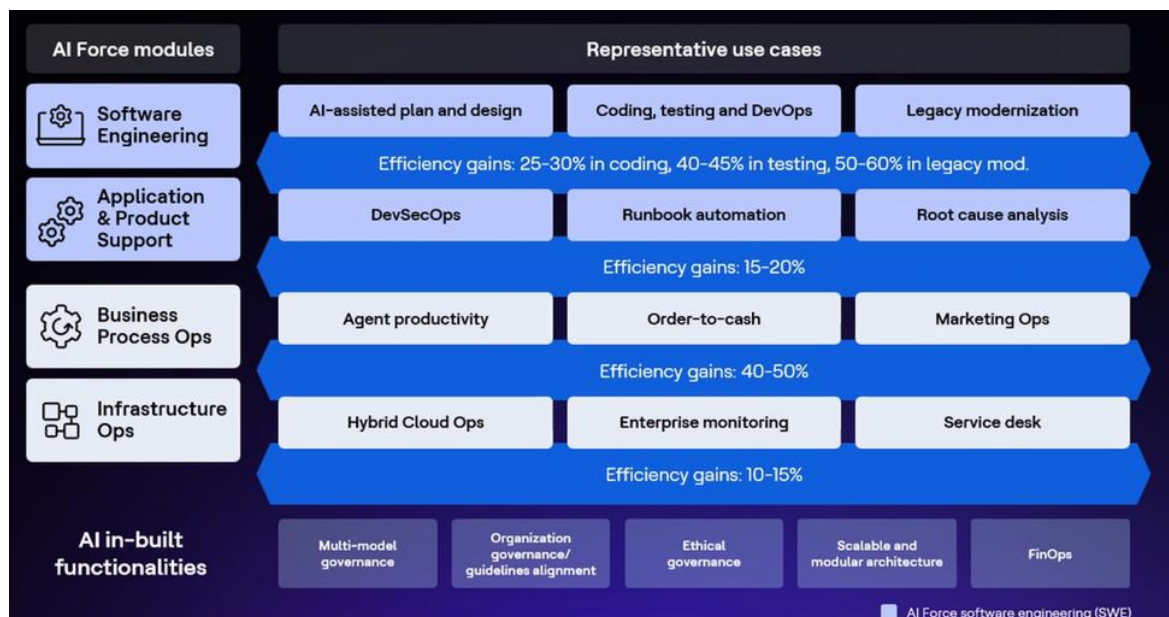
Four ways to consume, determined by the customer’s business problem

HCLTech’s customers can take advantage of the AI Force platform in whichever deployment and consumption model fits their needs. HCLTech offer the platform as a stand-alone deployment, embedded into the client’s IT environment, through APIs (which one HCLTech leader described as “headless ... behind the scenes”), or on the edge through AI-enabled PCs.

Critically, HCLTech leaders assured TBR that the customer’s consumption model of choice made “no difference in how the customer pays for AI Force.” As for decision making around the consumption model, HCLTech leaders said the company advises customers based on the business problem the customer is trying to solve.

On this point, TBR believes HCLTech has, itself, made a strategic decision: allow the customer’s environment, needs and business problems to determine the best commercial and technological fit for HCLTech’s platform, rather than HCLTech’s business and commercial needs dictating deployment terms.

Figure 3



SOURCE: HCLTECH

The discussion included detailed accounts of two deployments at different types of companies. First, to accelerate a legacy IT modernization effort at a financial institution, HCLTech used AI Force to map, migrate and test more than 200 legacy applications.

Second, at a massive global technology company, HCLTech used AI Force to radically reduce marketing spend through a what an HCLTech leader referred to as “marketing ops transformation from manual-driven content development by a third-party vendor to GenAI-automated content generation.” TBR has been briefed on similar marketing operations improvements through GenAI automation, but none at the same scale or with comparable cost savings as those described by HCLTech.

HCLTech leaders also described the company’s recently announced partnership extension with Xerox. HCLTech will leverage automation, product and sustenance engineering, and process operations services — including order to cash, sales and marketing operations, and supply chain and procurement — along with AI Force, to deliver a unified interface that transforms the way employees and clients engage with Xerox.

HCLTech describes other AI Force use cases on its website.

Minimal change management and increased visibility provide immediate value

In TBR’s research, GenAI adoption has benefited enterprises with well-managed and orchestrated data, even if that data exists in silos. In contrast, enterprises with little visibility into their data have been challenged to see meaningful returns on their GenAI investments, in part because of a challenge HCLTech identified above: People within an

enterprise typically like the specialized software tools they are already using and want to keep using them.

HCLTech's AI Force does not ask for change from multiple personas across an enterprise or for adoption of a new set of tools; it instead provides greater visibility into everyone's processes, software usage and IT environment and demonstrates how one person, process or tool can affect another. By providing visibility without demanding replacement and adoption, HCLTech's AI Force can deliver value with minimal change management.

AI Force may be what helps HCLTech survive the coming IT services business model upheaval

As HCLTech's leaders noted to TBR, HCLTech is not new to AI, as the company had been investing in AI, training its workforce around AI principles and deployments, working with chip manufactures, and developing and selling software all before GenAI emerged. As one slide in HCLTech's presentation noted, the company has been "Building and deploying AI solutions since 2016."

Legacy — and maybe more accurately, proven — skills and capabilities lend immediate credibility to what HCLTech brings to clients and partners with AI Force. Further, a significant part of what separates HCLTech from immediate peers is the company's IP-driven services model, a strategic difference that becomes increasingly relevant as clients ask for more GenAI-enabled services and less labor-dependent services. HCLTech's business model is not simply enhanced by AI Force and other IP-driven solutions; it might actually be saved by those capabilities as the entire IT services business model undergoes significant, AI-induced change.

TBR will be watching as HCLTech develops additional platforms, brings agentic AI solutions to discussions with clients, and enables fully autonomous AI deployments, all built on a solid foundation of expertise, experience and ever-increasing capabilities around artificial intelligence.

Note: The following companies mentioned in this special report are publicly traded: Amazon (Nasdaq: AMZN), IBM (NYSE: IBM), Microsoft (Nasdaq: MSFT) and SAP (NYSE: SAP).

For content reuse and media usage guidelines, please see [TBR terms of use](#).

Technology Business Research, Inc. is a leading independent market, competitive and ecosystem intelligence firm specializing in the business and financial analyses of hardware, software, professional services, and telecom vendors and operators. Serving a global clientele, TBR provides timely and actionable market research and business intelligence in a format that is uniquely tailored to clients' needs. Our analysts are available to address client-specific issues further or information needs on an inquiry or proprietary consulting basis.

TBR has been empowering corporate decision makers since 1996. For more information, visit <https://tbri.com>.

©2024 Technology Business Research, Inc. This report is based on information made available to the public by the vendor and other public sources. No representation is made that this information is accurate or complete. Technology Business Research will not be held liable or responsible for any decisions that are made based on this information. The information contained in this report and all other TBR products is not and should not be construed to be investment advice. TBR does not make any recommendations or provide any advice regarding the value, purchase, sale or retention of securities. This report is copyright-protected and supplied for the sole use of the recipient. Contact Technology Business Research, Inc. for permission to reproduce.