

University of Arkansas, Fayetteville

ScholarWorks@UARK

Information Systems Undergraduate Honors
Theses

Information Systems

5-2022

The Importance of Agile Reporting Methods in a Retail Sales Environment

Katie Haefner

Follow this and additional works at: <https://scholarworks.uark.edu/isysuht>



Part of the [Business Administration, Management, and Operations Commons](#), [Business Analytics Commons](#), [Business and Corporate Communications Commons](#), [Business Intelligence Commons](#), [Organizational Behavior and Theory Commons](#), [Sales and Merchandising Commons](#), and the [Technology and Innovation Commons](#)

Citation

Haefner, K. (2022). The Importance of Agile Reporting Methods in a Retail Sales Environment. *Information Systems Undergraduate Honors Theses* Retrieved from <https://scholarworks.uark.edu/isysuht/17>

This Thesis is brought to you for free and open access by the Information Systems at ScholarWorks@UARK. It has been accepted for inclusion in Information Systems Undergraduate Honors Theses by an authorized administrator of ScholarWorks@UARK. For more information, please contact scholar@uark.edu.

The Importance of Agile Reporting Methods in a Retail Sales Environment

by

Katie Haefner

Advisor: Craig Geiger

**An Honors Thesis in partial fulfillment of the requirements for the degree Bachelor of
Science in Business Administration in Finance and Business Analytics.**

Sam M. Walton College of Business

University of Arkansas

Fayetteville, Arkansas

May 2022

Table of Contents

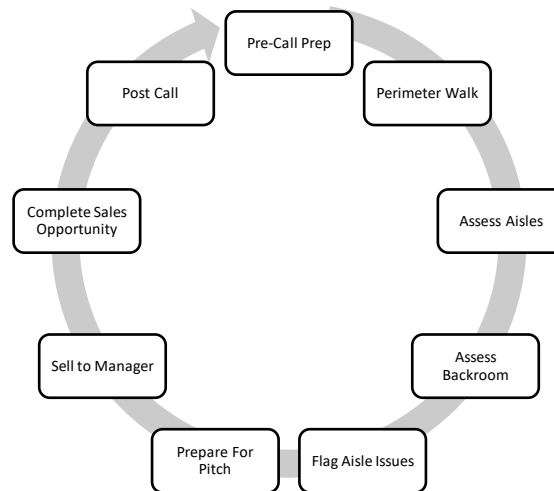
<i>Introduction</i>	3
<i>Learning Objectives</i>	3
<i>Situation Assessment</i>	4
<i>Project Objectives</i>	5
<i>Literature Review</i>	5
<i>Project Development</i>	6
<i>Analysis/Implications for the Company</i>	7
<i>Conclusion</i>	7
<i>Personal Evaluation</i>	8
<i>References</i>	10

Introduction

The primary objective of this project is to understand the importance of agile reporting methodologies for a retail sales team. Data has proven to be very vital for businesses to use and understand. In software systems that serve as data warehouses, it is expected that value be provided at each iteration within the system. This includes all the measurements, metrics, and reports. Agile reporting effects the way that data is utilized within a company. This paper looks at some of ways that value can be added when companies focus on ways to consolidate and standardize data as well as make it easily accessible.

Learning Objectives

As a sales intern this summer for The Kellogg Company, I worked in the field for the first five weeks alongside two Kellogg Sales Representatives in order to learn and understand the actions taken at the store level to drive business results and brand growth. Through this experience, I was also able to recognize how all the different functions within the company, specifically the Retail Performance Team, all worked together to support the work being done in the field. I had the opportunity to gain experience in grocery retail stores Schnucks and Dierbergs, and also Walmart stores in the St. Louis Market Area. Although the different retailers vary slightly on how they conduct business, the methodologies that we approached each store with stayed the same. On average, we spent 70 minutes in each store performing all steps in the Kellogg's 9-Step Store Call Process.



Through this cycle, I learned the importance of every single step in driving sales in store. When I first stepped into this role as a sales intern, I assumed my main role would be trying to sell Kellogg products to store managers/directors. After being in the field for 6 weeks, I learned that selling to the manager isn't always the most important part. Each step in the 9-step process was essential to continue to maintain and grow an active brand presence within the stores. While the only time you are truly selling to someone is during the 7th step, *sell to manager*, each step aligned with different objectives and goals. When looking at shelves we wanted to verify we were keeping our space and competitors weren't taking any facings. We also wanted to look for discontinued items to report to key account executives. Checking the shelves for stock outs was also vital for account executives to be aware of to understand if it was an issue within Kellogg and the supply chain or whether it was a problem in the retail chain not ordering our products. There were so many things in each store that were important to do to drive Kellogg business

results. Due to the timing expectations and limit set, we were forced to prioritize the needs and expectations in every store. What could we do that would drive the most results in the 70 minutes we spent in the store? Timing was everything. We needed easy access to all our data and information in each store to drive business growth week over week.

When out in the field with a Kellogg Sales Representative, we utilized an iPad to record and update selling activities and leveraged sales data in Tableau to sell to managers. This allowed for easy accessibility to all documents, reports, and information necessary when in stores. However, this also creates opportunity for refinement. While everything is right at your fingertips, it also causes confusion when there are too many things, in too many places, and on too many apps. In further findings, fellow interns and I found that many of the tools that the Sales Representatives had access to, they weren't even using for one of two reasons; one, because they didn't even know it existed, or two, because it was too hard to try to go find.

Situation Assessment

As a member of the Retail Performance Team, I have learned how important it is to understand the who behind everything you do. With the field sales reps being the who behind my project, I was able to use my experience of working in the field to guide the decisions that I made throughout the process. After identifying the end user, I solicited feedback from multiple Kellogg Sales Representatives (KSRs) to understand how to create a tool that would facilitate their ability to understand the different reports. Much of the advice that I got was centered around simplicity. They wanted the relevant data to be easy to access and easy to understand. A couple of the KSR's stated that often when there is too much information and in too many places, they just won't even use the tool. In one response, Dan Rice, a KSR in the St Louis region, stated, "Time is very important while in store and even more important when talking to a decision maker so having to jump from app to app can cause a little frustration." The top opportunities identified from the feedback were simplicity, accessibility, navigation between reports, understanding the tools available, and formatting for ease of use.

One of the apps that had opportunity for refinement was Tableau. Tableau is an excellent reporting and modeling tool that the retail and accounts team can utilize. The data within enables analysis to uncover patterns and trends within the business across categories, and the various reports can be leveraged in selling presentations with store managers. There are hundreds of reports that the retail and account teams have the ability to leverage, however the reports are only useful if the teams know how to use them. This created an opportunity for me to commercialize and create knowledge around these reports through the creation and integration of job aids.

The other opportunity that presented itself was with how to educate the retail and accounts teams on new data, information, and reporting tools. Currently, Kellogg lacks structure in how they present and deploy new dashboards. Recently, a new dashboard within the Performance Sales Drivers Workbook was added. When this dashboard was deployed, there was confusion around how to get the retail and account teams to understand how to access it and further how to utilize it. With a lack of deployment strategy as well as no formal training methodologies, new dashboards often go unused. In a recent article, Frank Brogie, Product Marketing Manager at Replsly, states "Data in the hands of one is helpful, but in the hands of an entire team is when it becomes powerful. (Brogie)" When the retail and account teams don't know how to use the newly implemented dashboards, value is lost. With more structure in place, Kellogg can optimize their sales through more efficient KSR's. With the current situation, this allowed me to consolidate and refine some of the current techniques that were being used to get information out to the retail and account teams.

Project Objectives

Through this project, I was given three main objectives in order to measure project execution and track performance. First, I was to build/update job aids for Tableau retail reports. Then I was to integrate the job aid tools into Tableau Dashboard Reports. And finally, outline a recommended training deployment plan for future Tableau Dashboard releases. At the completion of this project, the job aids would ideally increase efficiency for sales representatives while out in the field as well as encourage the retail and account teams to optimize the results that they could draw from the data and different reports. We will investigate the steps taken to complete this project as well as how the process will influence future reporting techniques.

Literature Review

The basic idea of utilizing numbers for analysis has been one that has been around for thousands of years. What started all the way back in 18,000 BCE as tally sticks, to in 2400 BCE as the abacus, has now turned in to computers with complex, ever-expanding capabilities (Marr, 2015). Humans have been storing and analyzing data for many centuries; however, since the emergence of internet and digital storage, the concept of Big Data has gained significant momentum. In 2014, “88% of business executives surveyed by GE working with Accenture report that big data analytics is a top priority for their business. (Marr, 2015)” With current data capabilities expanding, companies can no longer remain competitive in their industry without the analysis and implication of data. However, companies need to understand that Big data is less about how much you have and more about how you go about using it (SAS).

To effectively utilize the data at hand, agile reporting techniques have become an important part of every company and its technological structure. Adanza, VP of Marketing at Vector, states “Less is more is a fundamental principle in gauging the appropriate level of reporting: you should only create enough reports to adequately track success and measure performance. Too many reports are a waste of time and effort--both for the writers and readers of the reports. (Adanza, 2016)” Given the tools that companies have access to today, the challenge is finding the balance between too little reporting and too much and finding ways to create a balance to optimize efficiency and effectiveness. In order to do this, companies are investing in software systems and companies to store, understand, and utilize their data. In one article, Kidd states that by the end of 2021, “73% of organizations will be using all or mostly SaaS Solutions. (Kidd 2020)” SaaS, which stands for software as a service, is how applications are delivered through the internet, creating easy access to data from any device. Partnerships with companies that can help make sense of data are rapidly increasing for small businesses, large corporate companies, and every company in between.

In 1992, Walmart first deployed Retail Link, a software system that hosts inventory and source of sales data for Walmart’s suppliers. Then in 1996, Walmart made this system available through the Internet, making it more widely accessible to all different parts of their business, including their suppliers and manufacturers (Wailgum). Due to Walmart’s large presence in the retail industry, this showed a huge step in the need for accurate and accessible data in an organization.

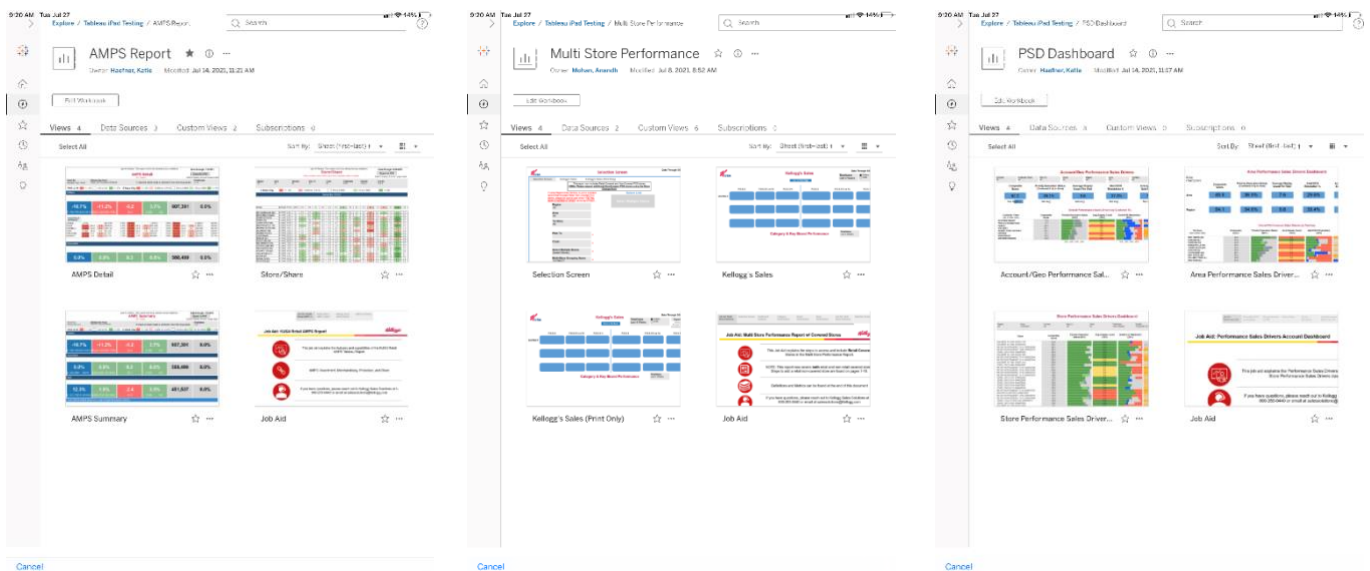
Within a business, specifically in sales, having and using data can help to personalize sales, anticipate customer needs, and create repeatable successes (Lucid Content Team). “According to a Business Application Research Center (BARC) survey of 559 business and IT decision-makers, data-driven sales increased profits by as much as 8% while simultaneously reducing the overall cost of operations by 10%” (Lucid Content Team). In the past couple decades, companies continually look for new software, new database systems, and new

technology that they can utilize to continually improve the current ways that they can store and analyze their data. Prior to 2013, Kellogg company used a traditional relational database system for their data analysis and modeling. However, when that solution was no longer able to keep up with the increasing demand for data, they were forced to look for new solutions. Kellogg chose to work with AWS, Amazon Web Services, a cloud-based platform that can “accommodate terabytes of data, scale according to infrastructure needs, and stay within its budget” (Amazon). The continuous need to create faster, more reliable, data-driven decisions is vital, and Kellogg, as well as other big companies throughout the world, have turned to platforms that offer SaaS solutions, like AWS. With a solution like this, Kellogg can further scale the systems used for data analysis, one of those applications being Tableau. Tableau is one of the software systems utilized by many major companies as the data delivery platform of choice to drive and grow their business through visual analytics.

Project Development

Over the last 6 weeks, I used PowerPoint and Tableau to create, update, and integrate job aids for the Multi Store Performance Report, the AMPS (Assortment, Merchandising, Promotion, Share) Report, and the PSD (Performance Sales Drivers) Dashboard. The existing versions of these job aids contained many pages of information. I worked to consolidate the information into fewer slides and fewer steps so that the retail and account teams can more easily understand the job aids. To create the reports, I utilized PowerPoint with each slide displaying step by step how to use different functions within the dashboards. Previously, these job aids pulled screenshots from the desktop version of Tableau. With the end user constantly in mind, I decided to take screenshots from the iPad version of Tableau because that was how most of the retail team accessed it. I also ensured that all job aids were consistent and easy to follow, using the same fonts, colors, and overall format throughout. Once my manager and I were satisfied with the end results of the three job aids, I started the integration process.

I partnered with Tableau Lead, Anandh Mohan, to understand the integration process and strategically place the job aids in a place that would allow for easy accessibility for the retail team. We met weekly to work through this process and the steps involved in integration. Using the iPad testing folder, I was able to test where a good place to put the job aid would be and how to execute getting it in that place.



As shown from the diagrams above, when in Tableau, a Kellogg Sales Representative can select a workbook, and now along with seeing the different reports in the workbook, there is also a job aid at their disposal. This allows for easy accessibility of the job aids which will encourage more of the retail and account teams to utilize the reports.

Analysis/Implications for the Company

After the process was complete, I laid out a plan for future Tableau Dashboard implementation. In a recent article, Frank Brogie, Product Marketing Manager at Replib, states “Data in the hands of one is helpful, but in the hands of an entire team is when it becomes powerful. (Brogie)” When the retail and account teams don’t know how to use the newly implemented dashboards, value is lost. With more structure in place, Kellogg can optimize their sales through more efficient KSR’s. In detailing recommendations, I presented four action steps to leadership that should be taken when implementing a new or updating an old dashboard.

My first suggestion was to designate a specific person to take over the job aids. From observation and conversations, it seems that there is not one set person that oversees the creation and implementation of job aids. I received feedback that often times the job aids were moved throughout various positions but never set as one person’s responsibility. My recommendation is to have 1 person that is accountable for the initial creation of needed job aids as well as continually updating the job aids as dashboards are changed and modified.

Second, I suggested that when a dashboard is first released, along with that dashboard there should be two things that are released simultaneously. A job aid should be created and added into the workbook of the new dashboard as shown from my project. These two things should go hand in hand. As well as the job aid, a 2-minute drill video should be created and released to give retail and account teams visibility on what the dashboard looks like and an overview of how to use it.

Third, I recommended that there be an initial training that takes place. I suggested the idea that this training takes place on the quarterly, regional town hall meeting in order to get a wide audience. These quarterly calls are essential for all retail and account teams to attend, so talking through a new dashboard during this call would reach a wide audience. This training will be structured to introduce the dashboard and walk through the different filter options, how to access the different reports, and what kinds of information and insights that it will provide.

From there, I recommended two follow up calls. These follow up calls should be a mix of training as well as a time for feedback. These will take place 30 days after initial implementation and then again 90 days after. While the initial training took place at the regional level, these follow ups should take place at the area level so that questions and feedback can be given. After each of these follow ups, KSM’s will be asked to provide the feedback to help continually improve the dashboard.

These recommendations will increase knowledge around the reports available to the retail and account teams. Often, dashboards have gone unused by many teams/people due to the fact that they don’t know how to find the information or decipher the data within the reports. With a structured release plan, new dashboards will be understood and therefore utilized by retail and account teams in the future.

Conclusion

Throughout this internship, I had first-hand experience in the field to see how important data-driven decisions are as well as where current data and reporting processes could be refined and improved. This entire process of creation and integration of job aids for my project will

increase proficiency for US Retail Sales Reporting and create more agile reporting methodologies. The business results that were gained will shape the future implementation of reporting tools. This entire project ultimately allowed me to see where processes could be refined in implementing new dashboards and updating existing ones. These updates and processes will lay out a framework for the best practices in implementing new Tableau reports. Agile reporting continues to be a necessary topic to improve the productivity and efficiency of the retail and accounts team. To work towards continually improving these processes, there are a couple key questions that will need to be asked:

- How can we increase the visibility to reporting tools?
- How does this report/performance metric differ from what is already available, how can it be beneficial to the retail and account teams?
- What is the business process that this reporting will support?
- Who will use this report and how will it be used?
- How can current processes and information be refined or consolidated to maximize efficiency?

Reporting techniques are methodologies that need to continually evolve as data capabilities are rapidly advancing. Data remains a driving factor for companies, so it is essential that companies understand how to use and leverage the mass amounts of data that are available to them. With more consolidated data, retail and account teams will be empowered with data capabilities to drive results and performance metrics in store. As an intern out in the field for the first five weeks, I really understood the need for concise and specific reporting. With continual refinement towards agile reporting techniques, data can allow companies to reach new levels of understanding their business and where opportunities for growth present themselves.

Personal Evaluation

This project, as well as the entire internship, taught me a lot both personally and professionally. Working for a company that has such a strong foundation in their values and mission allowed me to really understand the basis of what makes Kellogg a leader in the CPG industry. Through the various networking opportunities that I had and relationships I was able to build with professionals throughout Kellogg to build culture intelligence, I was able to gain more insight into not only the company, but also myself. The opportunities for involvement and networking have allowed me to expand on my strengths as well as recognize opportunities for growth. With a manager, multiple mentors, and a team of professionals there for support, I was given advice, mentorship, and guidance on where I want to take my career and the steps that I need to do to get there.

The University Relations Team within Kellogg, set the intern class up on many calls with senior leadership throughout the summer. On these networking calls, there was one question that someone always asked and that was, "If you were to go back to being in our shoes as an intern, what is one piece of advice you would give as we look to further our careers?" In just about every single response, we were told one defining thing, to take advantage of the opportunities that present themselves. This really resonated with me and is something that I will continue to think about as I approach my job search and career past college. I truly do think that every day is an opportunity to learn, and we must approach each day with that mindset to grow and develop new skills and insight. Kellogg stresses the importance of having a hunger to learn so throughout the internship, I was always very curious and constantly asking questions to gain new information and insight. The idea of being a lifelong learner is one that is very important to me

so seeing a culture value growth through learning is a very important connection. I think being a lifelong learner and taking advantage of opportunities when approached with them go hand in hand. When you take new opportunities, you widen your ability to learn more and gain more knowledge whether that be in a new area, new team, or new position.

Throughout the internship, I kept a detailed notebook for each meeting, event, and networking opportunity that I had. As I wrapped up the internship and began to reflect on my experience, I utilized all feedback, advice, and notes that I wrote to form 5 key takeaways:

1. Feedback is essential for both personal and professional learning and growth, if you aren't getting any, ask for it.
2. Be confident in everything you do and all decisions you make.
3. Networking is an opportunity, take advantage of it. You never know who could impact you and your career path.
4. Be curious, it will cause you to learn more, understand more, and engage more.
5. Show passion for your work, be enthusiastic.

From this internship, I have gained many skills, learned many lessons, and had so many experiences that I look forward to implementing into my career path going forward. The project work has shown me agile reporting is just one aspect that companies must continue to improve upon to remain competitive in the industry. Innovation and change have shown to be so important not only in reporting methodologies, but in all areas throughout the company. From these experiences, I have seen so much value in change. New demands, changing trends, and an increasingly competitive market should drive continual changes, with new techniques, new skills, new information, that will continue to drive growth and business results. Due to the success that I had as an intern and the results I helped to drive through my project, I was offered a Temporary Student Support position to continue working with Kellogg throughout my senior year. I look forward to continuing to learn more about Kellogg and the CPG industry by utilizing the skills I have learned thus far.

References

- 31, A., & Kidd, C. (2020, August 31). *SaaS in 2021: Growth trends & statistics*. BMC Blogs. <https://www.bmc.com/blogs/saas-growth-trends/#>.
- Adanza, Francis. (2016, December 20). *The best way to do agile project reporting*. SmartBear.com. <https://smartbear.com/blog/agile-reporting-tips/>.
- Big data: What it is and why it matters*. SAS. (n.d.). https://www.sas.com/en_us/insights/big-data/what-is-big-data.html.
- Brogie, F. (n.d.). *Agile reporting: How to save time while uncovering trends from the field*. Repsly. <https://www.repsly.com/blog/field-team-management/agile-reporting-saving-time-uncovering-trends-from-field>.
- National Council on Vocational Education. (2014). *The Kellogg Company Case Study*. Amazon. <https://aws.amazon.com/solutions/case-studies/kellogg-company/>.
- Wailgum, T. (2007, October 17). *45 years of WAL-MART history: A technology time line*. CIO. <https://www.cio.com/article/2437873/45-years-of-wal-mart-history--a-technology-time-line.html>.
- What is Tableau?* Tableau. (n.d.). <https://www.tableau.com/why-tableau/what-is-tableau>.
- Written by Bernard Marr. (2015, February 25). *A brief history of big data everyone should read*. World Economic Forum. <https://www.weforum.org/agenda/2015/02/a-brief-history-of-big-data-everyone-should-read/>.