Previsánt Insights

Real Business Transformation via Disciplined AI Innovation

There is certainly no shortage of expert opinions and advice regarding the impact of AI. They range from the one extreme of AI being your salvation as a technology to transform your business to set you apart from competitions. Or to the other extreme of runaway AI with hallucination and unexplainable behaviors that will bring havoc to your enterprise. As with all competing and opposite popular opinions, the truth is somewhere in between. One thing is certain: an organization will not reap the benefits of the technology by sitting on the sideline. According to Goldman Sachs CIO Marco Argenti, most companies in 2024 are going to focus on the proof-of-concepts that are likely to show the highest return. ⌷ The only way to cut through the hype to reality is to engage and explore the technology with structure and discipline within the context of their own organization.

The AI Innovation Imperatives

Innovation or the ability to innovate, in one way or another, underpins all transformations. However, innovation leading to true business value – productive innovation – is not a given. This is especially true in the field of Data & AI applications. Companies need to adopt an exploration mindset where they can rapidly experiment and determine the applicability of technologies and use cases. Successful innovative programs share the following key factors in delivering value to the organization:
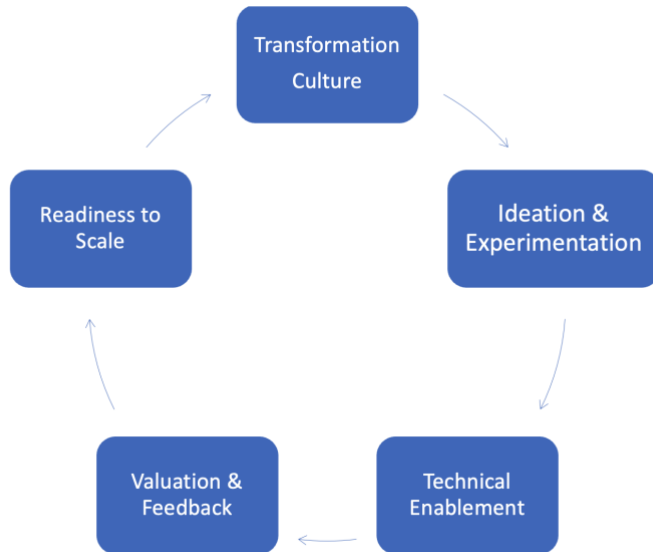
Transformation Culture

Readiness to Scale

Ideation & Experimentation

Valuation & Feedback

Technical Enablement

Figure 1: Five AI Innovation Imperatives

Transformation Culture – Having the right organizational mindset that are adept in managing and harnessing disruptions is at the heart of innovation success. Both business & technology leadership must embrace and endorse an intelligent approach in experimentation and risk taking. The rationale is simple. There are many innovation opportunities. Not all innovation will yield positive business value. You do not know until you try or experiment. It is important to stop as soon as possible when an experiment is futile. It is important to accelerate quickly when an experiment shows promise.

Ideation & Experimentation – The next key driver for successful AI innovation is creating an internal environment that encourages use case ideation across the organization. Given the pervasive potential impact of AI and Gen AI, this is especially important to enable the engagement of the business and operational frontline to capture use cases for consideration. Many leading Fortune 500 organizations have set up internal website with clearly defined information requirements for use case submission as well as Shark-Tank-like pitch and evaluation select Proof-of-Concept opportunities. Once selected, POC projects go into a structured rapid experimentation lasting typical 4-6 weeks to determine their merit for more formal investment. The objective is to leverage a learn-fast/fail-fast process to filter out the good vs. the bad AI investment opportunities.

Technical Enablement – With an efficient process to identify and select AI POC use cases, a successful innovation process must have a strong technical support, including an experimentation sandbox and supporting domain expertise, to stand-up and execute the rapid experimentations (i.e., exercising the fail-fast/Learn-fast notion). While not necessary in production strength, a good sandbox infrastructure should core data engineering capabilities to support data ingestion, integration, and storage. Access to AI/ML development workbench with model library is key for discriminative use case exploration; access to select LLM (i.e., either

public or private) along with Retrieval Augmented Generation (RAG) capability is the key for Gen AI use cases. Finally, a small core team of AI data engineers, solution architects and data scientists are critical to advise and supplement the POC team for key expertise.

Valuation & Measure – The merit of a use case must be measured by its technical feasibility as well as its business impact. Will the benefits of the eventual application justify the investment? By definition, a POC will prove out the feasibility & practicality of a technical design. For example, can we integrate in real-time the speech-to-text module based on natural language processing with a LLM embedded with domain-specific knowledge to create a call center agent assistant to help handle customer complaints? An equally important question to guide the innovation effort is whether the positive customer experience and the efficiency gained in handling their complaints will generate the needed value, financial or otherwise, to support the investment. A good innovation governance process must help clarify the expected business benefits and can measure the performance of the solution to over time to ensure the meeting of the expectations.

Readiness to Scale – Finally, upon a positive confirmation of a use case at the completion of the POC (i.e., technical feasibility validated and adequate business value confirmed), the organization must be ready to extend and operationalize the solution from the sandbox instance to a production scale. Scaled-up model & infrastructure for increased volume, production access control, info security, responsible AI guardrails and governance, technical change management (i.e., CI/CD & MLOPS) and organizational change management (e.g., operating procedures update and training) are the common considerations. Organizations will benefit from having a repeatable process to help consistently and quickly transition proven POCs into production.

Bringing it together

With the understanding of the AI Innovation imperatives, below is a framework we at Previsant have leveraged to help our clients stand-up an effective innovation engine.
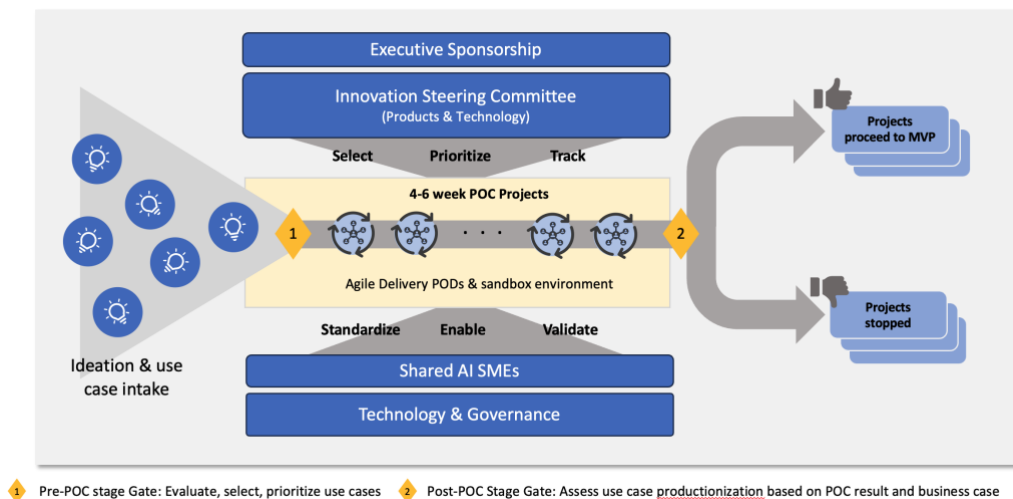

Figure 2: Previsant AI Innovation Framework

This framework focuses on the key success factors introduced in the "imperatives" section of this article. Moving from the left to the right, the first step is to create a use case intake funnel that spans across the organization including all lines of business and functional areas. Internal AI Innovation website is used to create broad awareness and to provide a standard process to capture ideas from the field. The pre-POC Stage Gate review, evaluate and select from the submitted use cases for POC projects. This is an opportunity to inject excitement and heighten awareness by introducing gaming and competitive elements into the selection process (i.e., leveraging Shark Tank format as mentioned earlier). Constant engagement with business and IT sponsor executives as well as ensuring proper technical sandbox & governance support (i.e., both people & technology) are key. This is depicted by the blue boxes above and below the POC projects in the center. All selected use cases will execute as 4-6-week POC to validate the technology feasibility and to provide assessment of business benefits. Stage Gate 2 offers an exit checkpoint to confirm or reject further investment into the use case. For the use cases approved for production MVP, we engage the production playbook to scale the POC into production-ready solution. Monitoring process will continue to track the use case for long-term value realization.

At Previsant, our experienced partners have leveraged this proven innovation model to help many clients capitalize the real value of AI beyond the hype. Please feel free to reach out for a deeper discussion.

Brian Ng

Founding Partner
Previsant Insights