Asset Data Availability underpins Modernization in Asset Intensive Industries

'New Business Models' is the first of IDC's 10 Decision Imperatives for utilities to address in 2015.[1] Smart Grids, Smart Meters, Renewables and Distributed Generation are all combining in an increasingly competitive environment. IDC's advice to counteract fundamental (and currently unsure) change is simple in principle, but not necessarily easy in reality: IT agility is required. In short, a huge influx of new data needs to be analysed and deployed in a flexible manner to support rapidly changing business processes.

Utilities increasingly need to harness the power of big data to compete and survive: Smart meters and mobile apps will allow utilities to encourage their consumers into mutually beneficial consumption patterns; Smart Grids and distribution networks will improve reliability of supply, reduce losses and contribute to reduced operating costs. The potential of big data is huge in many industries, including utilities; but many forget the 'little data' which underpins all big data analysis by providing both context and the ability to take action. In the case of utilities, customer services are often a focus for implementing big data analytics. However, utilities are asset intensive organisations, and big data analytics on assets has a huge potential to improve and adapt operations: procurement, performance, maintenance and asset sales. In order to leverage asset analytics, the availability of high quality asset data should be at the centre of any agile IT strategy. This data should flow smoothly between all systems and business processes to ensure analysis and processes are grounded in fact and are immediately actionable. Not an easy task, since IDC also suggests that utilities are unable to invest in legacy systems replacement.[1]

A major European gas transportation company uses Informatica MDM to provide a common view of all assets for improved data accessibility and agility across the enterprise. Arhis is the prime integrator for the solution, delivering the original project on time and currently provides application maintenance.

Distribution of Asset Data

As most utilities have an Asset Management System in place, a common mistake is to assume that they already have a good grasp of their asset data. Unfortunately the truth is far more complex. Since assets are at the core of every utility, asset data is required within numerous departments, each with their own business processes, IT systems and view on asset data. Examples of asset data usage are provided in the table below:

[1] IDC FutureScape: Worldwide Utilities 2015 Predictions webinar, December 17th 2014

Table 1: Asset Data Usage

Department	Primary processes
Finance	Better tax planning and execution Complete asset inventory for valuation
Maintenance	Reduce planned & unplanned downtime Accurate budgeting Increase staff efficiency
Regulatory	Staff efficiency for rate case reporting
Operations	Accept, analyse & act on new big data sources Improved field preparedness and resource efficiency
Customer Services	Targeted advanced warning of outages

This fragmented view of asset data builds in costs through poor decision making and wasted efforts across all operations. For example, engineers frequently take to the field without proper information, causing delays and rework. Navigant Research predicts spend on asset management and condition monitoring solutions will triple to $6.9billion by 2023[2]. These solutions are designed to transform maintenance into a lean process where digital predictions replace physical buffers such as spare part inventory or routine maintenance. An impressive sum of money that will deliver little value and increase risk of unplanned outages without access to clean and trusted asset data.

"If the pipe is not there, then we dig a few other holes …cost of doing business"

"Not sure where the transformers are owned by a joint venture partner, but it has an impact on maintenance cost"

Complex business models also come into play from an asset ownership point of view. Without an accurate view on assets, maintenance budgeting and asset valuation for taxation purposes become challenging guessing game. Current business model changes, for example E.On's move to renewables, and subsequent asset sales of €3bn, highlight the value of assets under management, where inaccuracies of even 0.1% implies inaccuracies of €millions in monetary terms.

Closer inspection of asset management systems often shows that even within 'a single' system, duplicate records and other poor data quality exists. This poor quality data is created primarily by two factors:

1. A tendency to create new records if a user can't instantly find what they are trying to find.
2. Multiple instances of a 'Single System'.

Master your Asset Data, Master your Business

Master Data Management (MDM) is designed to continuously link and coordinate the unique identifying elements of things such as assets, spares, locations and technicians within and across various systems.

[2] Asset Management and Condition Monitoring, Navigant Research, 2014

Informatica multi-domain MDM solutions are designed to eliminate excessive time spent by businesses searching for and manually reconciling data in different formats across multiple systems. It creates and delivers high quality data for unlimited reuse within the organization, supporting applications, routine business processes and big data analytics to produce actionable information.

Informatica MDM creates a 'golden record' of asset data by integrating asset information, finding and removeing inconsistencies and duplicates in your mission-critical data, then resolving it across all formats and systems. The availability of a single, trusted view of assets will deliver measurable business value across the utlility including:

- **Increased staff efficiency**
  - Reduced effort in data search, reconciliation & management
  - Reduced effort for regulatory reporting
- **Maintenance cost savings**
  - Delivery of complete asset history & location to analytics engines and engineers
  - Lower spare part inventory & costs through accurate visibility and planning
  - More efficient repairs with the right engineer, place, spares & tools for each job
- **Reduced property taxes**
  - Accurate ownership and location reporting
- **Improved maintenance budgeting**
  - Complete & accurate view of all assets and spares

Informatica MDM is a central part of IT systems modernisation at one of the largest global utilities, sharing master reference data amongst all stakeholders.

Arhis was selected as the prime integrator due to our in-depth knowledge of asset MDM and project implementation track record.

Clean, easily Accessible Asset Data from Arhis & Informatica

MDM implementations should be closely aligned to delivering business value in order to keep the project focused and provide a measurable ROI. Informatica MDM uses a flexible business model-driven MDM approach to address your unique MDM business requirements. Arhis has been deploying Informatica MDM solutions for more than 10 years with true MDM experts, and has successfully led the largest asset MDM projects for utilities in Europe, using Informatica's MDM solution. Two leading French utilities already rely on Informatica & Arhis to master their asset data to improve operations, cut costs, and drive asset availability.

Arhis' MDM Factory capitalizes on a unique set of software assets, skills and methodology developed through years of experience. In addition, their post-implementation support secures our customers' MDM deployment with the right blend of insource staff & deep MDM Factory expertise.

Together Arhis and Informatica can deliver a trusted, single view of all assets that will underpin both IT agility and support efficient business processes, especially important in times of change. Our combined tools and methodology ensure not only the technical success of an asset MDM project, but also the commercial success by delivering measurable business value.

About Informatica

Informatica MDM helps organizations to deliver business value with complete and accurate views of business-critical master data as well as a “360° view” of all relationships among this master data. Leading firms in utilities, financial services, life sciences, manufacturing, healthcare, and many other industries rely on Informatica MDM to meet their specific business requirements.

About Arhis

Founded in 2003, Arhis is a public limited company with its headquarters in Switzerland, and local offices in Spain, the United Kingdom and Hong Kong. Arhis is a leading company in MDM implementations with more than 45 data projects successfully completed in a variety of sectors ranging from Utilities, Retail, to Banking and Telco.