

Final Exam: Estimating and Describing the Future of your BI/DSS

If technical aspects were no factor, along with uninhibited access to resources and the budget necessary to run such an extensive BI DSS project, I would plan to rapidly expand the scope of researching housing affordability. With inflation and other variables such as home prices drastically increasing over the years, more studies could be compiled and further research questions asked around such things as what factors are contributing to why the younger generations can no longer afford their first home until later in life. Further, this project could be expanded even a great deal to compare US data alongside the data located at OCED which captures housing affordability on a global level. A true global view of housing affordability and the factors which play into it would be preciously valuable.

One of the many points Sherman makes regarding BI design layouts for visualizations is that consistency beats elegance (p 343). Standard backgrounds, titles, legends and navigation tools are key so there is a level of familiarity for the users of the tool. Sherman notes that developing templates improves the productivity of the BI team, speeds up BI delivery and decreases maintenance costs (p. 343). If a framework was developed to span globally for assessing housing affordability, standardization would be key beginning at the very bottom level of gathering data requirements. The images from Sherman's book shown below the process for the gathering of data requirements followed by the order of designing data models.

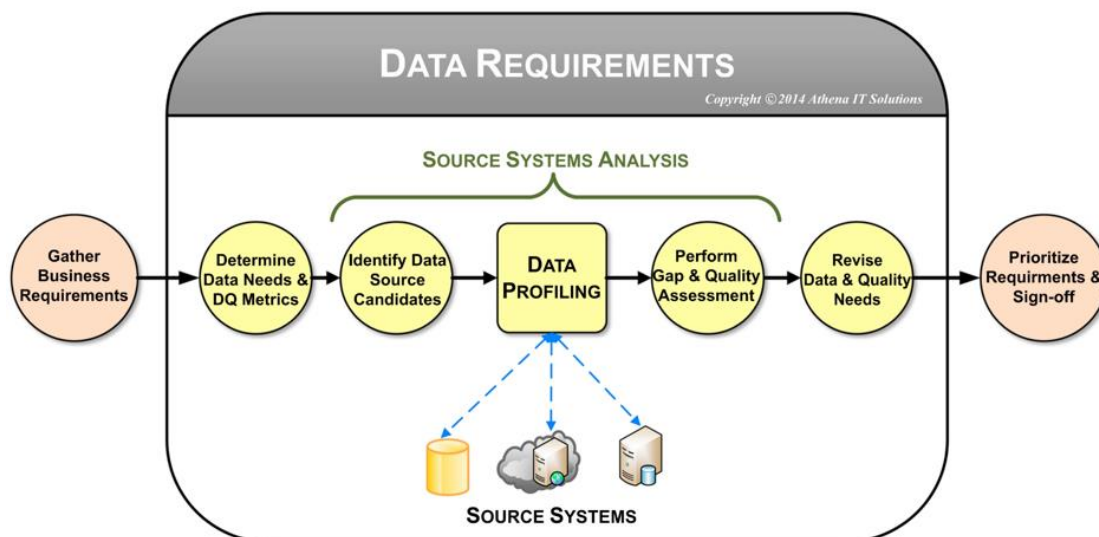


Figure 1. Sherman, Chapter 11 p 281.

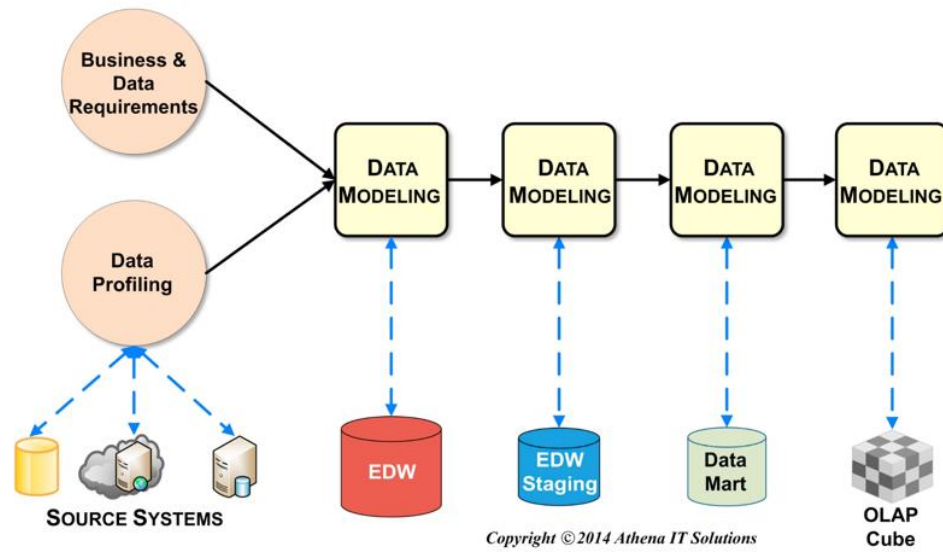


Figure 2. Sherman, Chapter 11 p 282.

Data integration plays an important role to stay cognizant of. Sherman alludes to all the misconceptions many individuals rationalize their use of manually coding instead of using tools. Sherman mentions IT has generally treated data integration projects tactically, thus failing to recognize the need for and benefits of common and reusable data integration processes. As shown in the below figure depicting the data extraction, transformation and loading process, this creates overlapping and redundant efforts leading to data silos, over budget projects and a diminished ability to respond to business needs (p 303).

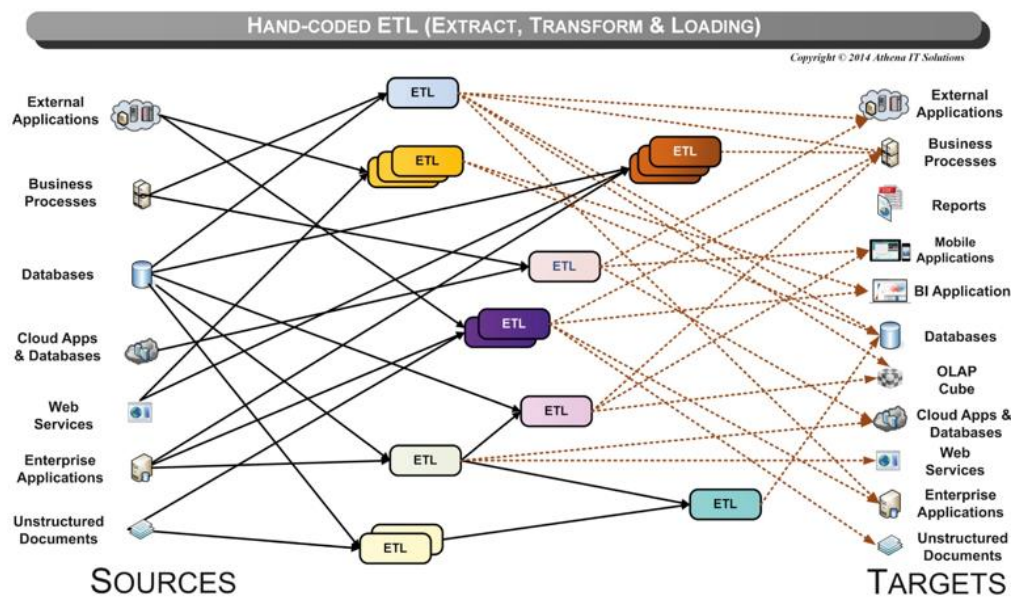


Figure 3. Sherman, Chapter 12 p 302.

Sherman appropriately notes that the demands on information and data architectures have significantly expanded. Not only have data variety, volume and velocity grown substantially, there has also been substantial growth in the need to include data from outside an enterprise and interact with a larger audience (p 74). The evolution of enterprise data over time is properly displayed in the below figure from Sherman's book.

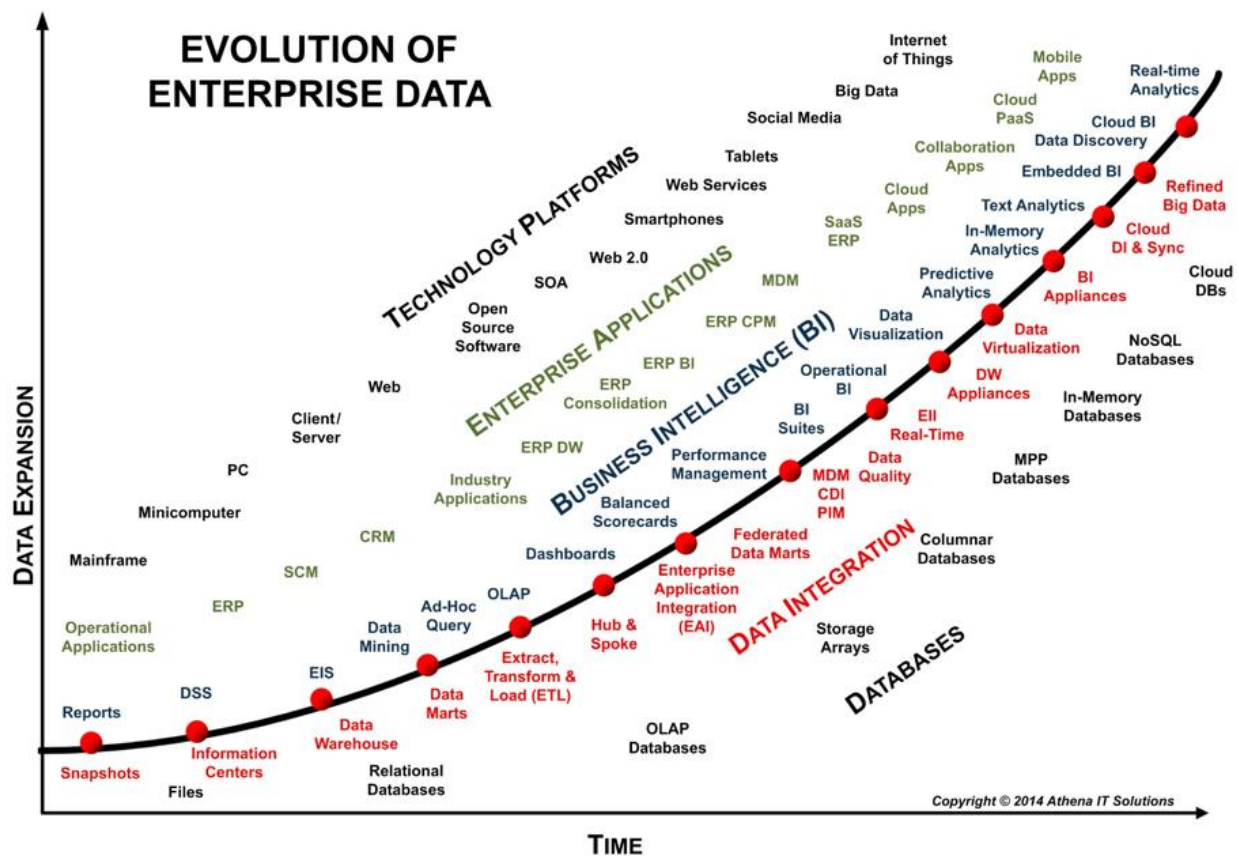


Figure 4. Sherman, Chapter 4 p 77.

As stated in my project report, every economic crisis causes more population to slip further into the poverty thresholds. I would want to use a highly developed BI/DSS system to aid in pinpointing the underlying causes and also capable of evolving going forward. A future BI DSS system could be able to cross-cut masses of data, pointing to areas best capable of supporting large-scale development. In an ideal world, multiple BI applications built for specific end users could even possibly point out infrastructural obstacles on a detailed level. As Sherman mentions, figuring out the what, who and why is the easiest part of implementing a plan. The difficult part is then determining how security will be applied in relation to people and data (p 81).

Per Sherman, designing the data integration architecture with its processes and workflow requires detailed information about all data sources and targets (p 280). In order to properly run a global scale BI/DSS system, standardization and repeatable processes would be key in what data needs and data quality must be in order to be consistent. For example, with the data I used in my final project sourced from the HUD hosted HADS system, while some insights can be gathered from the provided data points there is potential for so much more should this data be capable of aligning with industry skills and educational background. However, if this data is not collected consistently, it will not function effectively for self-service BI. In conclusion, as Sherman mentions, the data presented in each BI application must be designed in the context of the ease-of-use and functionality that is appropriate for its intended use and audience (p 348).

References

Sherman, R. (2015). *Business intelligence guidebook: from data integration to analytics*. Elsevier.