Ethics + Science: The New Philosophy for Data & AI	Governance	Methodology	Quality Process	Skills
Ethics	• Enterprise policy for controlling moral issues and good use of data and AI[3] • Vision with human oversight • Anticipation of new technologies	• Sustainable model businesses and appointment of a new executive role responsible for Data Ethics	• Automatic tools to scan AI algorithms for fairness, transparency and privacy in prediction and classification • Full data quality on core data (master, reference data)	• Economics, social and medical science • Philosophy • Law and Policy
Data Architect	• Information System Architecture framework and key process to conduct the change management on data architecture	• Top-down approach to establish the data foundation based on key business objects • Bottom-up to fulfil a central business glossary	• Coverage of the Data Architecture within the entire Information System • Data quality issue such as data duplication, data corruption, etc.	• Enterprise Architect
Data Steward	• Corporate processes to apply clear data authoring and validation on core data (master, reference data) • Data lineage at the level of the data values	• Master Data Management program based on incremental implementation of data and associated approval workflow[1]	• Coverage of the Data Stewardship activity within the entire Information System • Effectiveness of the data steward for the businesses	• Business knowledge of the company / organization and perfect command of the data glossary
Data Modeler	• Version management on the semantic data models and their derivation into logical data models • Data lineage at the level of the data structures	• Semantics data modelling process[2,4] • Logical data modelling process • Physical schema optimization rules	• Coverage of the Data modelling activity within the entire Information System[2] • Ability to share the knowledge on the data	• Methodologist in semantic data modelling, then derivation to logical data models
Scientists	• Enterprise policy to secure the memory of data values and AI algorithms parameters used to compute prediction and classification	• Master Data Management program based on the version management of data and AI parameters used[1]	• Auditability of AI algorithms including prediction, classification and associated data used	• AI, mathematics, economics, social sciences, natural sciences

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1 www.orchestranetworks.com
2 www.praxeme.org
3 www.smart-up.org
4 http://www.youtube.com/watch?v=T4BmyF-SAwY – Modeling process in Master Data Management