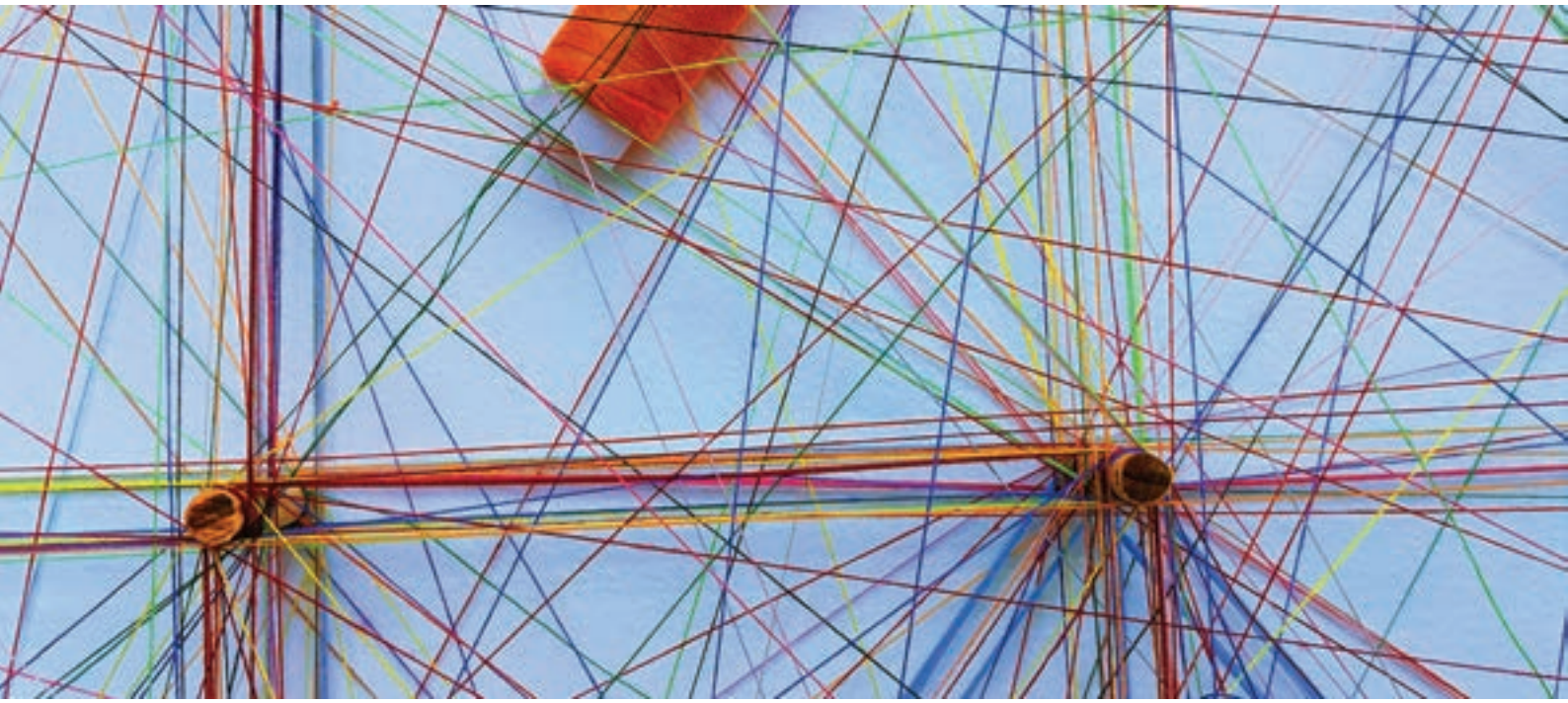
Strategizing a Network of Stores with AI-Based Performance Measurement

A Prescience Decision Solutions Whitepaper



Retailers with brick and mortar stores need to plan their store network well for a sustainable and profitable business. If the network analysis is not data-driven, the cost and operational overheads increase exponentially during the growth phase of the enterprise. The enterprise needs to analyze four key parameters periodically:

1. **Retain existing stores with the same configuration**
2. **Retain existing stores with a scaled-down or a scaled-up configuration**
3. **Close existing stores**
4. **Open new stores**

Any decision to retain or close down a store depends on several factors that can be normalized as data points. This aspect is essential to evaluate the performance of the stores objectively on several parameters. When deciding to close an existing store, the retailers need to understand the primary reasons that affect the performance of the stores. Similarly, setting up a new store comes with its own set of challenges owing to the uncertainties of finding suitable locations. ***Fortunately, data science and analysis coupled with artificial intelligence is here to help.*** It's important for an enterprise to devise an extensive evaluation process and find out patterns that can surface only through deeper data analysis. In our client engagements at Prescience, we had witnessed such challenges being faced by the industry at large and we considered it an

opportunity to build a solution stack that can cater to the industry's needs. ***Our solution enables your retail enterprise in the decision-making process through a comprehensive set of key inferences and recommendations to analyze existing stores' performance and decide about the strategy to open new stores.***

HOW IS THE AI ROAD DIFFERENT?

The traditional method of evaluating a store or finding a set of favorable conditions to set up a new store was based on various KPIs. The transition to Business intelligence (BI) meant that the evaluation method was based on getting a better view of the KPIs, in conjunction with the on-ground experience of executives. However, the capability to visualize the impact of all these KPIs as they came together, and the resultant performance was still missing. This is where artificial intelligence and machine learning began to transform the industry landscape.

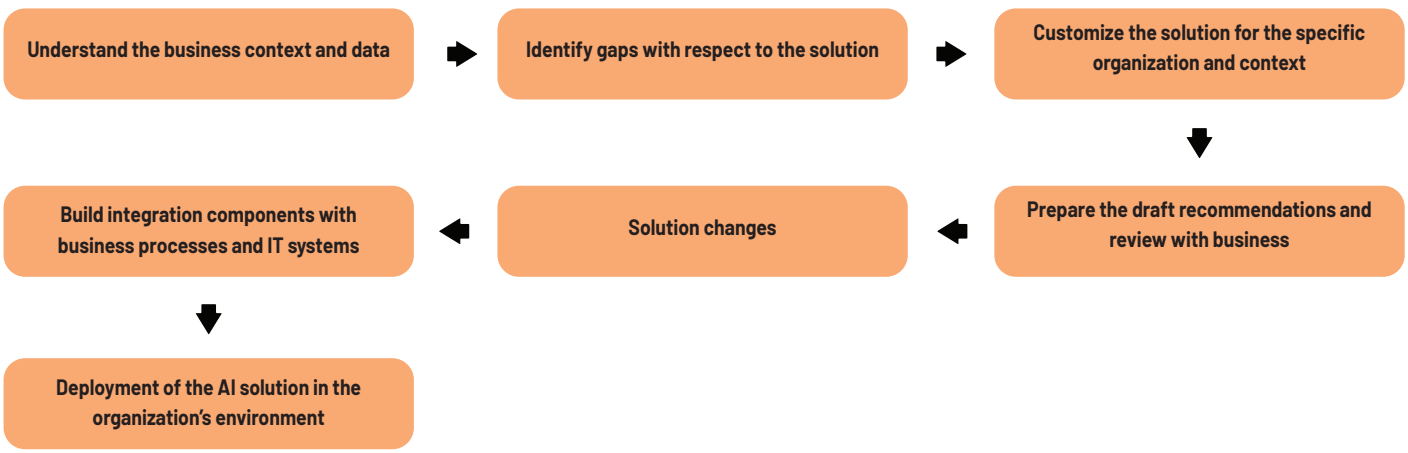
- AI helps understand the impact of the various factor variables, working together, on the stores' performance.
- AI also helps identify additional and indirect factors that get formed through a blend of pre-existing factor variables

WHO CAN BENEFIT FROM THIS AI AND ML DRIVEN APPROACH?

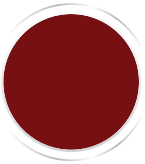
Artificial intelligence and machine learning can help any brick and mortar retail enterprise network.

HOW DOES THIS WORK?

We begin the engagement from a business-backward view, where our focus remains on understanding the business situation and make use of the business insights from our customers. We couple these with our knowledge of AI and ML and figure out methods to ensure that the entire process from collecting data till delivering a tangible is consistent with the business functions' expectations and aspirations.

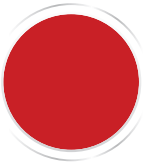


COMPONENTS OF THE SOLUTION



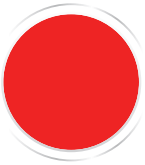
REQUIREMENTS CAPTURE

Comprehensive stakeholder identification
Questionnaire to capture specific requirements
Workshop methdology to optimize capturing of requriements



DATA CAPTURE AND ORGANIZATION

Built-in templates for capturing data
Well-structured and flexible data model
Supplement the process with external data



DATA QUALITY

Assessment of data quality
Missing value treatment

MACHINE LEARNING AND AI

Best-fit machine learning techniques
Learning based on business dynamics and user inputs
Integration with business systems to drive AI

VISUALIZATION

Intuitive and integrated dashboards
Whitebox systems with the ability to reveiw and change recommendations

THE OPPORTUNITIES

The key opportunities resulting from our solution for a brick and mortar retail enterprise with a network of stores are:

- Better understanding of the KPIs, leading to better decision-making
- Help strategize revenue growth for each of the stores by identifying their individual strengths, weaknesses, opportunities and threats
- Enhancing the rewards system by basing them on dynamic factors
- Identifying an appropriate location for new stores based on additional data-points and factors
- Prioritization of key variables that would play a role in higher revenues. For instance, if carpet area is an important factor, our solution will recommend an optimal range of carpet area that would result in better revenues.

Breaking away from the conventional methods of performance analysis, our AI-driven approach enables you to pave a breakthrough path focusing on success with the ease of building value for your enterprise across the network and not just one store.
That's powerful and that's a gamechanger.

About Prescience Decision Solutions

Prescience is a business focused analytics firm that empowers organizations to find meaningful insights in their data. Our Business-Backward Approach helps create tangible data-driven solutions that provide users with timely inputs for astute decision making. We do this by leveraging our expertise in machine learning and advanced data science technologies, deep domain knowledge and our customers' business knowledge.
Visit us at www.prescienceds.com or send us an email at info@prescienceds.com to get in touch with us. You can also follow us on LinkedIn.