An Agile Approach to Data Mapping and Integration

The ability to implement change quickly in any development method is not only highly desirable but also necessary as every level of every organization attempts to achieve better, faster and more complete insight into customer's needs and analytics.
Developers and architects want Business Intelligence solutions that are highly effective, and the only way to develop a highly effective Business Intelligence solution is to implement the highest priority requirements first.
Stressed processes are not necessarily bad processes. As organizations attempt to do a lot more with a lot less, much faster than before, Business Intelligence groups everywhere must adapt and upgrade outmoded processes and deliver faster results by trying to modify existing development methodologies .to deliver faster results.
This maximizes Return On Investment (ROI) and brings the stakeholders quick wins that allow for better and faster adoption of the Business Intelligence Solution. Because requirements change constantly and quickly, organizations must seek to embrace change rather than avoid it, manage change rather than fight it!

Recap: Key to Agility

- Manage requirements completely – Implement the highest priority first.
- Prove the architecture and solution early.
- Adapt and upgrade internal processes and methodologies to deliver faster results
- Requirements change. Embrace this reality and manage it quickly and effectively.

How do you Achieve Success in Building a Successful Business Intelligence Solution in a Non-Intrusive and Agile Way?
Let's examine practical approaches in which the ETL development process can be optimized to deliver business results faster by addressing the bullets above:

Manage requirements completely – Implement the highest priority first.
Partner with your business sponsors to identify their top priority requirements first and identify the 'low hanging fruit' to deliver early project wins. Trace data requirements back to the system(s) of record, building the Source to Target Mappings (STM) rules as you go. Quickly analyze the data and receive approval on the sourcing and business logic in the STM (E.g., Business wants to see total sales for a region by product – you need to identify how many systems of records exist, which tables they are sourced from, and if the data is complete and in good quality).

Prove the architecture and solution early.
Ensure the architecture is auditable and data is traceable from the originating source. Conduct a short proof of concept to demonstrate that the solution will work – no surprises. If the architecture or design is flawed you want to know about it early.

Adapt internal processes and methodologies to deliver faster results.
One of the too-often overlooked areas of integration is the "pre-etl" - Source to Target Mapping (STM) process. We can call it the source to target mapping problem.

Anyone who has managed a data warehouse or an integration project where lots of data is being moved or federated understands the difficulties and risk involved in this seldom-discussed, hidden area of the development process. Integration teams address the STM problem using resources that create and manage hundreds to thousands of Excel-based spreadsheets which document the STM rules. These STM are passed via email through the workflow process: Technical analyst → Approver → ETL Developer → Tester. The problem is compounded when there is a change and the cycle is repeated. Hundreds of Excel files quickly become impossible to maintain. The process is characterized by being slow, manual, and error-prone – often resulting in QA teams and ETL teams dismissing the STM requirements as being out of date and not accurate. That sounds like project risk - doesn't it?

A good agile process centrally manages and tracks the mappings through the workflow and change process, reducing risk and errors, and allowing developers central access to accurate coding requirements – the STM.

Requirements change: Accept this reality and manage it quickly and effectively.
Requirements change for a variety of reasons. Either your business sponsor's priorities change or, more likely, as you learn more about the data the detail coding requirements change - This change must be effectively managed or teams are destined for trouble or worse: Failure. Anticipate the fact that requirements will change and develop a good strategy to measure the impact of the change and to manage it effectively.

AnalytiX Mapping Manager

AnalytiX™ Mapping Manager™ software solution was designed by integration experts and solves the problems outlined above. It provides significant improvement over traditional and manual methods which use spreadsheets or documents to clumsily address the Source to Target Mapping problem. It makes the entire STM process faster, more manageable and collaborative.
To view the full white-paper, visit www.analytixds.com/solutions.htm

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