

## Case Study: Needl Helps a Financial Services Company Build Institutional Memory and an Integrated Data Platform Enabling Big Data Insights

### Client Background

The company in question is a five-member financial services firm specializing in investment management. The firm handles huge volumes of data and research reports, arriving via various platforms, such as email alerts, broker updates, group messages and paid subscriptions.

The firm's professionals used emails, chats, drives, note taking platforms and several other tools to curate high value information on various real-time investment-related issues that required immediate attention. This allowed them to take advantage of valuable insights provided by professional peers and leverage real-time research reports that highlighted the impact of potential earnings on their portfolios.

### Challenges Faced by the Company

Advantageous though these platforms were on account of their agility in exchanging information in real-time, the downside was that much of this information was getting siloed and proving near impossible to retrieve later. File attachments shared over chat groups were found to be mostly unavailable for download later, making retrievability of multimedia content difficult.

Furthermore, having to process thousands of research reports to create a knowledge graph from the same was almost impossible. The inability to efficiently process the sheer volume, velocity and variety of high value data residing in multiple venues was a deterrent to productivity.

### Business Needs of the Company

The company had several specific business needs. For one, the nature of its investment-related activity required its professionals to be able to research huge amounts of historical performance data of businesses. This data needed to be extracted from a particular format and converted into Excel for personalized data manipulations. For e.g., brokerage reports in pdf or images of newspaper clips. Numerous conference calls and annual general meetings with management of the investee needed to be transcribed and summarized to create a knowledge repository of these within the firm.

There was also a regular need to search for companies in popular news media, high-quality blogs and forums, besides regulatory websites, and exchanges, for company-related disclosures and announcements.

Lastly, the knowledge repository created through these various sources needed to be structured in such a way as to make knowledge sharing and retrieval a simple and seamless process.

The firm needed a single tool that would be able to crunch through and retrieve all the data scattered across platform silos and devices, effectively removing productivity-related issues.

### The Solution

**The company decided to try Needl to address their data challenges.** There were some immediate and tangible benefits once the company started using Needl:

1. Needl integrated all sources of information handled by the company into a cloud-based platform.
2. To begin with, a common repository was created which contained the data of all users from their emails, chat groups, social media, storage platforms, note-taking apps and even meta searches from popular platforms like YouTube, podcasts, and search engines. The entire team was given a single login to access the knowledge repository. As the team started using Needl extensively, eventually everyone created their own individual Needl accounts and integrated their popular apps and websites in it.
3. Needl created an attachment repository of documents, media, and links. Once previously unshared data from individual teams made its way into the Needl repository, many avenues for intelligent collaboration were soon

realized. The team started sharing data from their individual repository with one another and to the team repository seamlessly. This made knowledge sharing easy and facilitated creation and retention of institutional memory.

4. Specific crawlers set up in Needl were able to extract news from a host of reputed business media and industry-specific trusted sources such as exchanges, regulators, and industry associations.
5. By using Needl, there was a seamless intermeshing of private data channels and commonly visited external web data from blogs, media etc.
6. Needl processed and displayed relevant search results in a single query that searched across not only documents and chats but also scanned content, images, audio, and video data.
7. With lots of data coming in from various sources and with a daily need of having to refer to large historical data sets, Needl's single, powerful ML based search across all the private and public data and within document types, and all media types brought the most relevant data within seconds to their fingertips.
8. Data whether it was long paragraphs of text or large data tables in PDF documents that needed to be copied for reports and analysis could easily be clipped and converted to word and excel files in Needl, thus reducing huge efforts in copying and replicating data sets in multiple tools to make the data usable and actionable.
9. Referencing documents, searching within documents, and clipping data from several documents into a single document was done with Needl's smart summary builder. This eliminated the need to move from one platform to the other to create reports and made creating and sharing of reports easy for the team.

### ***Privacy of personal data***

By virtue of each member linking relevant data into Needl which was coming to them and not automatically accessible to others, the knowledge feed created allowed members to share data while retaining control on what was shared.

To address privacy concerns that members might have had regarding linking their emails and chats to a common pool, each member was given the option to share a specific chat or sync the entire chat group and use rule-based email forwarding or full sync option. This approach allowed users to keep their personal data separate.

### **Distinctive features of Needl that maximizes efficiency of Data storage, Search and Retrieval:**

**1. Relevant Search Results in a Single Query:** Needl goes beyond what Google offers as a search engine. It is an ad free platform and provides a unified search with user inputs and preferences built in. The relevancy ranking feature of the search provides contextual outcomes for the user.

Needl provides the capability of looking for the same data on multiple apps, platforms, and websites at the same time, while allowing for content search within all document types, audio, video, and image files in one's personal data.

**2. Machine Learning Based Tagging of Data vs Creating Directory Structures:** Needl leverages both human annotation and machine learning via the following:

- Classifies and labels documents and media using OCR etc.
- Transforms large and complex data sets into more usable formats by clipping and summarization.
- Tags, clusters and groups data into knowledge-based feeds, alerts, and notifications.
- Provides sentiment analysis of documents and reports instantly.
- Sorting, filtering, auto-tagging, annotation, and bookmarks feature along with the single search in Needl makes data retrieval quick and easy

### **3. Standardized processing**

Needl offers the flexibility to clip and convert paragraphs to word documents or notes, clip tables inside documents and images to excel files without ever having to leave the platform or having to copy and paste data across platforms and applications.

#### 4. Sharing and Collaboration

Needl allows users to create their own data exchange and easily discover and access data from across multiple platforms frequently used by knowledge workers. Needl also eliminates data silos and allows instant and secure sharing of governed data across the organization and beyond, by creating a user-specific data exchange. Share controls are built in and can be exercised for read, print, and download of data. The product is designed with the best of breed data security and privacy features (Refer to the Privacy section above for more details).

#### The Result

- Improved productivity of the investment team, by removing their high dependence on large amounts of unstructured, personalized data, and instead converting it into structured and searchable content; removed silos between data and processing and resolved interoperability issues.
- Gave users a large selection of data integration whereby users can combine data from multiple sources based on their consent and contextual need.
- Exponentially reduced time taken in search and retrieval of relevant data with the single integrated ML search.
- Made data accessible anywhere and available always since data in Needl is auto-refreshed and backed-up in cloud.
- Enabled large value creation by providing standardized processing capabilities which most users would require often, at an exceptionally low cost.
- Gave the team a choice of determining what, when and how they consume and control their attention and focus via prioritization based on trusted sources and individual use context
- Enabled seamless sharing and collaboration, eliminating friction and productivity loss, which was the norm prior to Needl.

By using Needl, the firm was able to build an institutional knowledge base, removing dependencies on people. This meant that regardless of people moving in and out of the firm, the knowledge remained within the organization. Standardized processing features of Needl facilitated an industry-best collaboration experience to enhance core value proposition to users in a safe, secure, and privacy-first environment.

The financial services company and its investment team now has 3.5 TB of structured and unstructured data on the Needl platform, and Needl is proving to be a versatile data platform that enables analyst teams to access the best possible content of their choice. Small teams within the company can now focus on the important data filtered out instead of getting bogged down by a data tsunami. By capturing and amplifying relevant signals, Needl helps the analysts cover vast ground while reducing noise from unwanted data.

To experience how you can gain the competitive edge and deal with Big Data and understand value proposition of Integrated Data Platforms, please visit us at: <http://www.needl.ai/>

#### [A quick overview of Needl](#)

