



Analyst Perspective

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OneStream's Sensible ML Tasks AI for Business Planning

OneStream offers a platform designed to serve the needs of accounting and financial planning and analysis organizations. The software handles financial close and consolidation, planning and budgeting, analysis and reporting. For me, the most significant [announcement](#) at the company's recent user conference was the unveiling of its Sensible ML (Machine Learning) offering, which is in limited general release. I've commented on the importance of artificial intelligence in business applications, and Sensible ML is a promising and important step in that direction.

AI will be the most consequential technology for business computing. Ventana Research asserts that by 2025, almost all vendors of software designed for finance organizations will have incorporated some AI capabilities to reduce workloads and improve performance. Increasingly, all vendors of software aimed at the office of finance will differentiate offerings by the capabilities and accuracy of AI functionality. And organizations will adopt this technology to attract and retain the best talent because AI enables substantial reduction of low-value work so there's more time for workers to focus on tasks that require their expertise, experience and judgment. The main objective of AI-enhanced software is to have the applications do more so that people can contribute more.

Digital Finance
Market Assertion

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There are many potential uses of AI, including automating and enhancing the breadth of analytics, applying machine-driven task supervision to speed process execution and reduce errors, generating recommendations, and automating report commentary. OneStream's Sensible ML effort is focused on the specific task of applying time-series forecasting techniques to:



- Improve the effectiveness of the process by marrying financial and operational planning, including sales- and constrained demand-forecasting. The goal is to reduce bias, increase accuracy and make better business decisions by assessing operational and financial options in tandem.
- Enhance organizational agility by being able to react faster to changing conditions.
- Achieve efficiency gains by substantially lowering workloads and shortening planning and budgeting cycle times.

The impact of these advances can be strategic and impactful and are therefore high on the AI wish list for executives. However, this is an ambitious undertaking because of the significant difficulty in packaging data science techniques, applying analytics and managing the data required to achieve organizational objectives.

Not mentioned as part of the potential AI roadmap is using ML techniques to identify and build performant predictive models (especially driver-based planning models) using time series data.

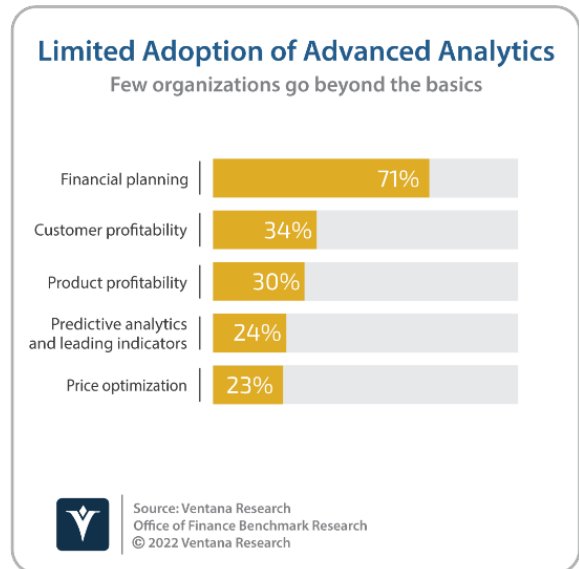
Sensible ML uses a set of techniques and resources that rapidly identify the most useful statistical relationships in a data set. This is something AI can perform faster and more accurately than most humans. It also does so on a continuous basis so statistical models always reflect the most recent experience and conditions. Complex analytical tasks that use a rich and diverse data set with a different level of machine learning – as in identifying situations with multiple variables, especially those requiring operational and external data such as economic and market conditions – result in a better prediction of likely outcomes. Using AI to identify a richer set of factors can significantly improve the accuracy of forecasts, especially in identifying breaks in trends or in assessing why events diverged from plan. The software also monitors the health of the models, so as the quality of the forecasts degrade past a certain point, users are alerted, and the process of repairing or replacing that component begins.

Sensible ML is an attempt to address a longstanding yet unmet need to make planning a more effective business tool. To put this in historical context, for the past couple of decades, predictive analytics has been touted as a means of improving the accuracy and timeliness of forecasts and plans. Today, our research shows that the technique is only lightly adopted. Our Office of Finance Benchmark Research shows that only 24% of organizations use this predictive technology. Perhaps its limited use is the result of the difficulty that FP&A groups face in acquiring and managing the data that is necessary to make useful, accurate projections possible, as well as a lack of skilled analysts and not enough time to apply these techniques.



Trust and demonstrating a lack of bias in recommendations are important to user acceptance of this technology. Recognizing this, OneStream has built in techniques such as back testing models to show users how they would have performed in the past, as well as having a focus on transparency to foster trust.

Vendor-supplied AI-enabled applications have the potential to overcome resource and skill-level issues by building data science automation into an offering. However, to be practical and scalable, the software must provide the means of acquiring and staging the data used by the machine learning system, and OneStream's Analytic Blend offers that capability. The quality of the intelligence, analysis and recommendations is completely dependent on the available data. The software's ability to learn and adapt over time is heavily dependent on the quality and scope of the data it can absorb. Analytic Blend supports financial, operational and transactional data used for initial and ongoing training.



A data store that is an integral part of an application – designed for a targeted set of users and use cases – is necessary for the comprehensive training of efficient machine learning systems. It must be able to scale in performance so operations can be completed within time constraints. I've referred to this type of data structure – tongue in cheek – as a “data pantry” because, like a pantry, everything needed is immediately at hand, with labels that are immediately understood, as opposed to a warehouse where everything is stacked high to the rafters and the tags are often inscrutable. Stocking the data pantry is hands-free because operations use application programming interfaces or robotic process automation to handle data movements, transformation and enrichment on a continuous basis. All data is extracted directly from the authoritative system of record so that it is as reliable as possible. While kitchen pantries tend to be cozy, data pantries must be able to handle large volumes of data, especially if highly granular information is required to achieve the desired result.

OneStream is ahead of the curve in offering a sophisticated AI offering, and its approach looks promising. But it is still early days in the evolution of the technology. It's been fashionable to talk about “first-mover advantage,” especially during the dot-com boom at the turn of the century. That concept has been tested empirically for a couple of decades and has been found wanting. In the early 1990s, for instance, the [Apple Newton](#) demonstrated the first-mover disadvantage when its handwriting recognition technology proved inadequate. Recognizing the challenges and perils of applying AI to forecasting and planning, OneStream is taking a cautious approach, keeping the offering in limited



release and available to organizations that are applying a use case that's likely to be successful.

I recommend that organizations considering replacing financial consolidation or planning software consider OneStream in that role. The company was rated [Exemplary](#) in meeting the overall product and customer experience requirements in our 2022 Business Planning Value Index. The company was also recognized as the Ventana Research 15th Annual Digital Innovation Award winner in Office of Finance. The software scored highly in all categories and ranked first in Reliability, delivering the necessary performance and scalability using its existing architecture. Its consolidation system is robust and used by some of the largest and complex organizations in the world. I also recommend that organizations closely monitor the investments and product direction of business software companies. While it is still early days, I expect capabilities afforded for the practical application of AI will grow increasingly important over the next five years.

Regards,

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To read more perspectives by Rob, visit <https://robertkugel.ventanaresearch.com/>



Robert Kugel – SVP and Research Director, Ventana Research

Robert Kugel is responsible for the Office of Finance and business research, focusing on the intersection of information technology with the finance organization and business. His research agenda includes the application of IT to finance and business process optimization, looking particularly at ERP and continuous accounting, financial performance management, predictive planning, price and revenue management, revenue and lease accounting and robotic finance.