



What business challenge does xPatterns address?

xPatterns addresses the enterprise challenge of processing large volumes of streaming data and making sense of it for real-time decision-making, keeping the enterprise competitive in a rapidly-changing world. The source of economic value is shifting from what we know at a specific point in time--Business Intelligence--to the notion of effectively participating in real-time flows of knowledge, i.e., dynamic analysis of unstructured data.

What is xPatterns?

xPatterns™ is a software platform that offers a more efficient and cost-effective approach to drawing true understanding from varied data sources in real-time. Intelligent algorithms and adaptive learning are used to discover connections woven into normally-disparate data, which leads to actionable intelligence that has deeper insights for making better decisions. xPatterns becomes more valuable with increased interaction; it constantly recalculates and re-evaluates data relationships as more data is processed, new data sources are added, and more users take part in the exploration process. This makes the xPatterns solution more dynamic and effective as it “learns” about content and users.

How does xPatterns determine relevance?

We have built a system, xRelevance™, that enables disambiguation and relevant content lookup, using innovative information retrieval approaches, allowing for a code-once, use-repeatedly model of domain expertise. In this system, domain expertise is acquired by importing, parsing and indexing a corpus of content representative of the domain, for example the content of a sports website or a music catalogue. Having indexed a corpus, we can enable two key relevance-related functionalities: disambiguation or entry-point relevance; and relevance-based content lookup.

How is xPatterns different from other solutions today?

What differentiates xPatterns from traditional natural language-based solutions is its ability to deliver highly-relevant information from seemingly disconnected data, without the use of traditional (OWL) ontologies or taxonomies. xPatterns' unique technology finds previously unseen, yet relevant correlations between data entities through the automatic discovery of relationships between concepts in unstructured data, minimizing creation and maintenance costs typically associated with traditional natural language text analytics methods.

How is xPatterns deployed?

xPatterns can be deployed on-premise or can be accessed as software-as-a-service (SaaS). Our team of implementation experts has years of enterprise implementation experience across a broad set of industries. We are invested in the success of each customer engagement, and ensure enhanced service-delivery of xPatterns platform through our demonstrated delivery methodology.

What types of developer tools are available?

xPatterns has a comprehensive Software Developer's Guide that allows your team to get up and running quickly. Please contact us for additional information at info@atigeo.com or 425.635.3900.

How is xPatterns architected?

xPatterns is offered as Web service APIs backed by an n-tiered architecture that is comprised of web servers, database servers (for persistent storage) and distributed compute nodes (compute-intensive processing of unstructured data).

What is a Domain Expert?

An xPatterns Domain Expert is a central source of knowledge regarding the concepts (single and multi-word terms) in a given domain and the strength of associations between those concepts. Essentially, a Domain Expert is a hierarchy-free ontology—hierarchy-free, in the sense that all attributes are of the type, "is associated with". Domain Experts are created using a "relevance discovery" approach by mining a corpus of text data (content) in the category of interest. This content can be derived from customer-defined sources, the Internet, or any source which reasonably represents a domain of expertise for a specified category. These sources should be readily accessible in order to maintain the relevancy of the self-constructing Domain Expert, with minimal manual intervention. The Domain Expert makes dependencies between concepts explicit. These dependencies clarify how changes involving certain concepts influence other concepts. xPatterns leverages machine learning methods to allow refinement and maintenance of the Domain Expert through crowdsourced user interaction.

Does xPatterns require training? If so, how long does training take?

xPatterns leverages machine learning technologies which benefit from training. Training occurs via user interaction through crowdsourcing. Each training instance is performed extremely quickly (sub-second, real-time). Training time is based on the size of the Domain Expert, and the dynamic nature of the content.

How is Content Updated?

Content is updated automatically via xPatterns APIs.

What is xPatterns' pricing structure?

xPatterns offers flexible pricing models that can be tailored to meet your needs. Please contact us for additional information at info@atigeo.com or 425.635.3900.