Understanding Text Analytics and Gen AI in Your Organization

While Gen AI continues to astound and delight in the public sphere, businesses are struggling to turn that excitement into real business value. In addition to the well-known flaws like hallucinations, it is difficult to see how to utilize Gen AI beyond customer support chat. The key is to pair Gen AI with text analytics. This pairing, however, requires a careful and deep understanding of both and even more important, the integration of the two.

The KAPS Group has developed a simple but powerful approach that can create a strategic foundation for building a joint enterprise text analytics and Gen AI capability.

The approach is based on two parts:

- A deep understanding of what text analytics is and what it can do
- A deep understanding of what the pairing of text analytics and Gen AI can do

Although Gen AI is getting all the press as the new kid on the block, text analytics is the foundation that will create real business value.

Understanding What Text Analytics Can Do

This understanding of text analytics can get organizations started and/or it can take any current information initiatives to a new level. A deep understanding can:

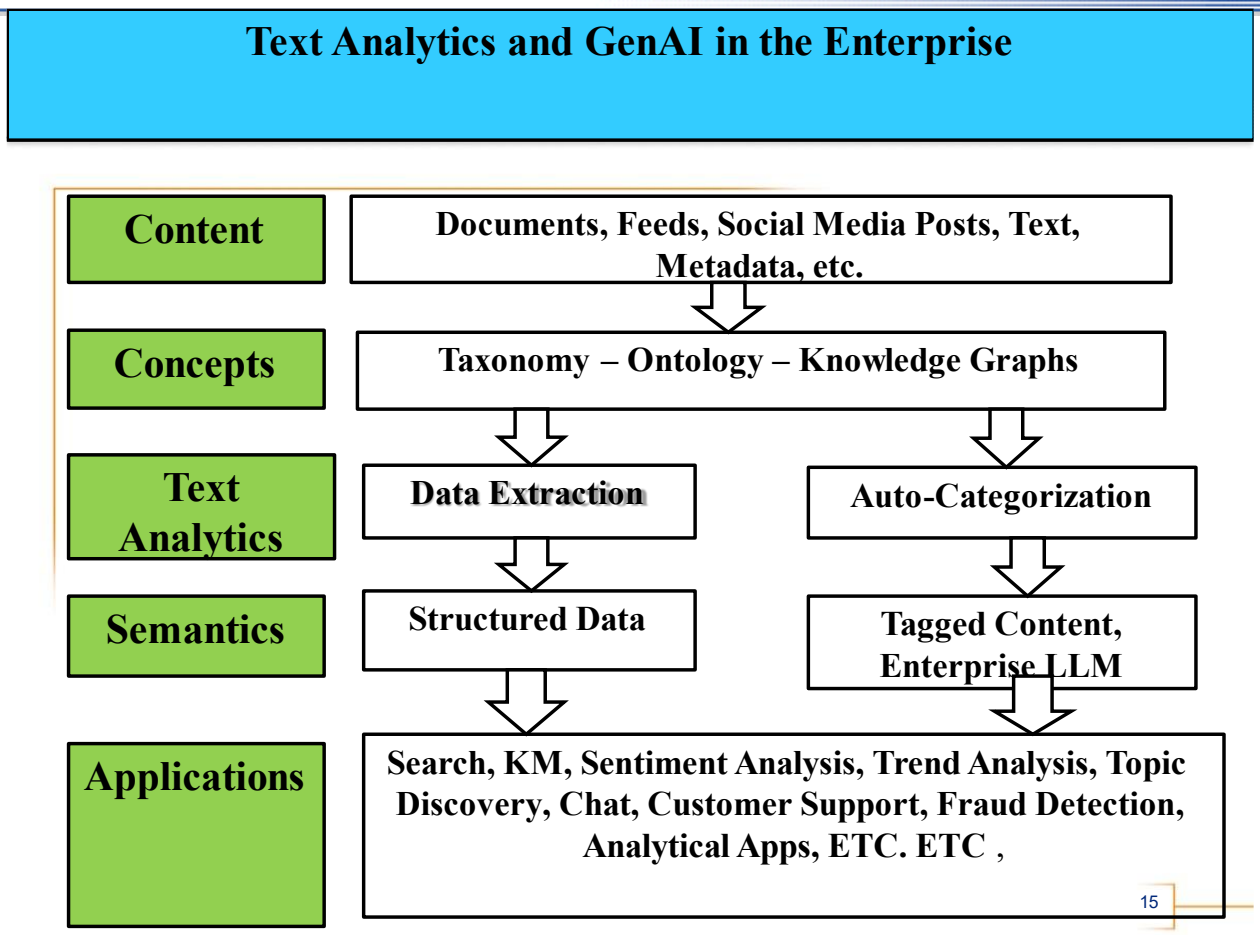
- Guide the development of a text analytics platform
- Demonstrate how to apply that platform throughout the enterprise
- Demonstrate how to enhance every business application from content management to search to business and customer intelligence

Enterprise Text Analytics Model

An enterprise text analytics model consists of semantic resources (taxonomy, ontology), text analytics and taxonomy management software, publishing and tagging processes and roles, a search engine, and a huge range of smart applications. Text analytics is the brains of the outfit that:

- Applies taxonomies to break down information silos and actualize their value
- Categorizes unstructured content to feed to an LLM and multiple applications
- Extracts data – adding bigger text to big data enabling countless analytical applications
- Takes search beyond counting term frequency and bags of words
- Creates LLM source documents and enhances the search component of a RAG app
- Applies content models that use the structure in documents to get accuracies of 98%+

We start with a generic enterprise model of how text analytics fits in with your information environment – and how it can transform that environment with or without Gen AI.



Text Analytics and Gen AI

There are 5 well-known flaws with Gen AI that restrict its application within the enterprise:

- Tendency to hallucinate
- Lack of transparency – no one knows how they work
- Amount and quality of data needed to train
- Security issues - Jailbreaks – get Gen AI to break its own rules
- Public content and vocabulary, not reflective of enterprise language

These can be summed up as accuracy and depth. The fundamental problem is that Gen AI doesn't have a brain, only a prediction mechanism. It mimics human language and provides the most popular answer which leads to superficial, stereotypical answers which while they can amuse and amaze in a public sphere, are not sufficient to create real business value. Gen AI also has trouble dealing with complexity. In sum, Gen AI lacks accuracy and depth.

Text analytics can add both. The essential strategic question is where, when, and how. It can be anything from using text analytics to create a high-quality set of documents cheaply using auto-

categorization for building an enterprise LLM to enhance RAG applications to incorporating Python code into a prompt engineering application.

The Process

This is a one-week (40 hours) engagement, based on Tom Reamy's book, *Deep Text: Using Text Analytics to Overcome Information Overload, Get Real Value from Social Media, and Add Big(ger) Text to Big Data* as applied to Gen AI

Creating a Deep Understanding of Text Analytics and Gen AI

It begins with a three day focused series of meetings and discussions that normally takes place on-site. The onsite begins with a three-hour overview on all aspects of text analytics:

- What text analytics is and what is its business value
- How can text analytics enhance Gen AI initiatives
- How to get started and what are the best practices
- What kinds of applications can be built and how to build them

Live demos of text analytics software provided by our partner companies as applicable

Building an Enterprise Text Analytics Model

The next step is to gather information about your information environment through a variety of tested techniques which can include focus groups, interviews, or presentations. This information is designed to articulate the organization's critical information and knowledge needs and identify where text analytics can transform your information environment.

The next step is to use that information to develop a customized text analytics model starting with our generic model based on dozens of text analytics projects. This model is then presented to selected key stakeholders for a round of analysis and discussion.

Output: The output of this process is the customized enterprise model and a roadmap for how to apply the model to build a foundation for multiple applications and selecting the best text analytics software, the best LLM, and initial application(s).

Options: This engagement can be done as a stand-alone or in conjunction with a KAPS Group Mini-POC that in a week can build a real life demo with a client's content.

Pricing: This engagement is a fixed price offering of $10, 000 although it can be expanded if the client would prefer a more in-depth engagement of 2-4 weeks. The expanded engagement allows for deeper research and targeted recommendations and plans. We also offer ongoing professional services to apply the combination of text analytics and Gen AI

If this sounds like something that you would like to learn more about, please contact Tom Reamy tomr@kapsgroup.com