

Stakeholders' SharePoint Site

The Stakeholders' SharePoint site's purpose was to serve as a go-to resource, providing the Aftermarket Planning Team's stakeholders with easy access to the team's research. The project had two audiences: the stakeholders who use the team's research and the team members who will manage the site after its completion.

The site that I was given on day one of my internship was extremely basic and had little work done on it. As a result, I completely transformed the site, using an incremental design approach. Since many of the pages and lists were extremely similar, I made and perfected one region's page before completing any other pages, applying a concept typically used when programming. Throughout this process, I applied backend and more complex SharePoint aspects to the site such as lists, JSON formatting code, and limiting permissions on management pages. I utilized these strategies to enhance the users' experiences on the frontend and backend sides.

To begin the project, I conducted interviews with the Aftermarket Planning Team's six employees and nine stakeholders. Then, I created an audience analysis document based upon the information gained from those discussions. From there, I was given the freedom to design and develop the site. I referred to the audience analysis whenever I needed to make decisions about the site, ensuring that all decisions for formatting the site and its individual parts were based upon the audiences' needs.

Next, I worked closely with the Aftermarket Planning Team to determine what content should be included on the site. Then, throughout the process of creating the site, the team provided feedback on how to improve the site and supplied additional content to include.

Finally, after completing the site, I conducted usability tests with stakeholders to check for any needed enhancements to improve the users' experiences on the site. The usability tests proved that the SharePoint site is effective. This success is primarily due to the fact that I based my decisions about the site's development on the audiences' needs as defined in the audience analysis.

After the completion of the usability tests, the site's link was shared with the entire Aftermarket and Customer Support Department, so they can use it to quickly and easily find the team's research. The team will continue adding new documents and managing the site's backend features to ensure this site serves as a resource for its stakeholders. After building the site, I wrote a user's manual for the backend side of the site to help the team members feel comfortable managing the site after my internship.

Currently, this site consists of nine pages and about 40 filtered document lists with the ability to add more pages and lists as the team wants to share new research findings.

First, figure 1 shows the part of the homepage that displays the heading and highest level of organization for the site. These six buttons allow users to immediately start filtering through all of the documents located on this site, helping them to find exactly what they need. In addition, the bottom section of the homepage features contact and about sections, but these sections had to be omitted from the screenshot for privacy reasons.

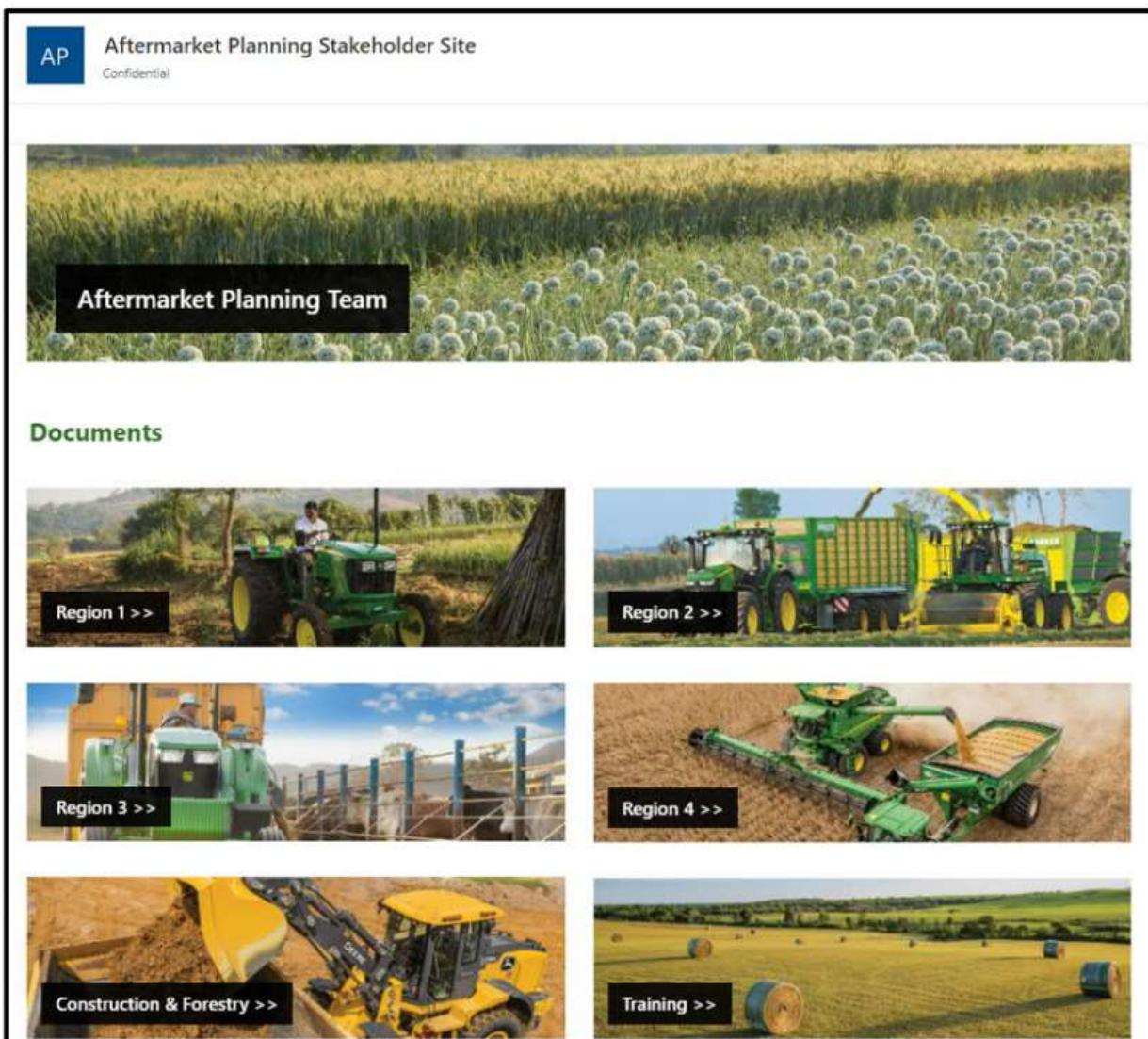


Figure 1: Homepage of the SharePoint Site.

Clicking on one of the region buttons or the Construction & Forestry button takes the user to the corresponding page. Figure 2 shows an example of a region page, in this instance the Region 1 page. Each region page features a navigation menu, links to top region documents (documents featuring most commonly used research), buttons that lead to documents lists that are categorized based on major research topics, and a contact section. Overall, including these features makes finding important documents quicker for users, provides guidance to users who are unsure of what research they want to find, and simplifies navigation of the site for users.

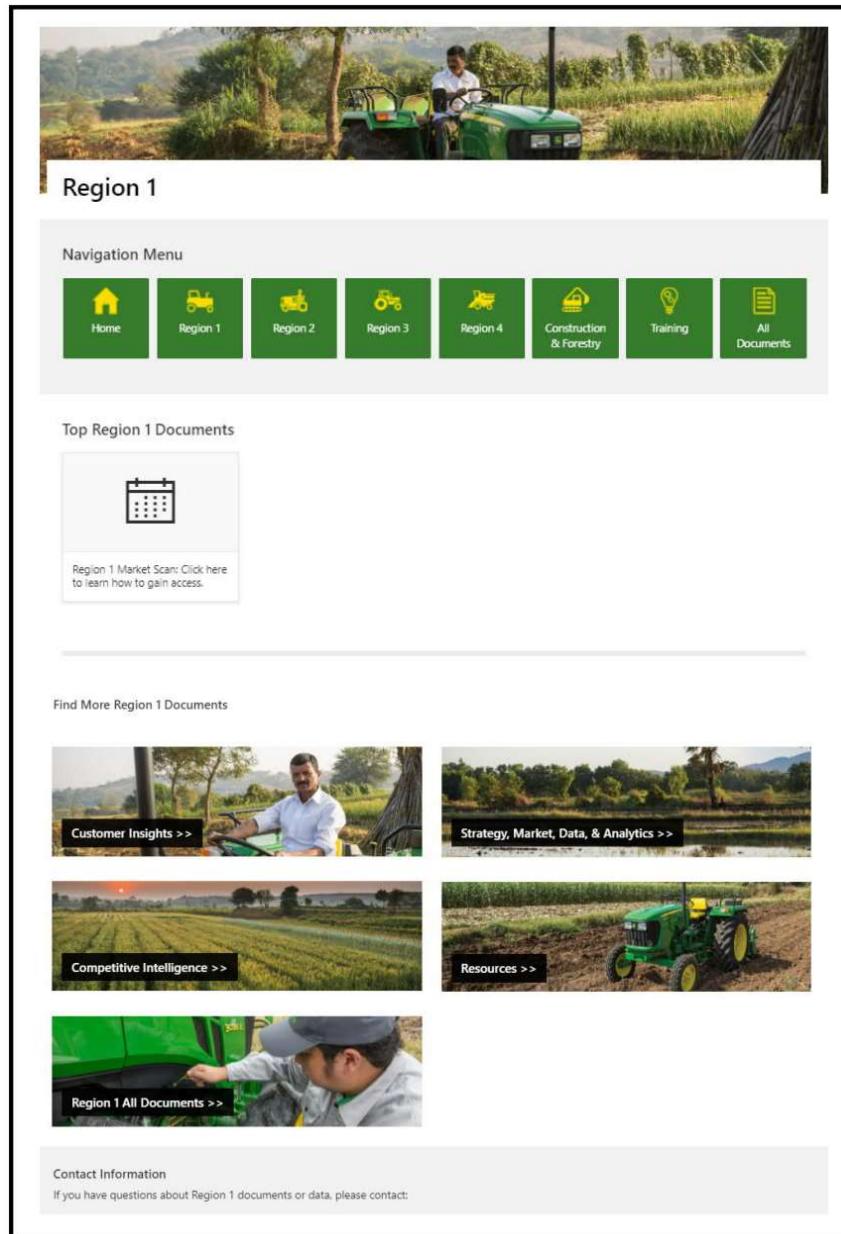


Figure 2: Region 1 page of the SharePoint Site, which follows the same design as the other region pages or the Construction and Forestry page on the site.

If users click the “Training” button on the homepage, the site provides a link to the document list filtered with training-related documents, which is shown in figure 3. Unlike the region pages, training only has one list. As a result, users have to click an extra time to get to the document list, when it could have been embedded in this page instead. Typically, forcing users to click an extra time to get to the document list is not good for the users’ experience, but in this case, it provides users with additional capabilities, improving their experience. If the training document list had been embedded in this page, it would not have had the filtering feature allowing users to manually filter through the documents with criteria such as the year that the research was completed or the product that the research focused on. In addition, including this page instead of directly linking to the training document list meant that the contact section could be included, something that SharePoint’s capabilities would not allow in the list. The contact section provides the training-specific contacts, which are different from the contact sections on other pages on the site and makes them important to include here.

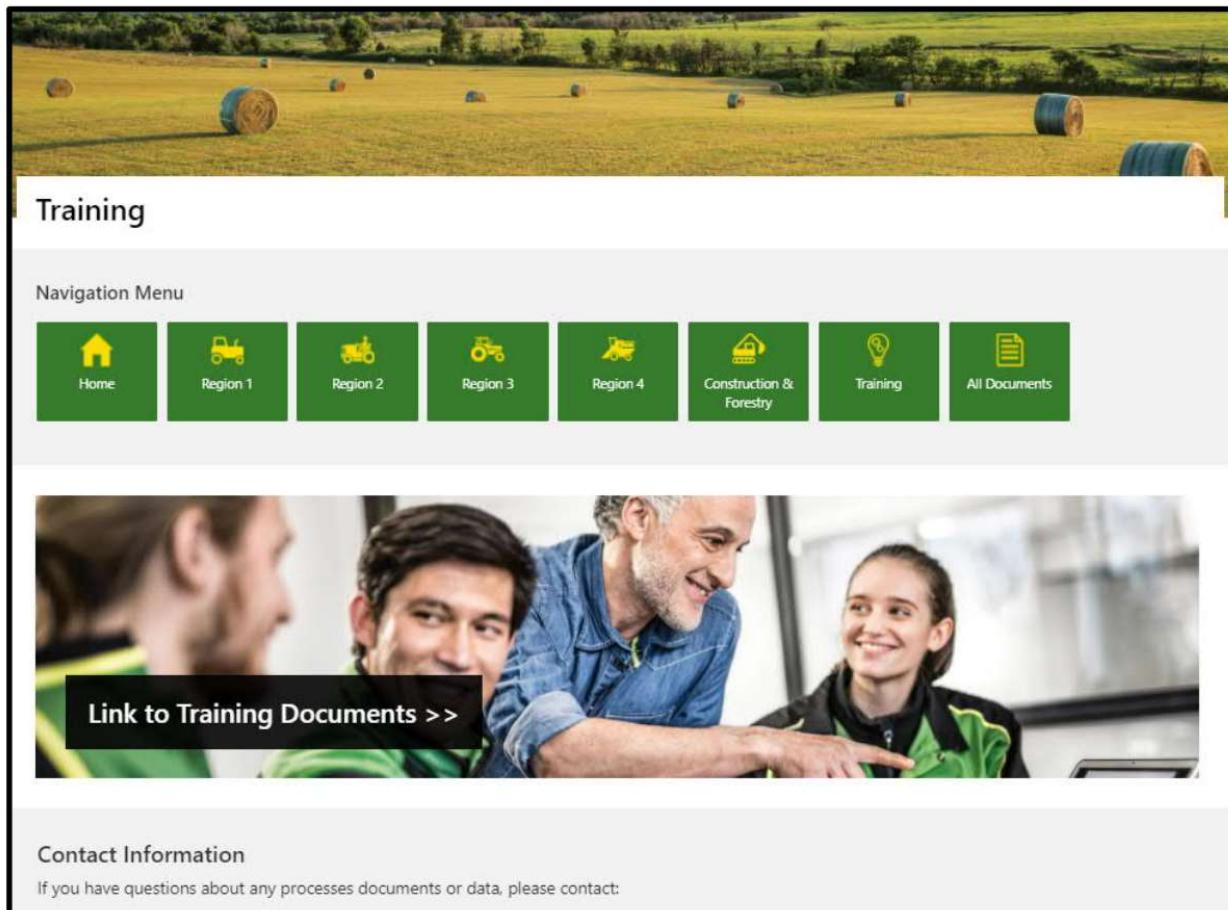


Figure 3: Training page of the SharePoint Site.

When users reach a document list, it looks like the one shown in figure 4 below. In this case, the figure shows the list of all of the documents which are linked anywhere on the site. Including an all documents list on the site means that if users are unsure of what they are looking for, they can come here to find what they need.

At the beginning of every document list on this site is a navigation feature. This feature allows users to go back to the previous page that they were using. I manually added and designed this feature to greatly improve the user experience when working with the lists.

In addition, every document link on the list includes the same information: screenshot preview of the document, title, description, and research categories. This information was included based upon the audience analysis document; they are common features that stakeholders could use to determine if the document might include the research that they are looking for. Including this information eliminates the need to manually go through each document to see if it has the needed research and saves the users time.

Also, since SharePoint did not allow the screenshot preview of the document, title, description, and research categories to link to the document, I edited the JSON code that formats the link to make it stand out more. These edits improved the user experience so that the users know exactly where to click and do not think that the link is broken because they are clicking on the wrong part of the image.

Finally, since the document list is long, the right hand side of the screen includes a filter section. Users can use this section to filter through the document list and quickly find the desired documents. Plus, this filter section includes other categories such as year or product-type that do not have specific lists, meaning it provides extra filtrations that the region buttons do not have.

The screenshot shows a SharePoint document library interface. At the top left is the title "All Documents". To the right is a "Filters" pane containing sections for "Categories", "Region", and "Year", each with a list of checkboxes. Below the title is a grid of document items. Each item has a thumbnail image (e.g., a yellow house icon), the title "Image Preview of Document", and a summary section with "Document Title", "Document Description", and "Categories" fields, all of which are redacted with black bars. At the bottom of each item's summary section are green buttons labeled "<< Back to Home Page", "Link to Document >>", and "More Information".

Figure 4: List of all of the documents on the site, which follows the same format as all of the other lists on the site.

Throughout the site, icons such as the four shown in figure 5 are used in navigation menus. Since I could not find enough provided icons to represent the different areas of work done by the team, I drew these four icons to help users have an idea of what is associated with the page they are clicking on, improving the users' experience even more.



Figure 5: Graphics that represent various pages on the site which are used in the navigation menu and are graphics that I drew.

Who is the Aftermarket Planning Team? Videos

The purpose of the “Who is the Aftermarket Planning Team?” collection of six videos was to promote and explain topics related to the team’s research to John Deere employees within the Aftermarket and Customer Support Department (the audience of the project). Another goal of these videos was to inspire employees to want to further explore the research talked about in the videos.

Each video features a different research topic and Aftermarket Planning team member, who serves as the subject matter experts. The video topics include:

1. Strategic Research Questions
2. Parts Availability
3. Qualitative Research Study
4. Competitive Intelligence Research
5. Customer Habits
6. Innovation Funnel

As all of the employees were working virtually, the videos were filmed using Microsoft Teams. Then, the videos were edited in Adobe Premiere Rush (also called Rush).

So far, these videos have been shared with all six members of the Aftermarket Planning Team (the subject matter experts of the videos) and the communications department. They thought the videos were effective because of their engaging and informational appeals. They also liked the story and visual aspects of the videos because they communicated a lot of information in a short amount of time.

During the next few months, these videos will be shared with John Deere employees within the Aftermarket and Customer Support Department via links on their internal social platform. Each video will be accompanied by a short paragraph (which I wrote) persuading people to watch the video and directing them to the full research documents or other places to learn more about the topic. The videos and captions direct employees to more detailed research documents on the studies mentioned in the videos as a way to promote the team’s research.

During the process of creating the videos, each subject matter expert helped determine the video topic, participated in a video interview, and provided research content, approval, and feedback on video edits. I also worked with a part-time student from the communications department to learn how to use the video editing software and organize sharing the completed videos with the Aftermarket and Customer Support Department. For the strategic research questions video, I served as the producer for the video while the same part-time student edited the video. For all of the other videos, I served as the producer and the editor.

When creating the videos, I was given a lot of flexibility in terms of style and content. As a result, I made decisions about how to edit the video and the content to include by considering the final product from the audience's perspective. I constantly asked myself if the part of the video related to the decision would help the audience and used the answer to that question to guide my decisions.

The following figures show the editing strategies that I used when creating the videos. I am unable to externally share any clips from the videos due to confidentiality restrictions.

The videos consist of multiple clips edited together as shown in figure 6. The core content for each video comes from an interview completed with the corresponding subject matter expert. While the final videos are each about 2-5 minutes long, all of the interviews lasted much longer than that, with the longest interview being about 50 minutes. As a result, for each subject, I combined the best clips from the interviews to tell a story. Our brains are hardwired to understand and remember stories better. As a result, formatting the video as a story helps the audience to engage with the content more and better understand the topic, helping to fulfill each video's purpose.



Figure 6: This screenshot shows an example of how the interview footage was edited together.

Also, incorporated within the videos is footage from research highlight reel videos and visuals to emphasize key points and make the videos more engaging. Including footage from the research study videos serves as a preview to the full study, making the audience want to watch the full video or read the full study, which helps fulfill the videos' purpose. In addition, the parts availability and qualitative research study videos include customer quotes, and the customer habits video includes dealer quotes. Including the footage of customer and dealer quotes allows the audience to hear the customers' and dealers' perspectives directly from them. These quotes increase the videos' credibility while also engaging the audience as they would rather hear the content directly from the customers and dealers, something not always possible, especially in a virtual environment.

Figure 7 shows an example of a visual used to emphasize a key point. This visual teaches the steps of the innovation funnel. The title of each step (hidden by black boxes in the screenshot) appears as the video topic expert explains the step, preventing the upcoming titles from distracting the audience. Also, the section behind the text for the title currently being discussed is yellow to help the audience know which step is being explained. Overall, formatting the visual in this way helps the audience to better follow along with the video content; they know exactly what the speaker is talking about and can better engage in the video to help them learn the topic easier. These strategies are applied to all of the visuals in each of the videos.

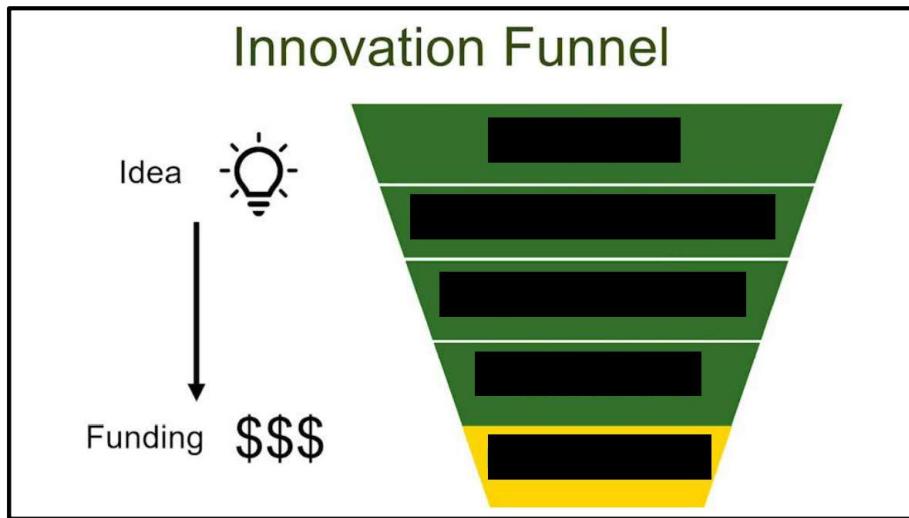


Figure 7: The innovation funnel visual helps the audience follow along with the video's key points.

Figure 8 shows how the visual shown in Figure 7 was incorporated into Rush. This visual was complex to make because of its different parts. Each line of text and box was an individual part. Rush only allows four visual parts to be shown at one time in the video. As this visual included more than four parts to be shown at one time, I made and added animation to the visual in PowerPoint. Then, I screen-recorded the visual, displaying the graphic as if it was a PowerPoint slideshow, and added the screen recording as a video in Rush. Following this process with several graphics allowed the videos to include custom and complex visuals. This was beneficial as many of the video subject experts provided me with visuals that they use when presenting the findings of their research. Creating custom visuals allowed me to eliminate distracting elements of the visuals and break the visuals up into multiple visuals if they were hard to understand or did not match the video's audio. Also, in many cases such as this one, complex visuals helped the audience better follow along with the video content. Basically, having custom and detailed visuals made the videos more understandable and interesting for the audience.

In addition, figure 8 shows how footage from a presentation was also included in the videos. When editing the original interview footage, I realized the audience would find it boring, stopping the audience from wanting to learn about the innovation funnel. Combining the original interview and the presentation footage made the video more interesting from the audience's perspective. Plus, as the presentation included aspects not in the original interview, the combined video gives the audience an in-depth perspective of the innovation funnel. This helps the innovation video better accomplish its purpose of informing the audience about research topics.

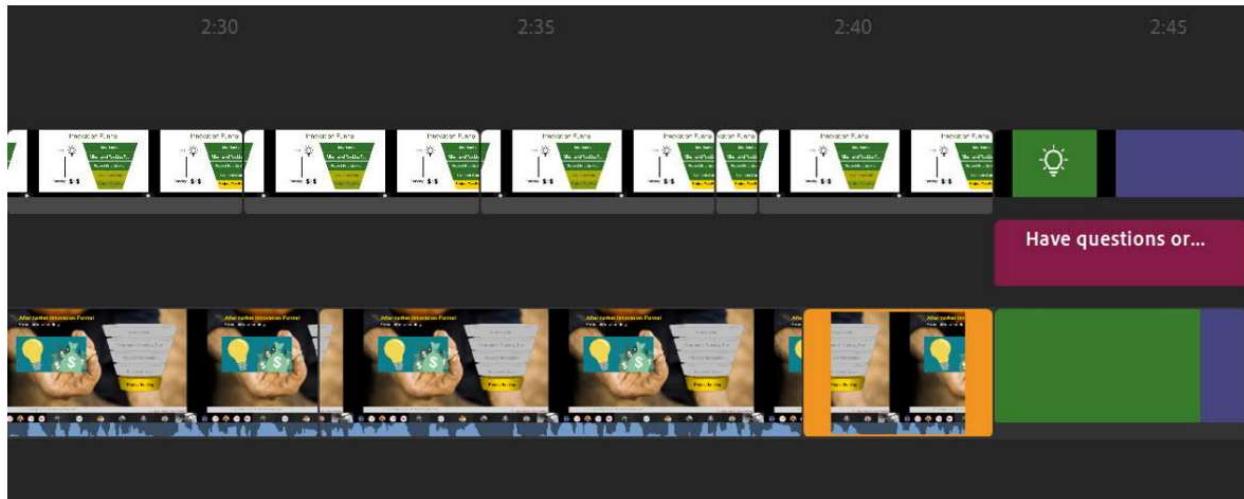


Figure 8: Because of the visual's complexity, the innovation funnel visual was created in PowerPoint and added to the video as a screen-recording.

Simpler visuals were manually created in Rush, as shown in figure 9. In this example from the parts availability video, the visual shows new lines of texts and charts/statistics which show in the video as the speaker references them, again helping to engage the audience in the research content.

In addition to engaging the audience, the visuals allowed the audio to be edited without being distracting. For example, in the clip shown in figure 9, the speaker used numerous “um”s, “like”s, and other filler words which distracted from the main point and would have been annoying to the audience. Normally, when eliminating filler words or long pauses, the audience can tell parts of the original footage were removed based on shifts in the video topic expert’s position on the screen. In this case, the audience cannot tell since the visual completely covers the video topic expert. Knowing this, I removed all of the filler words to strengthen the speaker’s summary and eliminate the distracting phrases, important edits to make since the findings were a very important key point of the video.

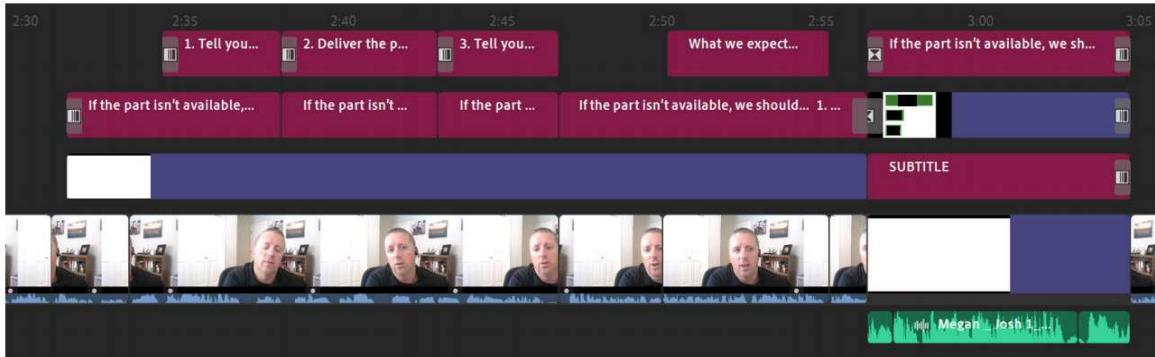


Figure 9: This clip from the parts availability video shows how simpler visuals were added to the video. Instead of being created in PowerPoint, this visual was created manually in Adobe Premiere Rush.

In addition to using visuals to engage the audience, the content of the videos is organized to capture the audience's attention. Specifically, since people's brains prefer when information is formatted with a beginning, middle, and end, the videos include this pattern to cater to their audience's needs. Basically, the introduction helps catch the audience's attention so they want to watch the video. The body informs the audience about the video's topic through the subject's content and visuals. Finally, the conclusion serves as a clincher to end the video and help the audience remember the information that they learned. While some of the introductions and conclusions use quotes from the interview with the video subject expert, others included visuals. For example, the competitive intelligence research video included the introduction in the form of a question as shown in figure 10. The question makes the audience curious about the video topic.

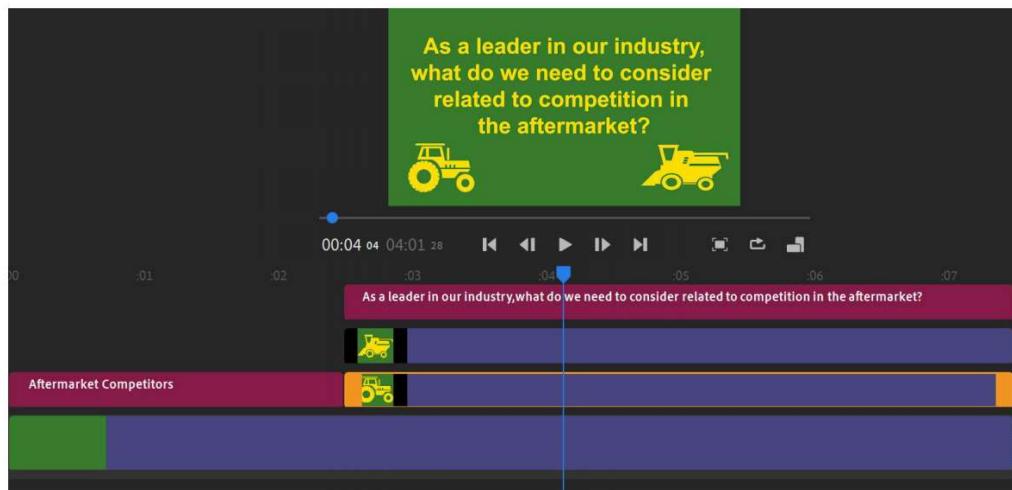


Figure 10: This screenshot shows the introduction to the competitive intelligence video, which uses a question to gain the audience's interest.

Customers' Habits Research Infographic

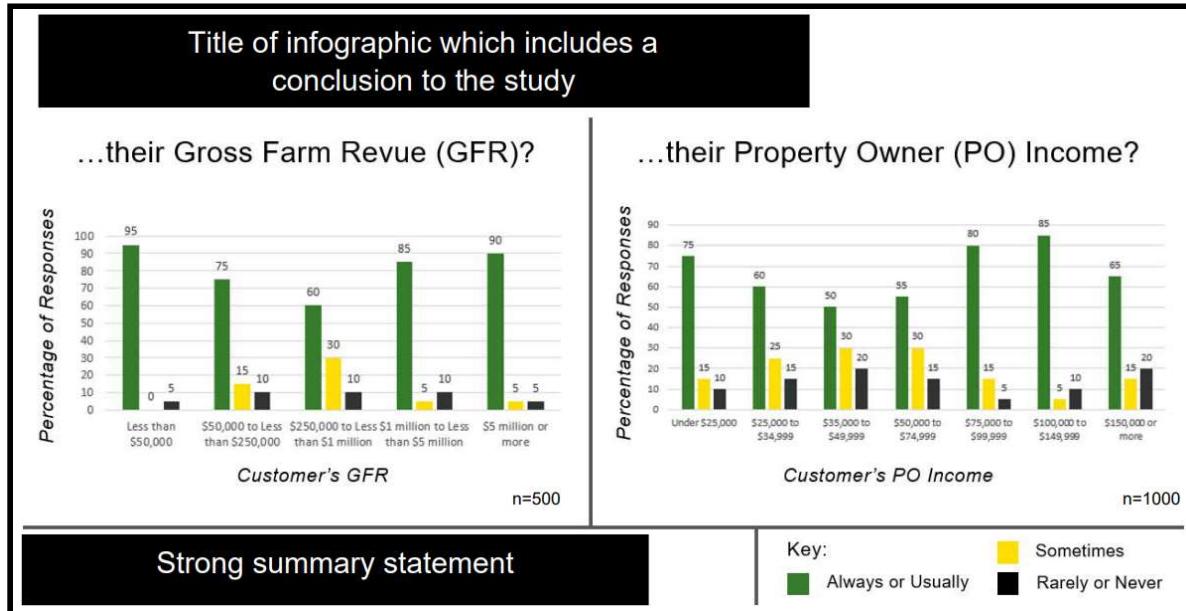
The infographic's purpose was to inform John Deere employees in the Aftermarket and Customer Support Department (the infographic's audience) of customers' repair and maintenance habits for their John Deere machinery. The infographic needed a succinct communication approach to explain important information but created without investing a lot of time into developing the piece.

This infographic is formatted as a PowerPoint slide deck. The data comes from research on customers' aftermarket habits. My manager gave me Excel spreadsheets, PowerPoint slide decks, and charts detailing this research. I used data from those files to create Pivot Tables in Excel and other charts to help me better understand the data and create a story for the infographic. After determining the infographic's message and what specific statistics would be included in the infographic, I created the infographic in PowerPoint. Along the way, I collaborated with my manager, who helped me to understand the importance and meaning of the data and provided feedback on the infographic.

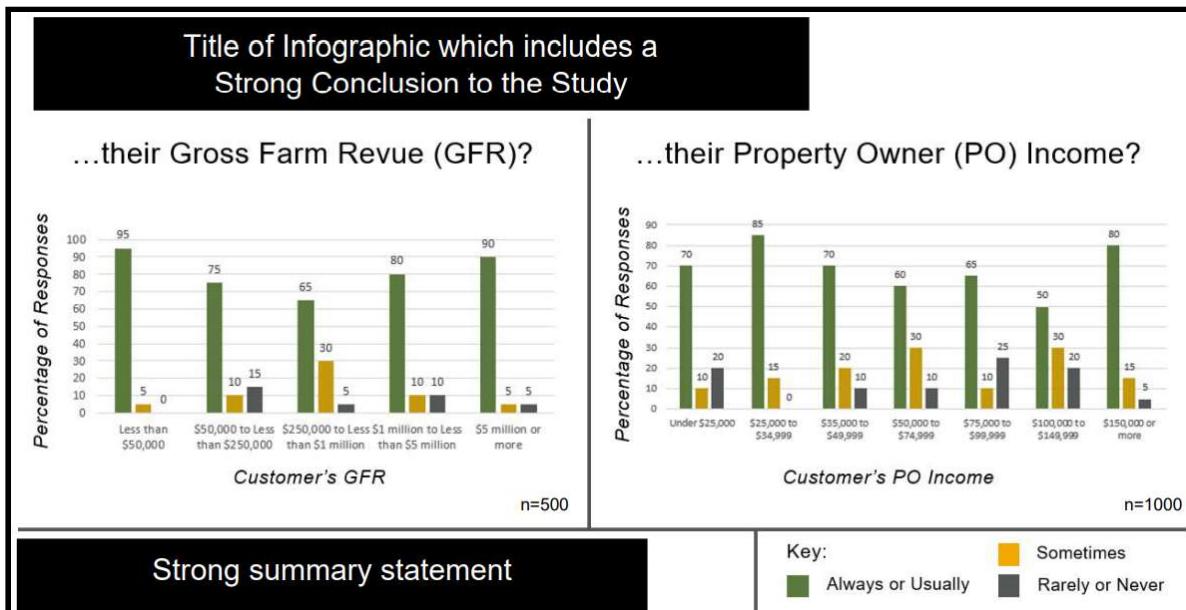
The infographic effectively informs employees of customers' repair and maintenance habits due to its direct headings, simple-to-read graphics, and clear presentation and summaries of the data.

The infographic will be shared with other John Deere employees in the Aftermarket and Customer Support Department via links on their internal social platform.

Figures 11 and 12 show the finished infographic design. All data shown in the graphic below is fake data, created solely for demonstrational purposes. **None of the data shown below reflects any actual research study.** Titles and summary statements showing study conclusions and summaries have been blacked out for confidentiality reasons.



*Figure 11: Infographic communicating research based on customers' maintenance habits.
Note: This graphic has been altered to protect confidential information.*



*Figure 12: Infographic communicating research based on customers' repair habits.
Note: This graphic has been altered to protect confidential information.*