



TRANSFORM YOUR BUSINESS WITH ENTERPRISE SEARCH

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Time wasted in data
lakes swamps to
derive meaningful
insights

Pluto7's Seven Step
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(P7SM)

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WHERE DO WE SPEND OUR TIME?

According to Forbes, “nearly 80% of enterprises have very little visibility into what is happening across their unstructured data, let alone how to manage it”.

According to Harvard Business Review “knowledge workers waste 50% of their time in hidden data factories, hunting data, finding and correcting errors, and searching confirmatory sources for data they don’t trust”.

Our customers around the world within various industries have confirmed this is not just a localized challenge.

In an enterprise, around 35% of knowledge worker’s time is spent searching for information.

This is a significant amount of labor directly impacting the bottom line. In helping customers create an internal “Google Search” like capability, we developed Pluto7’s Seven Search Methodology (P7SM).

This methodology will reduce the number of labor hours spent on search, helping businesses access deeper insights faster for quick decision making based on accurate and accessible information.

PLUTO7'S SEVEN STEP SEARCH METHODOLOGY (P7SM)



1. Define the **"Scope of the Search"** with related need and Intent. Define the source data and result sets based on the intent defined.
2. The **source** could be a combination of internal and external data sets depending on the problem being solved.
3. **Map roles and functions** to the search so that the scope of the search is tailored for its intended use and user with measurable outcomes.
 - a. Marketing Search
 - b. Sales Search
 - c. Supply Chain Search
4. A cloud enabled **"Search Foundation"** must be in place to support the structured, semi structured, and unstructured data related to the scope of the search.
5. Define the **Search layer Interface UI** based on the user's role, "Scope of the Search", and intended use.
6. Add a **"Digital Twin"** or virtual agent to help narrow down the results to find the right information faster, resulting in better quality decisions.
7. **Analyze the search outcomes** and how effective the search results performed for continuous improvement.

The technology backbone that makes this all possible is Google Cloud. Cloud search, Natural Language Processing, Chatbot, Customer Search, and related AI platform capabilities are used to create an enterprise search solution. Pluto7 has experience enabling these search methodologies and Google technologies within marketing, sales, and supply chain functions within an enterprise.

As part of a company's digital transformation, these functions are able to leverage the power of AI for data-driven decision making. Let's take a look at how these methodologies and technologies are applied for marketing, sales, and supply chain transformation.



A Fortune 100 Enterprise faced multiple issues when managing their technology infrastructure, as they were looking to centralize their structured and unstructured marketing data. The ultimate goal was to make this data easily accessible to the team to generate personalized campaigns and drive better click through rates. We implemented our methodology to help them manage and generate insights from their marketing data.

1. Scope of the Search

Defining the important questions the marketing team answers regularly is critical; questions like “what products change price when targeted towards B2B?” or “What products should I consider for personalized campaigns?”. In this case the information was mapped to map products

and customers, generating personalized campaigns and enabling the team to execute with confidence.

2. Source data identification

Consider building a search source data repository with data from past campaigns, contacts, content, price, costs, product details, and more that can be accessed easily with enterprise search.

3. Roles and Functions

Focus on the users. The marketing search engine must be tailored to the users. The intent and use of the search will be defined by the roles and needs of the search users. The marketing manager, campaign manager, and IT, will all have different needs of the search capabilities.



4. Cloud-enabled Foundation

Flexibility, performance, scalability, and cost effectiveness are key elements in a cloud foundation. Storing and expanding content with ever growing data and learnings from search must be secure and accessible.

5. Search layer Interface UI

The user experience and interface should be enabled within the current applications and current workflow for ease of use. The team should not have to learn a new and complicated tool. In this case, enterprise search should enhance the current processes of each marketing activity.

6. Digital Twin to manage search results

Having a search engine is one aspect of digital transformation. Having a virtual marketing agent that gives recommendations based on near real time data enables a marketing team to grow and succeed. AI models can act as a digital twin, working behind the search engine to learn and recommend actions based on centralized marketing data.

7. Analyze the search outcomes

As the marketing search engine receives new data, the engine provides better search results. The impact to the business must be measured periodically as the engine improves. Change management is key to improving processes and people to use the technology effectively.

SALES SEARCH



The sales organization of a large software enterprise was challenged with prioritizing the right opportunities. The sales reps spent 30-50% of their time searching for information related to opportunities each day.

Cutting this time down allowed the enterprise increase revenue, as the sales function was able to prioritize and work efficiently with the help of the search.

1. Scope of the Search

The goal is to help sales reps reduce time spent searching for information about the opportunity. It is important to know all internal and external information typically gathered on a daily basis and the sources frequently used.

2. Source data identification

Consider building a search data repository with all opportunity data from past and current deals along with contacts, external customer data, marketing data, and product data. Centralizing this information is essential to unlocking key information deep within the opportunity. The ability for sales to upsell and cross sell becomes clear when the journey is mapped and the patterns are analyzed.

3. Roles and functions

Define the users' role and needs when enabling the sales search engine. Leadership, sales management, reps, and analysts have different intent behind their searches. Building the engine with that in mind, allows you to tailor the results to the end users. Keeping the roles narrow allows higher quality search results.

4. Cloud enabled Foundation

The key to better correlate data is a continuous update of both internal and external data sources. Reps will be able to access relevant information quickly and efficiently while the sales search engine learns and improves over time.

5. Search layer Interface UI

New tools and technologies can be difficult to implement as processes and workflows change. A search engine that integrates with the current CRM and enhances the tools sales reps are already familiar with is ideal. Providing insights in a timely manner saves time and enables sales teams to accomplish more.

6. Digital Twin to manage search results

A chatbot like virtual agent to validate and assist in correlating search results with actions would act as a sales rep's digital twin. Assistants could make recommendations based on data from multiple sources analyzed together at scale. Prioritization and next steps could be easily identified to give your sales reps more time to talk to their customers.

7. Analyze the search outcomes

While analyzing the outcomes of the sales search engine, make sure to understand how the reps use the search results. This allows management to not only measure the relevant KPIs, but also improve the search engine based on the findings.



A large CPG company with manufacturing, packaging, and distribution facilities in over 100 countries wanted to cross leverage the learnings from one country into another. They wanted to centralize their supply chain data to enable faster and more efficient information exchanges across the different supply chain functions.

1. Scope of the Search

Supply chain's with complex networks enable S&OP process, Integrated business planning (IBP), and other efficiency processes to drive KPI improvements. Supporting these processes with supply search would enable demand planners, supply planners, supplier management, and logistics teams to make better data-driven decisions.

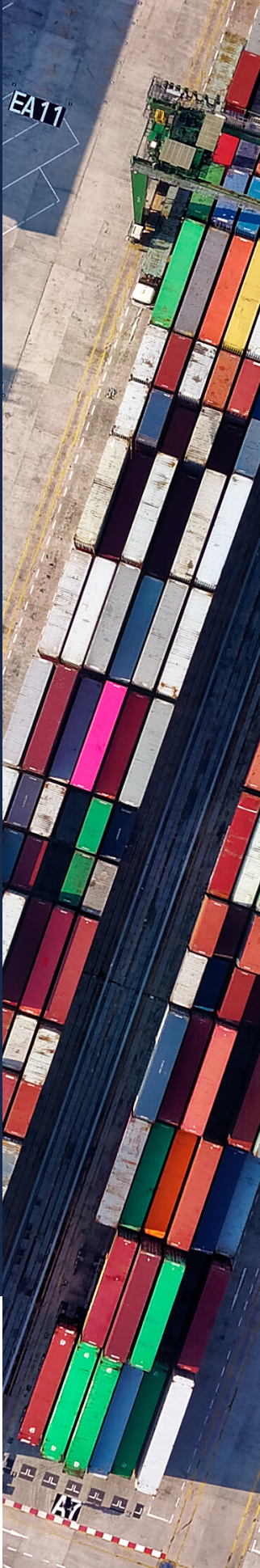
2. Source data identification

Data such as the bill of materials, supplier data, product images, catalogs, labels, invoices, sales history, supplier comments, customer support cases, and more help supply chain teams visualize the entire supply chain network better.

Centralizing internal data and complimenting that with external data related to demand, supply, and the market allow for a more complete understanding of the process.

3. Roles and functions

Demand planners, supply planners, supplier and logistics management roles are a good starting point. These end users of the supply search engine will determine the data, capabilities, and insights that the engine will provide.



For example, demand planners may want to know how their product demand compares to the market, or the customer's sentiment on the products. Such supply chain insights can be found through search correlations in a supply search engine.

4. Cloud enabled Foundation

Data you collect is ever expanding and increasing. New sensors and devices along with your legacy devices are capturing a lot of data. In order to get the most out of the data you already have, a real time analysis of the data at scale allows supply chain leaders to make data-driven decisions. Cloud provides a foundation for data acquisition, collection, and centralization.

This is the enabler for an advanced search with continuous learning capabilities. For example, your supply and demand decisions should reflect the changes in your supplier ranking found with the help of a powerful search engine tailored for your supply chain processes.

5. Search layer Interface UI

Supply chains have many interfaces across ERP, SaaS, and mobile applications. The supply chain search results can be embedded into existing applications to enhance their functionality.

6. Digital Twin to manage search results

The supply chain is an operationally intense process where the efficiency is directly reflected in the bottom line. A virtual assistant built into the search engine, could make recommendations based on insights and allow management to make better decisions faster.

7. Analyze the search outcomes

It is important to assess the effectiveness of the search results to optimize the engine as it continuously self improves based on learnings and feedback. This will allow leadership to increase the reliance on their digital twin to save time and drive cost savings.

CONCLUSION



Google Search allows anyone to search practically anything, anytime, from anywhere with a nearly instant result. Since we leverage this tool in our personal lives, should we not expect the same for our businesses internally? Having real-time search on an enterprise scale can seem like a herculean task, but as you have experienced, the world's information is easily accessible with Google technology, so your company can experience the same.

Machine learning, artificial intelligence, Natural Language Processing, and other Google Cloud capabilities allows enterprises to make intelligent searches. P7SM is a guide to help you begin enabling search capabilities that are effective across different functions such as marketing, sales, and supply chain. The same can be adopted across other functions in your business. When done right, search can reduce knowledge workers time spent searching by 35% saving time and money. Enterprise Search is a relatively new topic within business, however, based on the current trend, we expect enterprise search to be a norm across many companies by 2022.

Digital transformation is paving the way for businesses to make faster, more agile decisions. Some of the underlying factors like cloud migration, artificial intelligence, and search technologies are leading the way for Enterprise Search to become the norm.

Contact us

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