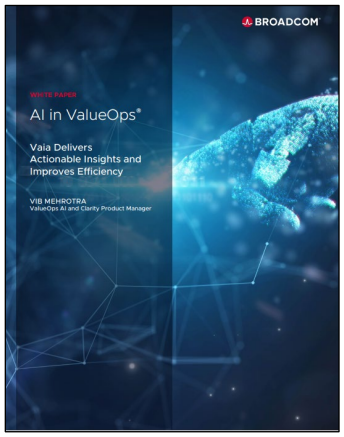

AI in ValueOps

Vaia Delivers Actionable Insights and Improves Efficiency

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EXECUTIVE SUMMARY

Artificial intelligence (AI) is not a new concept, but recent advancements have put AI within reach of many more applications, users, and organizations. Today, teams across many industries are leveraging generative AI and predictive algorithms to streamline laborious activities, save time, and eliminate waste. Many organizations are focused on harnessing AI to increase the productivity of their employees. As a world leader in AI, Broadcom is uniquely equipped to address this market demand. We have adopted a meticulously calculated and strategically planned approach to implement AI within the ValueOps® by Broadcom. This paper reveals how AI-fueled enhancements in ValueOps will help customers capitalize on these opportunities so they can maximize value.

VALUE STREAM MANAGEMENT

In today's fast-paced and constantly evolving economy, it is imperative that companies deliver value to their customers with speed and agility. Value Stream Management (VSM) has emerged as a key strategy to meet this challenge.1 VSM represents a strategic approach to optimizing the end-to-end flow of value. VSM is focused on two key aspects: speeding the delivery of customer-requested features or updates and ensuring that customers realize value from those changes. Monitoring the entire delivery life cycle allows organizations to identify processes that add value and eliminate those that create waste, ultimately optimizing the flow of outcomes.

Although VSM is proven as a successful strategy, there remain challenges that organizations must overcome in order to ensure success.2 When talking to our customers about these challenges, they identified the following areas as key use cases for us to focus on:

(3)

VALUE STREAM MANAGEMENT

(continued)

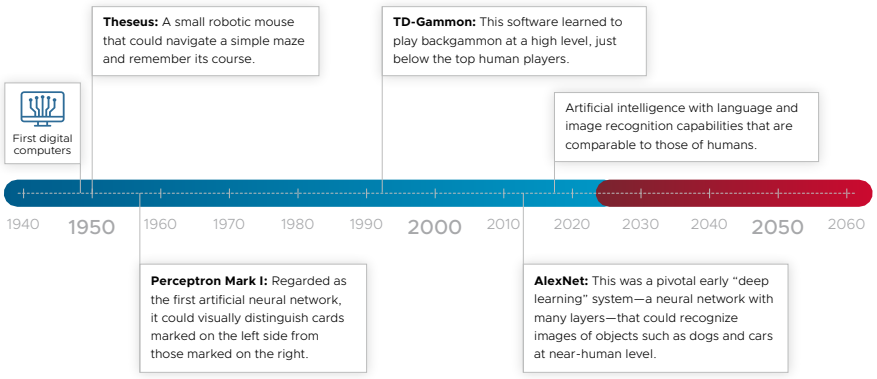
Organizations often face continuing challenges, even during the successful implementation of VSM. Topping the list is the persistence of inefficient processes (49%), which reduce profits, increase waste or loss, and often inhibit speed to market. Three items were tied for second place at 40%—collecting data, measuring customer value, and having siloed teams. Interviews reveal that these problems restrict the data-driven decision making and business optimization that drive efficiency and organizational alignment. All four of these challenges are integrally linked to the objectives of VSM.[3]

Several key factors can contribute to these challenges:

- **Bias.** Preconceived notions of flows can cause teams to inaccurately estimate the time required for processes or fail to account for certain steps. These inaccuracies and omissions can create waste and inefficiency. Subconscious biases can distort workflows.
- **Shortages.** Data collection is a mundane and laborious task. Given their resource limitations and workloads, teams can accidentally miss or misreport cycle times, defect rates, and utilization numbers.
- **Delayed information.** When teams can't get timely access to all the information they need, they struggle to manage risk and measure business value effectively.
- **Silos.** Individual functions or teams examine only their own processes, which disconnects them from the actual start-to-end flows of the value stream or enterprise.

AI: BRIEF HISTORY AND EVOLUTION

A timeline of notable artificial intelligence systems



SOURCE: OUR WORLD IN DATA[4]

Here's a definition of AI by Barr & Feigenbaum from 1981: "Artificial Intelligence (AI) is the part of computer science concerned with designing intelligent computer systems, that is, systems that exhibit characteristics we associate with intelligence in human behavior—understanding language, learning, reasoning, solving problems, and so on."[4] While AI has been pursued for decades, it wasn't until the last few years that investments and breakthroughs in AI started to gain significant momentum. Now, organizations in both industry and academia are leveraging AI to address challenges, pursue innovation, and build knowledge.

Within the AI domain, several disciplines have emerged:

- **Conversational AI.** Conversational AI relies on chatbots, voice recognition, and natural language processing to enable human-device interactions.
- **Machine learning.** Through these techniques, intelligence is employed to gain predictive capabilities, for example, to identify probabilities of success and risk.
- **Generative AI.** Generative AI employs sophisticated deep learning models and training data to generate new elements—including graphics, text, code, and more.
- **AI-powered robotic process automation.** While RPA has been in use for some time, recent breakthroughs in generative AI are unleashing rapidly expanding opportunities.

AI: BRIEF HISTORY AND EVOLUTION

(continued)

Recent Trends

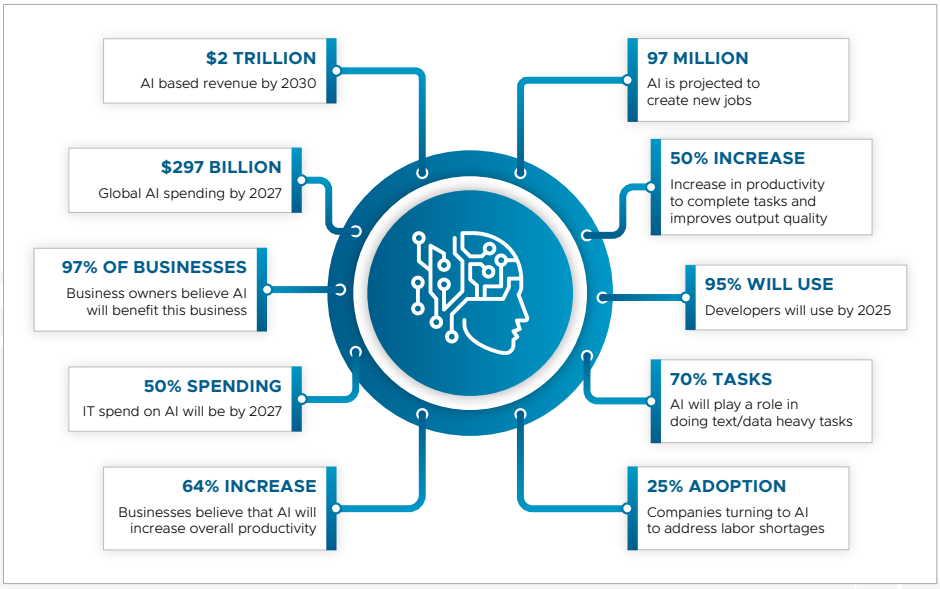
Companies such as Google, OpenAI, and Amazon have continued their efforts in AI by improving their algorithms and building new models. AI parameters are the adjustable elements in a model that are learned from training data. These include weights in neural networks and settings in machine learning algorithms. Parameters influence the behavior of AI models and determine how they make predictions or decisions.[5]

In the past two years, use of generative AI in particular has seen explosive growth. With backing from Amazon and Microsoft, OpenAI has continued to train their ChatGPT model. GPT-2 was trained based on millions of parameters. Trillions of words from the internet were used to train GPT-3. In November 2022, OpenAI released GPT-3.5 to the public, which brought generative AI into the mainstream. Teams in organizations and individuals started to use generative AI to automate tasks, get help with creative ideas, and even code software.[6]

The Impact of AI in Enterprises

Soon after its release to the public, the use of OpenAI's ChatGPT saw dramatic growth. ChatGPT users realized the value of AI in helping to craft clearer communications, accelerate coding tasks, rapidly explore answers to complex business questions, assist with creative work, and much more. All those laborious activities that used to take hours now only take minutes. Microsoft invested billions of dollars to embed OpenAI within their office products. Google released its own AI service, initially known as Bard and now named Gemini, which helps users collaborate with generative AI. Google combined Gemini's smartest and most capable model with many Google services, boosting the utility of the products users work with every day, including Gmail, Docs, Drive, Flights, Maps, and YouTube.

In essence, generative AI offerings from OpenAI and Google changed the perception of AI. Where people used to conceive of AI as robots in some far-distant future, they now view AI as a practical tool to use today. In year's past, much of the emphasis was on employing machine learning to make predictions. However, recent breakthroughs in machine learning have brought significant gains to generative AI, eclipsing the progress in the predictions arena.



AI: BRIEF HISTORY AND EVOLUTION

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The growth in AI investments and usage has been rapid and massive:

- 97% of business leaders believe AI will benefit their businesses.
- By 2027, global spending on AI is expected to near $300 billion, and to account for 50% of IT spending.
- The impact will be felt across professions and industries. For example, in the development arena, it is expected that by 2025, 95% of developers will use AI in their jobs in some fashion.
- AI is expected to contribute a 21% net increase to the United States GDP by 2030, showcasing its significant impact on economic growth.[7]

Success With AI Isn't Assured

In spite of all the gains, breakthroughs, and progress within the field of AI, success with AI is neither universal nor assured. In fact, within many organizations, initial AI initiatives are failing to deliver the value expected. Following are a few common reasons for these shortcomings.

Unclear Business Objectives

AI has its strengths and weaknesses. AI can be highly effective at identifying patterns and making predictions, for example. On the other hand, AI falls short when it comes to understanding context, practicing emotional intelligence, and exercising moral or ethical judgment.

Too often, initiatives are kicked off without a well-defined set of business objectives. Further, without a clear understanding of AI's relative strengths and weaknesses, teams aren't well equipped to ensure those objectives are pragmatic.

Poor Data Quality

"Garbage in, garbage out," is a long-standing truism in the world of technology, and it very much applies in the AI domain. As is the case for traditional data warehouses and other approaches, teams can't simply throw data available into an AI engine and expect the results desired. Exacerbating matters is that, when it comes to data for AI models, there's often a lack of clarity around what constitutes quality data.

Lack of Executive Buy-in and Cross-Team Collaboration

Gaining executive buy-in for AI initiatives and investments is proving problematic for many leaders. In one survey, 77% of respondents said they face barriers to entry from senior management, who aren't in alignment on the potential value of AI or on the expenditures that need to be made.[8]

Concerns About Trust, Risk, and Security Management

AI introduces new types of risks that need to be managed. Further, the very scope and complexity of AI models and data sets can compound these risks. Data security and user privacy are big concerns as leaders plan their strategic AI initiatives. If adequate controls aren't employed around new AI implementations, the business, employees, and customers can be exposed. These concerns can stifle the move to leverage AI.

AI can leave organizations exposed to copyright infringement, compliance issues, and data leaks. Faulty models can introduce the risk of so-called "hallucinations" that yield inaccurate, incomplete findings.

AI: BRIEF HISTORY AND EVOLUTION

(continued)

Potential of AI in VSM is Massive

In recent years, VSM has emerged as a key pillar of successful digital transformation. VSM is a framework for streamlining the entire flow of value to customers, from the initial conception of an idea through to the customer's realization of value. By employing VSM principles, teams improve transparency at every level of the organization, including around strategy, investments, and work. This fosters improved collaboration and alignment, and cultivates continued improvement and maximized customer value.

Given this framework's promise, many organizations are adopting—and benefiting from—VSM:

of companies will pilot or deploy VSM initiatives by the end of 2024.[13]

of early adopters have already experienced significant improvements through employing VSM.[13]

While significant benefits are being realized, AI promises to provide a massive boost to the power of VSM, both in the near and long term. Through the combination of AI and VSM, teams can achieve breakthroughs in organizational performance and success. By leveraging the power of AI, organizations can overcome VSM's challenges and maximize its benefits.

AI: BRIEF HISTORY AND EVOLUTION

(continued)

Some Basic AI Terminology

In order to evaluate the value of AI in VSM, it is important to understand some basic terminology.

Large Language Models (LLMs)

Large language models (LLMs) are computer programs trained on vast amounts of data to understand and generate natural language. They can infer context, provide coherent responses, translate languages, summarize text, and even assist in creative writing or code generation tasks. LLMs can act as next-word prediction engines that revolutionize applications powering chatbots, virtual assistants, content generation, research assistance, and language translation.[6, 9]

Retrieval-Augmented Generation (RAG)

Retrieval-augmented generation (RAG) is an AI technique in which an LLM connects to an external knowledge base to improve the accuracy and quality of its responses.[10] In effect, RAG combines the power of information retrieval with the finesse of language generation. By pulling in relevant data from external sources, RAG systems can provide more accurate and current information. These systems can tailor LLM responses to specific needs by incorporating domain-specific data. RAG is particularly well-suited for applications that require precise and informed answers.

The advantage of using RAG is that it can integrate with external data sources in real-time, providing context-aware responses. These systems can dynamically update information, without retraining the model, making it useful for real-time scenarios and topical questions.

Fine-tuning LLM

Fine-tuning an LLM involves retraining a pre-trained language model on a specific task or dataset. By doing this, we adapt the model to a particular application, without having to start from scratch. Through fine-tuning, teams can customize a powerful tool to fit their exact needs.[11, 12] Fine-tuning LLM tailors the model to specific tasks by adjusting internal parameters. Fine-tuning can refine the model's ability to handle the nuances of targeted domains, make the model better at certain tasks, or enable the model to perform new tasks.

THE VALUEOPS AI STRATEGY

ValueOps VSM as a Platform

ValueOps is the leading enterprise VSM platform, bringing together capabilities for strategic portfolio management (SPM), Agile project and portfolio management (Agile PPM), value stream integration, and enterprise analytics. Only ValueOps accelerates digital transformation by improving visibility, alignment, and efficiency at every stage of value creation.

ValueOps represents the seamless convergence of Clarity®, Rally®, ValueOps ConnectALL®, and ValueOps Insights in one platform. ValueOps empowers leaders at every level to plan, fund, manage, track, and optimize using a common data model and value orientation. With the widest range of features and the ultimate AI for VSM, only ValueOps is built to align strategy, investments, people, and work across the entire enterprise.

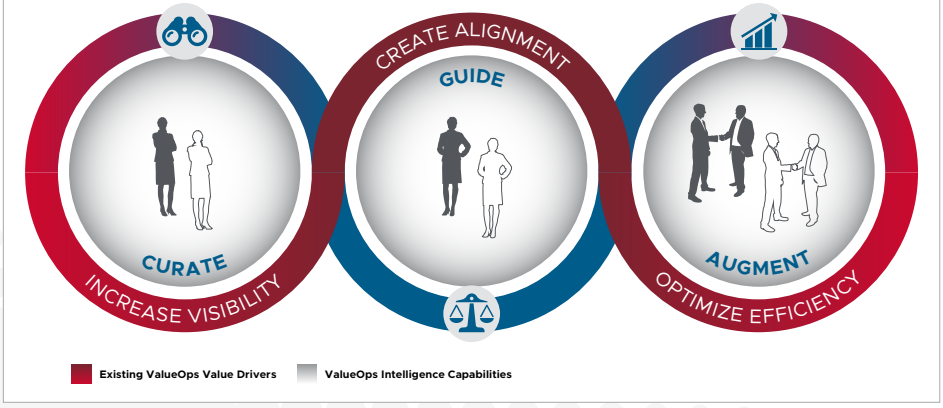
Customers implementing the platform typically experience improvement in three key value driver areas:

- **Visibility.** The solution delivers real-time data and insights from across the organization, helping stakeholders improve decision making and cultivate enhanced trust.
- **Alignment.** ValueOps helps everyone in the organization align their work around key outcomes—namely, the delivery of value. This accelerates digital transformation and benefit realization.
- **Efficiency.** ValueOps enables teams to establish new ways of working that optimize value delivery. The solution helps teams eliminate waste, increase productivity, and improve quality.

Enhancing ValueOps with AI

Innovations in ValueOps build upon Broadcom's leadership in AI. Broadcom is taking a cohesive, comprehensive, and connected approach to AI, delivering a complete suite of AI capabilities that seamlessly enhance the advantages of ValueOps.

With these advancements, the solution will help boost productivity, morale, and delivery quality for every role across the entire value stream.



THE VALUEOPS AI STRATEGY

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Through the combination of ValueOps and AI, customers will gain the following advantages:

- **Curated visibility.** With ValueOps, users can employ AI to find, visualize, and understand answers, so they can make better decisions and have improved evidence for justifying decisions. This enhanced, curated visibility helps improve trust and minimize risk through data science.
- **Guided alignment.** AI functions as an agile and VSM expert, helping effectively define strategies, plans, and work, fueling improved business outcomes. AI helps users define stories, features, and more.
- **Augmented efficiency.** AI can apply the required context and intelligence that enables teams to automate more complex, time-consuming VSM tasks that teams couldn't automate before. ValueOps helps users spend more time focusing on creatively addressing challenges and boosting efficiency and quality.

At Broadcom, we are developing AI solutions to support ValueOps in addressing VSM challenges. These efforts aim to support, but are not limited to, the following objectives:"

- **Improved probability of investment success.** With ValueOps, users can more strategically allocate resources and make more informed decisions, boosting their chances of making successful investments. The solution helps teams more effectively assess risk, conduct due diligence, and align investments with business goals.
- **Enhanced value realization.** Focusing on value creation rather than just cost reduction allows organizations to maximize returns. The solution helps leaders identify areas where value can be added—such as innovation, customer experience, and operational efficiency—so they can achieve better outcomes.
- **Early outcome predictability.** ValueOps helps stakeholders implement robust project management practices and monitor key performance indicators (KPIs), so they can predict outcomes earlier in the project lifecycle. This helps in adjusting strategies, mitigating risks, and ensuring successful project delivery.
- **Cost reduction and efficiency.** With the solution, teams can achieve cost savings by streamlining processes, automating repetitive tasks, and optimizing resource allocation. By reducing manual effort and minimizing waste, organizations can operate more efficiently.
- **Improved correlation and reporting.** ValueOps delivers data analytics and reporting tools that enhance decision-making. Compared to the manual approaches of the past, ValueOps delivers improved accuracy, offering advanced algorithms and data-driven insights.
- **Reduced waste and rework.** ValueOps helps stakeholders align teams, improve communication, implement standardized processes, and minimize rework. This not only saves time and effort but also ensures consistent quality.

THE VALUEOPS AI STRATEGY

(continued)

- **Increased productivity.** ValueOps supports more efficient resource utilization, optimized agile practice adoption, and enhanced employee productivity. The solution can guide investments in employee well-being and skill development, delivering long-term benefits for the organization.
- **Faster time to value.** By optimizing processes, reducing bottlenecks, and focusing on value-added activities, stakeholders can more quickly realize benefits from their investments.

Practical and Responsible AI

As Brian Nathanson, Head of Product Management for Clarity, says, "We need a practical and responsible AI." Embedding AI in ValueOps is crucial for helping customers achieve their organizational goals, however we need to ensure AI provides real value without compromising security. In ValueOps, our initial focus is to leverage generative AI capabilities to address low-risk scenarios, while providing significant gains in productivity. This will help promote immediate adoption. Following are some of the key principles that are guiding development:

- **Practicality.** Technology must align with real-world needs and constraints. A practical solution considers factors like usability, scalability, and maintenance. It ensures that users can adopt and utilize the technology effectively. Without practicality, even the most advanced technology may remain unused or fail to deliver value.
- **Responsibility.** Responsible technology vendors consider ethical, legal, and societal implications. They respect privacy, security, and fairness. By adopting responsible practices, vendors build trust with stakeholders and avoid negative consequences. Responsible vendors also promote sustainability and long-term viability.
- **Goal alignment.** Technology should directly contribute to achieving specific goals. Whether it's improving efficiency, enhancing customer experience, or increasing revenue, the chosen technology must align with the desired outcomes. By employing responsible technology, teams can ensure that these goals are pursued ethically and transparently.
- **Risk mitigation.** Practical and responsible technology minimizes risks. It avoids overcomplicating solutions, reduces implementation challenges, and prevents unintended consequences. Organizations can confidently invest in technology when they know it won't disrupt existing processes or harm stakeholders.

The practical and responsible approach to leveraging AI within ValueOps should focus on the following generative AI capabilities:

- Knowledge discovery
- Data generation
- Data hygiene
- Data summarization

THE VALUEOPS AI STRATEGY

(continued)

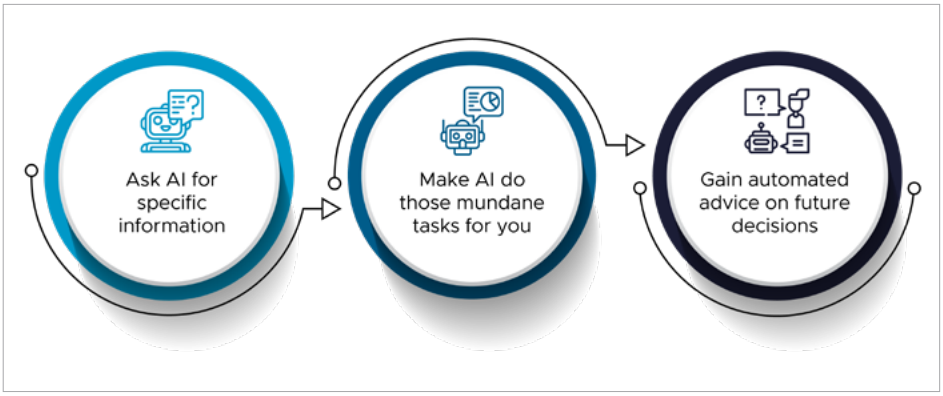
Introducing Vaia

Vaia is the consistent name for AI capabilities within the ValueOps platform, and is an acronym for the ValueOps Artificial Intelligent Agent. It is also a word of Greek origin, meaning ”life” or “living one” which carries a sense of vitality and strength. Vaia is often associated with the Greek goddess of life and nature.

AI agents are autonomous or semi-autonomous software entities that use AI techniques to perceive, make decisions, take actions, and achieve goals in their digital or physical environments. This is exactly what our AI agent will be able to do.

Leveraging AI capabilities within ValueOps products should be seamless to our users, which is why all intelligence capabilities in the platform will share this consistent branding. It will help customers recognize our advanced AI capabilities, similar to Microsoft leveraging OpenAI within its office products and branding this as Copilot, or Apple providing automating capabilities using OpenAI and calling it Apple Intelligence.

Through Vaia, we’re focusing long term on delivering AI to all users. Here’s what Vaia will enable users to do:



THE VALUEOPS AI STRATEGY

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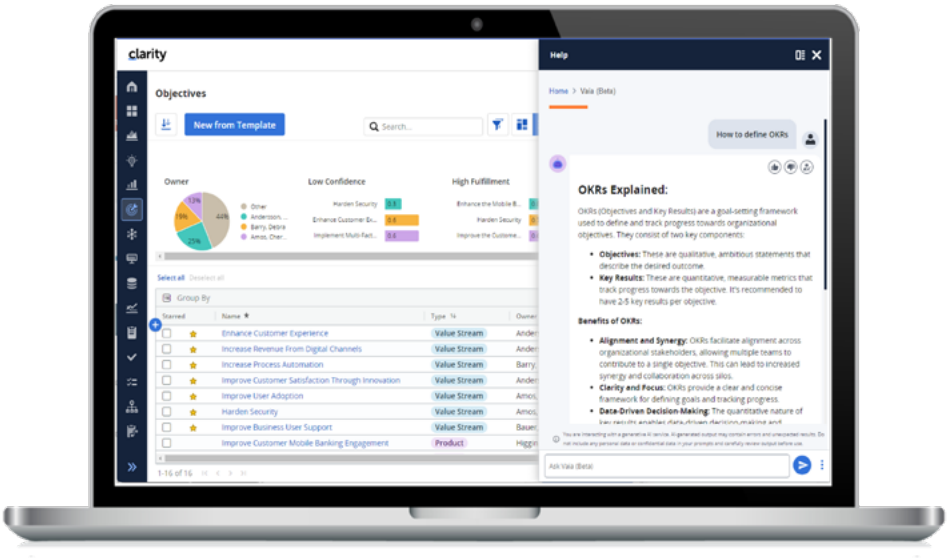
Generative AI: Key Capabilities

Our initial objective is to increase end user productivity by reducing the time it takes to perform laborious activities. We'll be helping customers leverage generative AI capabilities, while keeping data security and compliance at the forefront of what we do.

Guided Assistance With AI

When working with any solution, users can sometimes encounter challenges with performing specific actions or accessing the required data. With AI-powered knowledge discovery, users would have easy and immediate access to the specific guidance they need to perform a task or get an instant answer. Here are a few of the solution's possible use cases:



- Individual contributors who interact with multiple applications may encounter challenges when navigating between them, leading to potential frustration. Implementing context-sensitive help can efficiently guide users through tasks, enhancing productivity and cultivating better product adoption.
- As industries grow and new methodologies come along, it can be difficult for employees to stay current with the latest nomenclature. By offering fast access to terminology definitions, users can be more productive in interacting with applications.
- Many tasks, such as roadmapping, PI plans, and annual plans, are executed and then revisited after long intervals. In these cases, users often waste a lot of time reviewing historical information and determining what needs to be done next. Having an efficient AI-powered helper to guide users through the process would allow them to focus more on planning and less on reviewing.

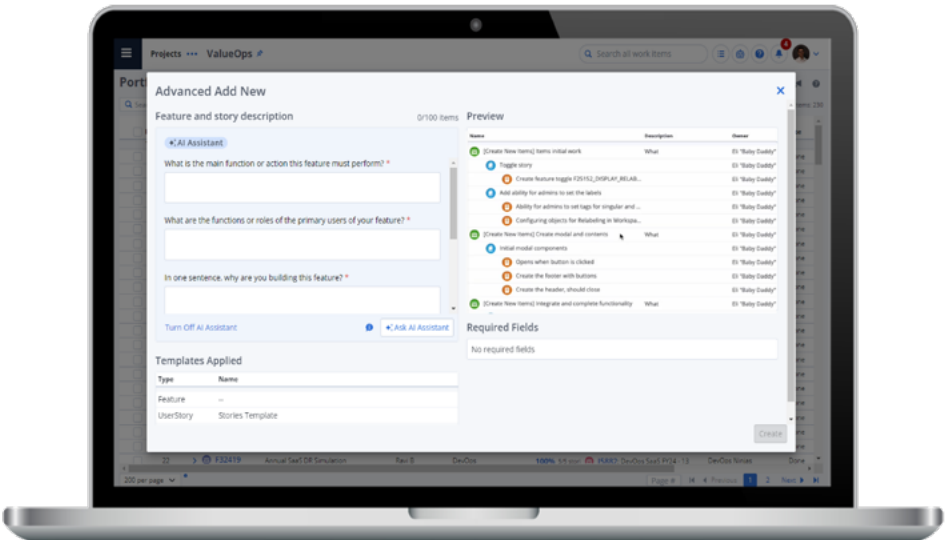
THE VALUEOPS AI STRATEGY

(continued)

Data Generation Using AI

It can be a daunting task to ensure that an application is only populated with accurate, relevant information. By enabling users to leverage context-sensitive, AI-generated text anywhere in an application, these challenges can be mitigated, increasing productivity and improving data quality. A range of personas can benefit from this feature, including individual contributors, executives, finance and operations personnel, business analysts, product leaders, project managers, and resource managers. More specifically, this capability will offer various personas these capabilities:

- Individual contributors, executives, and scrum masters will be able to use this capability to collect and display specific metrics to address user requirements. For example, they can support a user looking for a specific artifact that has taken the longest time to complete, or gauging a team's throughput during a specific timeframe.
- Individual contributors and product owners will be able to build a full set of features and stories, including descriptions and success criteria, based on specific requirements.
- Individual contributors, project managers, and resource managers can generate context-sensitive text related to a specific requirement within the application. This can help reduce the time spent on data population and enhance value realization. For example, a business analyst may need to define a new business capability. They can get AI assistance to populate the majority of the business justification needed based on a specific capability detail.



Data Summarization Using AI

Summarizing large and complex data plays a pivotal role in expediting decision-making processes. When teams are working with extensive datasets, it can be time consuming to manually analyze every detail. Complex data often contains noise or redundant details. In addition, rapid decision-making in a dynamic environment, where agility matters, requires identifying risks promptly.

With AI, complex data can be summarized instantaneously. This enables decision makers to focus on key metrics and quickly grasp key insights, without wading through voluminous data. Summaries distill the essential points, providing

THE VALUEOPS AI STRATEGY

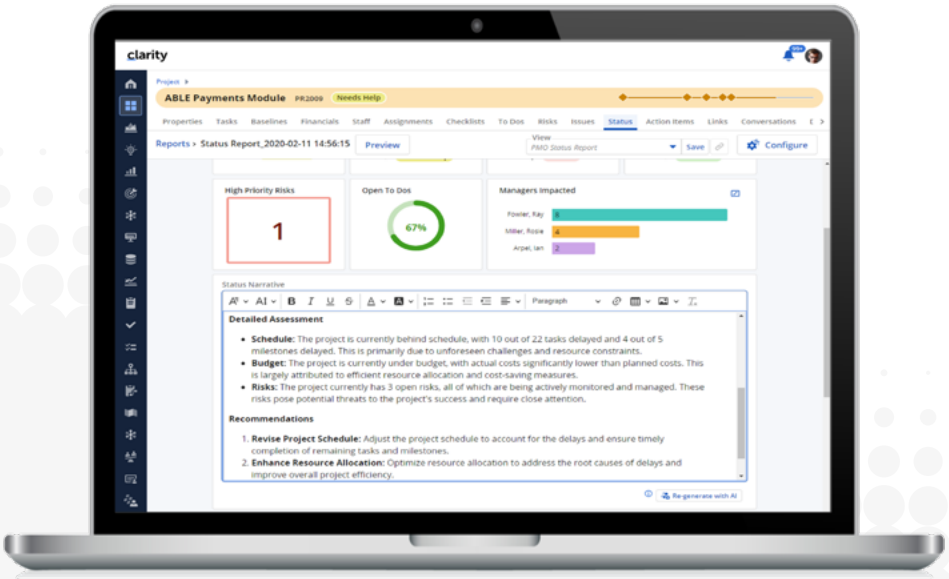
(continued)

a clearer picture. Decision-makers can focus on critical aspects, leading to more informed choices. By highlighting anomalies, trends, and outliers, AI can empower decision-makers to adapt swiftly and manage risk proactively. AI can reveal critical issues that might have remained buried in the data.

In essence, data summarization accelerates decision-making by providing relevant, actionable information, while minimizing the time and effort required for analysis.

ValueOps with AI can assist the following personas:

- Project managers, executives, product leaders, and individual contributors will be able to instantly generate a high-level status reports based on overall project progress (such as summary status fields of red/yellow/green) and investment-specific metrics such as tasks, risks, and financials.
- An enterprise investment portfolio could consist of hundreds of investments with several key elements, such as finance, risks, changes, resources, and more. Analyzing this large amount of data can be time consuming and laborious for executives, business analysts, and portfolio managers. Having AI to provide a summary of the portfolio with key metrics, such as financial spend and resource allocation, would allow them to make timely decisions in terms of how to pivot to achieve higher ROI.
- Individual contributors, product owners, and scrum masters could summarize the status feature and all its stories instantaneously, instead of spending hours going through each story.
- In today's complex IT landscape, system administrators face the challenge of managing integrations between multiple applications. Often, after defining these integrations, administrators lack the opportunity to thoroughly evaluate their performance. This lack of oversight can lead to undetected issues, suboptimal performance, and missed opportunities for improvement. Having AI that continuously monitors system data flow and provides a summary of key performance indicators, such as execution time, data failures, and so on, could help administrators detect issues early and intervene in a timely fashion.
- AI could assist stakeholders, such as executives, finance and operations executives, business analysts, and product leaders, helping them to understand key points in a complex chart or dashboard.



THE VALUEOPS AI STRATEGY

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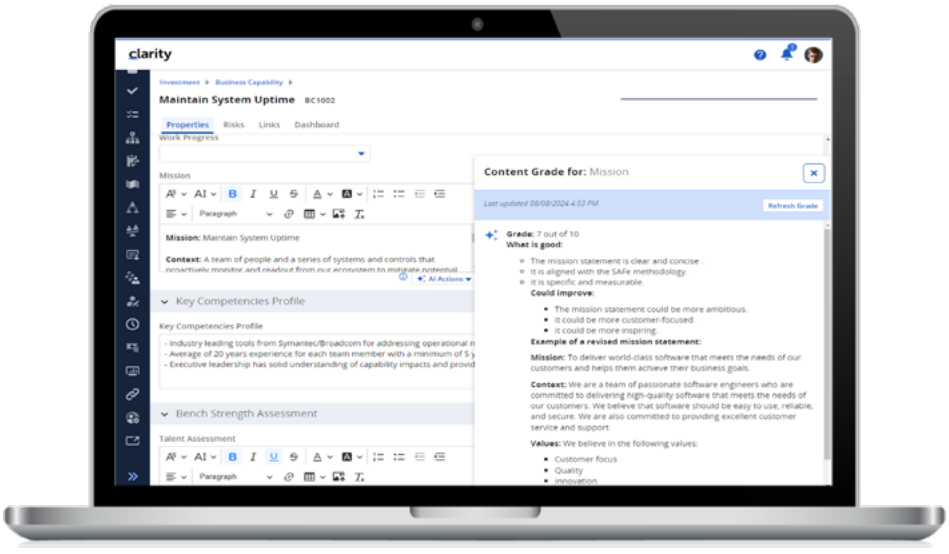
Data Hygiene

The saying is true: garbage in, garbage out. Data quality is a crucial part of any successful initiative. Populating the right data is a very laborious activity. Doing this task manually will often lead to erroneous and inconsistent information. Users that are time constrained or have excessive workloads will often take shortcuts with data population. This can result in poor data quality and incorrect decisions due to lack of information. For example, populating a lean business case for a capability requires a clear hypothesis, assumptions, dependencies, financial analysis, risks and mitigating actions, and an implementation plan. However, most of the time the only information that gets populated is a few lines of text justifying why the capability is needed.

Vaia can help review, grade, and guide these processes, ensuring the right data is populated. With AI's assistance, users can complete the same task faster and with higher quality. With this capability, a range of personas will be able to ensure data quality with far more ease and efficiency. Individual contributors, executives, finance and operations teams, business analysts, product leaders, project managers, and resource managers will all benefit from this capability.



THE VALUEOPS AI STRATEGY

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Designed with Trust, Security, Privacy, and Compliance in Mind

At Broadcom, we take customer data privacy and security very seriously. Data security and user privacy are big priorities as we plan our strategic AI initiatives. We are focusing on specific applications of AI that yield functional benefits—without exposing customer data. In the first phase of the AI capability in ValueOps, we plan to leverage the customer's existing AI service, such as Gemini or ChatGPT. This enables customers to leverage AI to extend functionality, while sensitive data processing occurs outside of Broadcom's applications and facilities. Longer term, Broadcom will be ensuring ValueOps platforms and architecture deliver robust security, auditability, privacy, and scalability.

Allowing customers to leverage their own AI service offers several advantages:

- **Enhanced data security.** By using their own AI service, sensitive data remains under the customer's control.
- **Data processing independence.** Currently, not all customer contracts allow Broadcom to process customer data for any AI-specific functionality. By using their own AI service, customers can leverage AI, without any dependency on Broadcom processing their data.
- **Aligned security terms.** Customers typically have existing agreements, or would prefer to have, with their AI service providers regarding security and compliance. By using their existing agreement, organizations adhere to terms they've already negotiated, ensuring consistency and transparency.
- **Rapid deployment.** By connecting to the customer's existing AI service, we can offer AI services within ValueOps faster. While a long-term solution is developed, customers can benefit from functionality without delays.

In summary, this approach balances security, cost-effectiveness, and agility, benefiting both Broadcom and our customers.

AI-DRIVEN VALUEOPS: LONG-TERM VISION

Conversational AI

The integration of advanced data capture and predictive analytics is a foundational element of our technological infrastructure. However, it is equally imperative to prioritize user experience by ensuring intuitive interaction with our systems. Analogous to the personalized assistance provided by a hotel concierge, our objective is to offer immediate support to users precisely when they require it.

We are committed to delivering uniform and sophisticated AI-driven capabilities across the entire suite of ValueOps products. Toward that end, we plan to introduce an interactive element, a chatbot, readily accessible with a single click. This initiative guarantees a standardized presentation of the chatbot interface within each product, fostering a familiar and efficient user experience. This chatbot will allow users to ask questions, or have AI perform a task on behalf of the user, using natural language.

Our chatbot will be designed to be contextually cognizant, enabling it to execute a variety of tasks tailored to the user's needs. These tasks encompass knowledge discovery, concise data summarization, expedient data retrieval, comprehensive data analysis, and the automation of routine tasks. A standard interface with a conversational chatbot is aimed at augmenting productivity and streamlining workflows within the ValueOps ecosystem.

Beyond Generative AI

While the data generation use case for generative AI is intriguing and the right first step, we need to understand that the market requirement is to achieve robotic process automation (RPA) and predictability. Generative AI addresses some of VSM's challenges. To get value faster, we need to find a way to generate models that customers can apply to their specific data sets, helping to optimize their processes and increase value.

Every customer we've talked to has indicated they would like us to move to providing predictive analytics. Customers want these predictive analytics to help avoid wasting resources, even before an initiative has been started. They also want to be able to identify and guard against potential risks before they are introduced.

AI-DRIVEN VALUEOPS: LONG-TERM VISION

(continued)

Challenges With Predictive AI

Getting to predictive analytics is not a trivial task and data quality represents the biggest barrier. In our discussions, customers largely agree that their own data is too "dirty" for doing any model building or predictions. This means that, in order for us to provide a solution for the future, we'll need to find a way to improve data quality, without disrupting or changing existing core product components.

In addition to data quality, we'll need to address the following key barriers in order to deliver predictive capabilities:

- **Security and safety.** We'll need to ensure confidentiality, protecting proprietary data and avoiding hallucinations and other issues.
- **Governance.** We'll have to implement the right structures so we can meet standards for responsible AI.
- **Skill and resources.** We'll have to have the right resources and skill sets in place to make this work.
- **Market acceptance.** It will be vital to time the release of capabilities so we can be best positioned for maximum market acceptance.
- **Cost and value.** We will need to ensure these capabilities achieve the expected business outcomes and return on investment.
- **Data coverage.** By capturing more data, including historical information, we can make better, more accurate predictions.

Redefining What's Possible

Data that has been cleaned and prepared for analytical purposes serves as the foundation for constructing robust models and generating accurate predictions. This critical process unlocks a multitude of advanced capabilities and accelerates the delivery of enhanced value to our customers.

With predictive AI in ValueOps, customers could gain the following advantages:

- **Curated visibility.** Vaia could expose key elements of a complex data stream, providing better evidence for justifying decisions. Vaia could perform the mundane and laborious tasks of collecting and presenting information. This would help organizations address their resource shortages.
- **Guided alignment.** Vaia could be the assistant that effectively define strategies, planning, and work, that yield improved business outcomes. With Vaia there won't be any bias in data collection and analysis. In addition, timely reporting of data will help improve measurement of value and reduce risks.
- **Augmented efficiency.** Vaia can apply the required context and intelligence that enables teams to automate tasks that they couldn't before, helping address challenges associated with resource shortages and silos.

AI-DRIVEN VALUEOPS: LONG-TERM VISION

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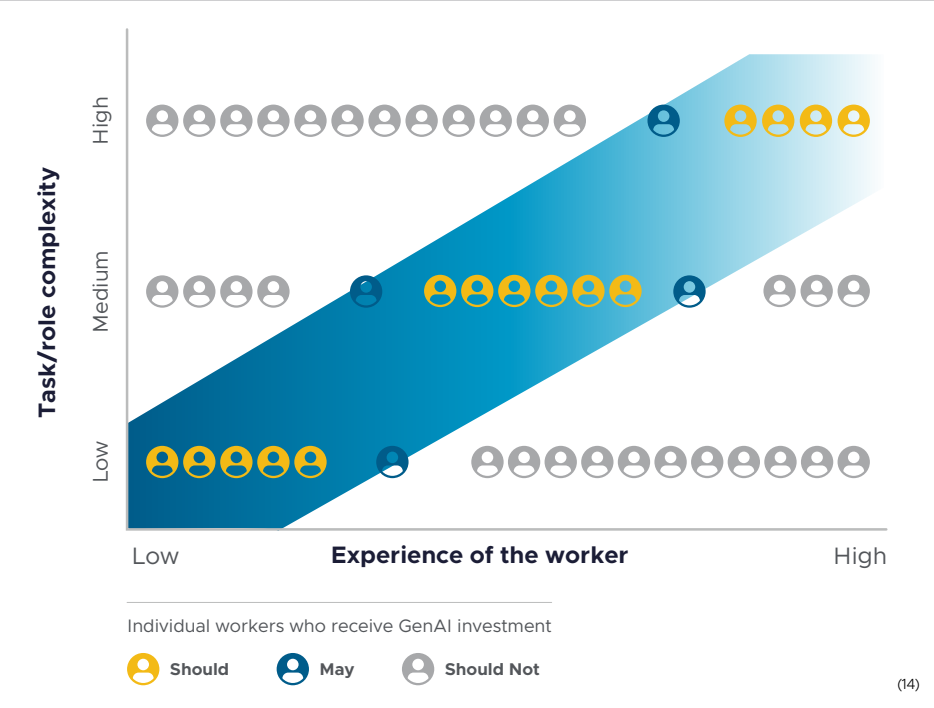
What's Next?



With Vaia, our plans are to target end-user productivity gains. AI technology isn't universally applicable, as its effectiveness varies based on user experience and the complexity of tasks. Enhancing productivity can help reduce costs and increase revenue, which can be achieved through several key areas: speeding up task delivery, prioritizing high-value tasks, planning to address critical tasks first, and improving the quality of outputs.

Currently, our focus is on integrating generative AI capabilities within ValueOps to boost productivity. Efforts are also being made to develop AI-powered prediction features, such as predicting investment success and optimizing resource allocation. To prepare for these advancements, it's essential to evaluate the quality and completeness of data, understand the criteria for success, and define what constitutes a good resource in terms of skills, availability, and experience.

To maximize potential gains, start by identifying the most labor-intensive tasks and roles within your organization. This helps pinpoint where automation and AI can have the most significant impact. When defining use cases, consider both user experience and task complexity to ensure practical and effective AI applications.

Engage in discussions with us about your specific use cases and scenarios involving generative AI. Begin the process of assembling and cleaning the data you need for your AI implementation. It's crucial to plan ahead for AI and navigate any regulatory challenges, working with executives and legal teams early and often. Finally, emphasize that implementing AI is a collaborative effort, requiring the involvement and support of everyone in the organization.

CONCLUSION

ValueOps can help customers leverage AI, so they maximize value. Initially, our focus is on delivering generative AI capabilities in ValueOps. Longer term, we will pursue a strategic direction focused on cost-effective, secure technology that delivers predictive capabilities.

Advancements in generative AI are happening rapidly. Organizations that aren't actively engaging with AI risk falling behind, and achieving successful value creation will require more than just the technology itself. AI necessitates proper investments in data quality, change management, AI literacy, risk mitigation, trust, and governance. Without these, realizing AI's full potential and value becomes challenging.

The focus should be on productivity gains rather than predictions, as predictive AI is still in its early stages and lacks the clean data needed for accurate forecasts. ValueOps is committed to AI and will continue to introduce new functionality with each release, ensuring ongoing improvements and advancements in AI capabilities.

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