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DATA SCIENCE AT SIRIUSMINDSHARE: A COMPREHENSIVE OVERVIEW

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SIRIUS DATA SCIENCE COMPETENCY FRAMEWORK

We at SiriusMindShare strive for excellence in data science. We designed a data science competency proficiency for our employees. It involves following behaviors:

- Enterprise Acumen
- Technical Leadership
- Data science Modeling

ENTERPRISE ACUMEN

Understands the enterprise business applications and goals. It has following sub competencies:

Enterprise applications knowledge | Enterprise data | Enterprise systems

The proficiency levels are defined as: *novice, intermediate & expert.*

Here is the competency map:

Table 1: Enterprise levels

	Novice	Intermediate	Expert
Enterprise applications knowledge	Aware of enterprise business applications	Worked with enterprise applications	Optimizes enterprise applications with other systems
Enterprise data	Identifies data needs of enterprises	Leverages enterprise data for solutions	Strategizes innovation using enterprise data
Enterprise systems	Aware of enterprise systems	Leverage enterprise systems to innovate new solutions	Optimizes enterprise systems with new techniques

TECHNICAL LEADERSHIP

It involves building, coaching and proliferating technical solutions in organization for enterprise problems. It has following sub competencies – Engineer | Senior Engineer | Architect

The proficiency levels are defined as: *novice, intermediate & expert*

Here is the competency map:

Table 2: Technical leadership levels

	Novice	Intermediate	Expert
Engineer	Understands technical module basics	Delivers basic technical modules	Creates technical modules with ease
Senior Engineer	Understand how to deliver single solution in system	Delivers several solutions in system	Creates entire system solution with ease
Architect	Designs an entire system	Designs several systems	Integrates complex systems with enterprise applications.

DATA SCIENCE MODELING

It involves building, tuning and optimizing data science models in organization for enterprise problems. It has following sub competencies – Analyst | Data Scientist | ML Architect

The proficiency levels are defined as: *novice, intermediate & expert*

Here is the competency map:

Table 3: Data science levels

	Novice	Intermediate	Expert
Analyst	Understand analysis basics	Delivers simple analysis	Creates advanced analysis
Data scientist	Understands data science modeling module basics	Delivers basic data science modeling	Creates data science models with ease
ML Architect	Understand end to end data science pipeline	Delivers several end-to-end data science pipelines	Creates new innovations in data science modeling and pipelines

LEVELING

Following levels apply to analyst, data scientist & ML architect. OR Engineer, Senior Engineer & Architect

Table 4: Experience levels

	Experience (years)	Education	Size of project	Type of project
Novice	1-2	BS	Simple, Complex	None
Intermediate	3-10	MS	Simple, Complex	Enterprise
Expert	10+	Ph.D.	Complex	Multiple Enterprises

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