

## Top of Minds Report series Information Integration - IT Support of Business Agility

### Introduction

The information landscape is moving in a furious speed. The market focus today when it comes to Information Integration is very much on the amount of data – Big Data – as it is called.

Another facet of Big Data is a quickly changing information landscape and the business needs the ability to integrate and use information quickly.

Even so, IT often has a hard time to keep up with the fast moving business information environment.

This Report will discuss on a high level what is needed, from an information integration point of view, in order for IT to be an enabler of Business agility and not the road block it often is seen as today.

*The business want a solution that gives them the ability to integrate and use information quickly*



### About the author

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### About Top of Minds

Top of Minds is a specialized company that offers services in the data warehousing and business intelligence area. We are premier partner in the Nordic countries on the data warehouse development using an agile approach where we use Data Vault to increase the benefits of the projects we participate in. We are a company with great focus on competence, our expertise and our clients' expertise and we are constantly working to spread our knowledge.

## The ever changing information landscape

A business has to have the ability to change with its market segment or even better, drive the change in its market segment.

Different things drives the change of a market segment, it might be new or changed;

*A business must have the ability to change with its market segment or even better, drive the change in its market segment.*

- products/services
- legislations
- geographical areas
- competitors
- scientific breakthroughs
- acquisitions/mergers

These changes all have one thing in common; they will produce new business information.

If you want to be a market leader, you should be in control of your business information, both internal and external and if the business wants to be the driver for changes in its market segment it should be the first among its competitors that can use the new information. That will help the business to drive the market segment in the direction it wants it to go. Through the usage of analysing, reporting and making predictions, of the new information a company can take the right decisions, before any of its competitors can.

The differentiator here is; how fast can the new information be integrated with the rest of the company information and made accessible and usable to the business.

## Flexibility in times of change

Time is of essences when it comes to the usage of new information for business decisions. To be first with new information integrated to the already existing information gives you an edge against others that are not ready.

It is important that a company has a flexible architecture, and most so from an IT perspective.

Changes in the market segment can affect many different levels of the company. All the way from strategic business goals and the business model down to the physical implementations of IT systems.

*The problem is, that the part of the company architecture that should be most flexible, is hardest to change*

The problem is that IT, which should be most flexible part of the company, is often hardest to change. IT, that should be the enabler for change, is many times the part in the company architecture that prevent a company to change in a rate it wants to.

## The IT landscape and change

Many companies IT landscapes is diverse and complex, with a lot of different systems with overlapping functionality, which is one of the main reasons for information integration.

One of the hardest and most complex Business and IT projects are information integration projects, where you build Data Warehouse, SOA, Enterprise Information Integration solutions etc.

When you build a complex solution, changing it will become that much harder. The most time consuming and expensive process in the IT landscape is development of new/changed code or new/changed data base tables. Things that might seem like a minor change in IT might be a huge problem from a business agility view.

Anyone that has worked in a larger IT organization knows that even the smallest of changes has to go through requirement documentation. Developing and testing in different environments, such as Development/System/Acceptance before it is allowed to be released in to the production environment. The whole time the deployment process of these large IT organizations are extremely controlled and deployment into production is only allowed at a certain date in a week/month/quarter.

If failing to make the changes and go through all the test environments before the specific deployment date to production, you might have to wait a long time before the next date of production deployment comes. All the time while the Business is wondering where their new information is.

That kind of deployment process is needed in a big and diverse IT landscape. IT needs that kind of control of everything that is happening to secure high quality of the solutions in the production environment and to keep up with legal regulations and compliance requirements.

So would it not be sweet to keep the amount of IT development down to a minimum when the business changes?

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## The physical representation

Today, most IT models and design patterns are focused on ease of understanding. That is an important aspect when designing the logical data models and design requirements, but when that is implemented as the physical representation of information, IT is going down the path of being the most inflexible part of a company's architecture.

The physical representation of information in our IT systems should be focused on the ability to absorb new information requirements with as little effect to code or tables as possible to enable and support the company in its change.

*...IT is going down the path of being the most inflexible part of a company's architecture.*

### Information integration to the Business

The solution is to have data in the information integration layer in its raw format but stored in flexible data base structures that can absorb new information requirements from the business without any change on the IT side.

To do this we need to break out the context (Meta Data) from the data into a separate Meta Data layer, see [Figure 1: High Level Overview](#), which the business has the power over. There, the business can decide up on what the information should be used for and how to represent it. The Business will also have the ability to change these "rules" without any need of IT Support.

#### High Level view

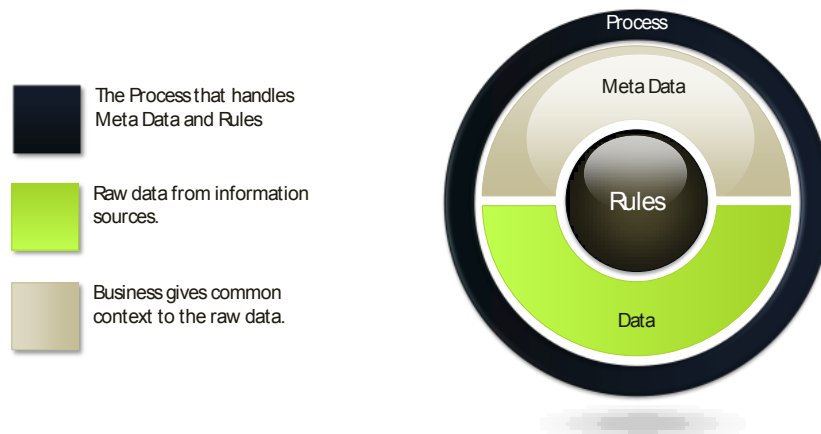
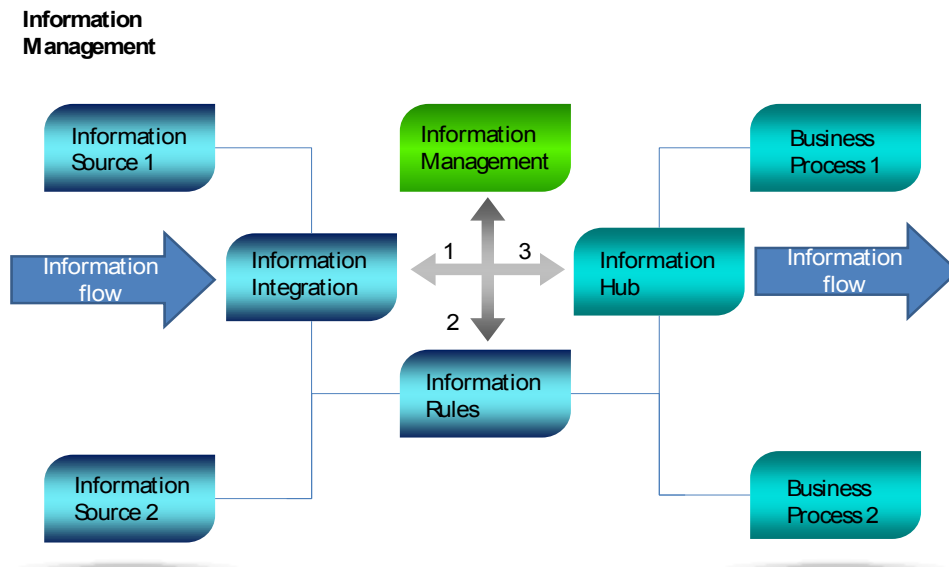


Figure 1: High Level Overview

### Information Management Process

To be in control of the information flow of the information integration layer you need to set up an Information Management Process, see [Figure 2: Information Management Process](#), where

dedicated people in the business sees to that the information is correctly configured for usage in business processes.



**Figure 2: Information Management Process**

1. The information flows into information absorbing structures in the Information Integration solution. The Information Management gives the information context. That means that the business decides how the information should be translated to a common view of the information.

2. Information Management sets up rules on how the data should be consolidated for the best possible usage in the business processes.

3. The business can pull out data from the information hub and the information management has the ability to help and support the extraction to fit the need of each business process.

What is special about this solution is that you can change the common view of the information, the rules for creating the best data and extraction rules in run time, without the need of any IT development.

This means that IT has a system that supports changes in the business environment and the business, through the Information Management process, has the direct power to change the usage of the information.

*This means that IT has a system that supports changes in the business environment...*

## With freedom comes responsibility

When building this kind of solution, you give power over the information directly into the hands of the business. It is important to understand, that even if the technical solution itself is extremely flexible, it is not magic. Without proper management of the information the result will not be as good as it could be. Therefore it is crucial that the people that manage the “rules” are competent, not only in the business but also understanding information management as a discipline.

*It is important to understand, that even if the technical solution itself is extremely flexible, it is not magic*

## Conclusion

This design concept can be used for all kinds of different information integration IT solutions, such as Master Data, Data Warehouse, Operational Information Integration are all well fitted to be built upon this concept.

If they are correctly implemented, IT has gone from being a roadblock for business change to an enabler and supporter of business agility when it comes to information integration.

Top of Minds have the knowledge, experience and the competence to set up processes, design and build such a solution for you. Contact us for more Information.

For a more technical detail on how to build this kind of solution, see “ToM Report Series on Agile Information Integration – Hyper Agile Design Pattern”

Thank you for reading this Report.