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Unlocking GenAI in Regulated Industries

Overcome Roadblocks and Seize the ROI

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Despite numerous documented cases showing how GenAI can transform regulated industries, many organizations have yet to unlock its value. This paper explores the roadblocks hindering GenAI adoption in these environments and offers practical solutions to overcome them. By addressing these challenges, regulated businesses can seize the return on investment (ROI) that GenAI provides.



The Problem

The ability to assess and leverage the power of AI is underutilized in many organizations, especially in regulated industries. Many organizations may hesitate to adopt AI due to concerns about regulations and potential risks.

This reasoning, however, may be overly cautious considering the current advancements in AI technology. Here are three concerns often expressed by leaders in regulated industries about GenAI adoption.

Legal Risk

Quantifying potential legal-risk exposure for GenAI in regulated environments remains challenging due to some unknown variables. The problem is not the inability to make forecasted calculations but the lack of a foundation for those calculations — historical case data and legal precedence — to use as reference points. This makes it difficult for organizations to confidently assess and quantify potential legal risks associated with GenAI implementation, leading to avoidance of using the technology.

Stakeholder Pressure

Another dilemma is managing the pressure from above. The CEO and the executive team see the benefits achieved in other organizations and push for use of GenAI. However, at the working level, mid-level management at times see GenAI as threatening. Unquantified risks, lack of understanding of impact on jobs and searching for the perfect use case can cause paralysis. This highlights the need to overcome this barrier and emphasize GenAI's role as a tool to augment human capabilities, not replace them.

Skills

Another hurdle is the lack of readily available skills, especially internally. Few people understand the details of large language models, and when you have a small IT team, it can be challenging to dedicate talent to developing internal GenAI expertise. Hiring a dedicated specialist can also be challenging, as many are very deep in specific technology sets.

These factors contribute to a sense of being “gun-shy” towards adopting GenAI. However, there are ways that you can address these concerns. Regulated industries have a history of navigating complex technological advancements, and their experience can be leveraged to overcome GenAI's roadblocks.

A Model To Follow



The challenges regulated industries face with GenAI adoption share many similarities with the transition to cloud computing. These similarities offer a useful model for navigating the current hurdles.

Back when Cloud services became readily available, just as with GenAI now, legal concerns regarding security practices and control over data were common.

Questions about financial justification also existed. Initially, people often viewed cloud adoption solely through a cost-saving lens. However, considering the total cost of ownership, currency of software, and speed to benefits, a more holistic approach was necessary for a successful analysis of the true potential of the cloud.

Also, the regulated industries also had a knowledge gap. Fortunately, cloud training, especially for industry experts, third-party regulators, and legal teams, helped improve understanding and increase the transparency of how cloud services were delivered. It was necessary to bring many people up to speed on what was involved to provide confidence to everyone.

The realm of GenAI requires the same type of educational efforts. Third-party regulators, legal teams, technical teams, users, and stakeholders must be familiarized with the technology's capabilities and limitations to foster comfort and confidence in its responsible use. Press coverage today is dominated by single issues or high visibility hallucinations rather than overall capabilities and successes.

GenAI provides different benefits and are very use case specific. Implementations require training and refinement. Cloud solutions were narrower in features and capabilities. With wider adoption of GenAI and daily use, the knowledge set around implementation benefits will grow, and content for education will also expand.

This lack of an established precedent creates challenges for legal teams, who typically favor this analysis approach. Legal teams that can closely collaborate with the IT department are essential to better define the legal risks.

As with cloud adoption, navigating the integration of GenAI will be a gradual process. Understanding GenAI's potential applications and building relationships with GenAI providers are crucial steps. By taking these actions, organizations can be early adopters and better capitalize on the benefits GenAI offers.



The Solution:

Present The

Tangible Benefits

Overcoming the hurdles to GenAI adoption in regulated industries requires a compelling case for its value. Fortunately, Generative AI offers a strong ROI through three key benefits: increased efficiency, enhanced accuracy, and the ability to explore.

Increased Efficiency

GenAI is very good at letting you take repetitive tasks and complete them faster. That's the efficiency you can take to the bottom line, whether you take that efficiency and not replace people when they leave/retire or cut back on third-party suppliers. It's a benefit many regulated industry organizations need in a challenging market.

Enhanced Accuracy

Large language models consume and connect so much more information faster than humans can. Using that improved information correctly leads to better decisions. That productivity has value. The value is specific to different use cases in each organization and depends on the context of how you're using it. Failing to adopt GenAI leaves this productivity untapped.

Unearthed Knowledge

Then, there is a harder ROI to estimate. GenAI allows you to learn from information in your own organization that you do not even know yet. By turning some of GenAI's tools loose on complex tasks that require content creation, they can exceed employee capabilities. Combine the ability to explain and share predictive QI content from large, complex data sets and explore what-if questions, and you may find new patterns or gaps that you did not even know existed. The power of GenAI to enhance predictive AI and data understanding and identify focus areas can lead to your organization gaining more advantage by finding undiscovered areas or "unknown unknowns" and working to exploit them or address them.

Known challenges are easier to focus on. For example, imagine you need help figuring out how to analyze performance data from multiple areas. You can specify pattern queries and find information showing your causal relationships or gaps in instrumentation across assets. GenAI can be used to create communication and action plans based on other data your organization already possesses.

The rSTAR Advantage: GenAI Consulting, Implementation, and Integration

Navigating the complexities of GenAI implementation, especially in highly regulated industries, can be daunting. But you do not have to do this alone. rSTAR, with its years of experience in AI for the energy and utilities sector, offers a proven five-step method to streamline GenAI exploration and implementation within your organization that includes readiness assessment, data assessment, and educating internal stakeholders about the technology, empowering them to initiate any pilot projects confidently.



Getting Started

GenAI is one of the most impactful changes in the technology landscape for all industries. Regulated companies should avoid being late adopters. But, at the same time, this isn't a 90-minute Formula One race. Start small. Identify readiness. Launch a few pilot projects that target specific business challenges. Learn from these projects and refine your approach before scaling up to tackle larger issues. This iterative process provides a learning curve for the entire team, ultimately making it faster and easier to implement more complex AI solutions. So, get on the grid, start your engines, and prepare for something more akin to the 24 hours of Le Mans, a team event, endurance race with strategy and contributions from the car, support team, and drivers to achieve success.



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