* **Introduction**

The current levels of automation are effective in other areas not effective in the data collection and feeding segments of the enterprise resource planning segment. Currently, in projects, more especially field work research projects such as market research use analogue ways of feeding data. The data is collected and fed into papers, and fed into the computer later; it is still the work of the researcher to estimate the validity of data. Even though most calculations are done on the machines, the calculating tools are not comprehensively integrated. An information system engineer is presented with the purpose of checking the most appropriate systems and their compatibility (Use it Better, 2016). They are also supposed to design the most workable information technology solutions for certain difficult tasks in a bid to eliminate the difficulties and errors due to too much human interventions. This proposal outline provides the basic information on workable solution to the problem of manual data collection systems.

**Identifying the problem**

It is essential to identify the problem first. According to Schuh and Upcraft (2001) universities had an issue with the issue of student’s affairs analysis. Some of the issue included the problem of methodologies used in need assessment. Real students are involved in the study, but the data collection is manual. During the Manual data collection, the data that is collected has to be fed into a system, say data analysis software. During feeding the people feeding feel that the work is too much and they have to narrow don into the most converging information. As a result they tend to discard most of the information, as outliers. If the information was fed automatically, there are chances that the outliers can be considered without affecting the results (Schuh & Upcraft, 2001).

In power engineering it is risky to have personnel check every detail of the system. A research proven that power outages globally are caused by faulty, dynamics and the risk of series of output and power conveyance. Considering the factors, solutions are developed from statistical considerations, but without automation, failure to get accurate results is a consequence. It is risky to go to the power lines with faulty circuits to collect information on the main problem. In addition, it is difficult to tell where an automated power production system fail from. Some of the powers stations are unreachable, for instance, the nuclear reactors, where only digital systems can gather information (Zong-xiang, 2005).

**Benefits of automation**

Benefits of automation include error free results. The automated systems do not overlook data because it is far from the converging data sets. During data feeding human laziness tends to narrow down data that is essential. Data collected from a given market can be having 1000 results, but the deadline is too short, or the workload is too much to the person feeding the data. As a result they tend to discard a lot of essential information. In qualitative researches, they might want to ignore the voluminous responses, to focus on the more precise data sets (Use it Better, 2016).

**Proposed solution**

The possible solution is the embracement of total digitization in information collection. An ERP system should have the data collection segments that are all digitized. An example is the innovative power grid which has cost power systems high amounts. However, it is not only supposed to be in the power industry. An example is in market research. The system should collect information. If, for instance a company has a website, they should give room and advise the clients to respond on the sites. I will suggest that the website have a connection to the ERP, in such a way that the data reads and is analyzed as it comes in. It should consider outliers, but they should not be discarded because they also offer essential information. In most cases, quantitative analysis is the most possibly solved problem by this approach. Quantitative approach can also be digitized, but it has to be discrete and optional questions (Use it Better, 2016).

To analyze non-stakeholders in the website, the field researchers should go to the field and provide the non-stakeholders with tablets or computes to leave their responses. Immediately the responder clicks the complete button, the information should go straight to the analytical tools where it can be evaluated automatically, and then finally, it should be presented automatically, in terms of reports fill in and mathematical presentations such as graphical methods. The main challenge is how the honesty levels of the respondents online or those responding to gadgets will be gauged, since in manual entry, the interviewer gauges the honesty through an eye contact (Use it Better, 2016).

**Conclusion**

Since data handling is an area of specialization to an information system engineer, it is important to check data accuracy. The first step is checking data collection tools. The manual process is full of errors sine human beings overlook some data sets to reduce the work load. It is also common to find people cooking data to meet deadlines. Data is delicate, for instance it can assist solve a market crisis and assist a firm to gain a competitive advantage. To avoid costs due to human errors, it is recommended that the scope of digitization and automation of data collection, analysis, and conversion or presentation should be embraced. Comprehensive integration is also essential in this automation and digitization approach.

References

Schuh, J. H., & Upcraft, M. L. (2001). *Assessment Practice in Student Affairs: An Application Manual. The Jossey-Bass Higher and Adult Education Series*. Jossey Bass Publishers, 350 Sansome St., San Francisco, CA 94104.

Zong-xiang, L. U. (2005). Survey of the research on the complexity of power grids and reliability analysis of blackouts [J]. *Automation of Electric Power Systems*, *12*(93–97). Use it Better. (2016). » Automated And Manual Data Collection – What’s The Difference? | UseItBetter Analytics [Web log post]. Retrieved from[http://www.useitbetter.com/blog/automated-vs-manual-data-collection/ (链接到外部网站。)](http://www.useitbetter.com/blog/automated-vs-manual-data-collection/)

Smith, A. D., & Offodile, O. F. (2008). Data collection automation and total quality management: case studies in the health-service industry. *Health marketing quarterly*, *25*(3), 217-240.

Weber, C., Saalfeld, M., Harboeck, C., Lobmaier, S. M., Weyrich, J., Grundmann, H. J., &Daumer, M. (2016). Automation in clinical data collection in obstetrics-Enabling pooled IPD studies for fetal heart rate.

Teknomo, K., Takeyama, Y., & Inamura, H. (2016). Tracking system to automate data collection of microscopic pedestrian traffic flow. *arXiv preprint arXiv:1609.01810* and activity monitoring. *PeerJ Preprints*, *4*, e2098v1.

Ozden, A., Faghri, A., & Li, M. (2016). Using Knowledge-automation Expert Systems to Enhance the Use and Understanding of Traffic Monitoring Data in State DOTs. *Procedia Engineering*, *145*, 980-986.