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## Data Science, Management, and Analytics

## Real Answers. Actionable Intelligence.

## Our 360° approach to data yields maximum clarity and insight.

Because Niyam IT understands the value of big data in today's dynamic technological ecosystem, all of our data scientists share a single common mission: to empower organizations with the highest-quality data that modern technologies can deliver. Our experts have decades of hands-on experience managing every aspect of the data process, from planning and design through deployment, analysis, and monitoring. By identifying and applying the most effective data management strategies and analytic approaches, we empower decision makers at every level with the critical, timely intelligence they need.

## Data Management

Combined with our cloud engineering, architecture design and IT security offerings, Niyam delivers a comprehensive approach to data management that can be easily tailored to suit the needs of any size organization.

## Harmonize, Standardize, and Cleanse

Standardize, cleanse, validate, correct, transform, and enrich your data. Choose from a collection of predefined algorithms or have our experts design a custom library for your unique needs. Harness available information from disparate sources for a more complete, consistent data set. Best of all, you can do it locally or in the cloud.

## Design Effective Data Models

Leverage accurately interpreted dynamic data to supercharge your decision-making abilities. Model data from relational, NoSQL, big data, BI, and ETL sources. Whether you need to craft a new model from a conceptual diagram or reverse engineer one from an existing database, Niyam's data science experts can help you effectively design and manage your logical and physical data models.

## Ensure Data Quality

Prevent bad data from entering your systems with a robust data quality firewall. Extend current cleansing and matching processes with a component to eliminate future data quality issues and boost confidence in the accuracy of your data.

## Enhance Data Discovery and Profiling

Deploy automated metadata discovery algorithms and AI to learn more about the structure and content of your data. Find dependencies, categorize and describe data, and empower users to make more informed decisions. Store your results in a central data catalog for future projects.

## Boost Time to Market

Analyze more data faster, make data-driven decisions, answer new and complex business questions, and apply new insights to your daily operations.

## Analytics

Our granular, deep-diving analytic solutions deliver the clearest, most revealing view of your data.

## **Predictive Modeling Strategies**

Predict the future by analyzing your historical data. Deploy custom algorithms to highlight patterns, reveal hidden correlations, and deliver new insights to improve decisionmaking throughout your organization.

## Natural Language Processing (NLP)

Deploy custom NLP algorithms to process everyday language



and transform unstructured text or speech into structured data. Optimize customer support, streamline text analytics, improve knowledge management strategies, and enhance social media monitoring.

#### Data Mining

Through a combination of advanced statistics, AI, and Machine Learning, our powerful Data Mining tools sift through the chaos and noise in your data to reveal what is relevant, helping you quickly and accurately assess likely outcomes and improve the entire decision-making process.

## Visualization

Niyam allows you to access your data precisely the way you want, delivering the right tool for the right job every time.

#### **Custom Dashboards**

Get a clear view of your data with dashboards built to your specifications – no software installation or IT expertise required. Easily integrate with existing applications to ensure all your team members have access to timely information. Host visualization tools locally or deploy them from the cloud.

#### **BI Software Integration**

Niyam delivers seamless integration with the BI platform of your choice, including Tableau, Qlik, PowerBI, and more. With support for simultaneous visualization across multiple tools, you can deploy unique visualization solutions for all your teams to meet their individual needs.

#### **KEY OUTCOME**

#### **FEMA Digital Library**

Niyam implemented a **state-of-the-art digital library** for FEMA's nationwide floodplain data using open source technology and advanced search engine capabilities. To date, this innovative solution has shrunk FEMA's internal data requests by **over 50%** and supported the reduction of its data warehouse space by 3600 sq. ft. – increasing client savings by reducing physical document space.

## Why Niyam?

Since our founding in 2007, Niyam has developed an impressive record of successful outcomes, earning our status as the go-to provider of innovative IT solutions. Today, Niyam sits at the vanguard of the industry, delivering state-of-the-art, mission-critical technologies to federal agencies and the public marketplace. Our solutions are proven to accelerate collaboration, increase efficiency, and consistently provide rapid, breakthrough results – all while remaining conscious of shifting timelines and budgets.

#### **Our Technology Partners**



#### **Our Tools and Processes**

- Amazon Cloud S3 Storage, AWS, Azure
- Python & R Models, Jenkins Build
- Tableau, Kibana, Qlik, PowerBI, Apache Hive
- SQL, MongoDB, PostgreSQL
- Agile Scrum, Kanban, eXtreme Programming
- Certified SAFe® Practitioner
- Pentaho Data Integrator, Apache NiFi and FME
- Spark, MapR Data Platform

#### Learn More

For more information about our **Data Science**, **Management**, and **Analytics** capabilities, contact us at 703-429-2450 or email info@niyamit.com.

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Schedule 70: GS-35F-144DA SBA Certified 8(a) | SBA Certified HUBZone CMMI DEV LVL 3 ISO 9001:2015 | ISO/IEC 20000-1:2018 | ISO/IEC 27001:2013

EFFECTIVE SOLUTIONS. MEASURABLE OUTCOMES.