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Less Friction, More Business—Graphite Connect Onboarding

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Less Friction, More Business—Graphite Connect Onboarding

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Design Project Report

Masters

Instructional Psychology & Technology, Brigham Young University

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Purpose

Graphite Connect is a fast-growing startup paving the way for an entirely new approach of connecting businesses. One of Graphite's primary functions is to speed up the onboarding process for suppliers. Ironically, the onboarding process for its own employees is far from efficient or effective. This is not the result of laziness or poor leadership, it is simply the outcome of a fast-growing business in a new industry.

Graphite's current onboarding process is as follows:

1. Invite new employees to watch 30-hours of recorded Zoom meetings to get acquainted with Graphite Connect (Graphite's software) and learn their role.
2. Meet with leadership one-on-one to answer questions (if leadership is available).
3. Give the new employee a new customer to work with.

As expected, new employees quickly abandon watching meetings and opt for exploring the software and surviving with customers. Overall this approach has led to low-quality output from new employees, reports of high stress, and employees not learning basic job skills and knowledge, thus the purpose of this project.

Project Impetus

Graphite recently experienced four times the growth in a single quarter as the company has experienced in an entire year. Future growth projections are even higher, and the need for more rapid and effective onboarding is abundantly clear—our growth will outpace our ability to train and hire new employees and therefore slow down business.

We must develop a way to more rapidly onboard new employees. The future of the business will depend on it. The purpose of this project is to speed up the onboarding process for new Customer Success team members.

Primary Outcomes

This program will be successful if after three weeks, a new Customer Success employee:

- Can clearly describe the problems that Graphite Connect solves.
- ~~◦ Can perform validations successfully without needing the help of others. *~~
- Can demonstrate and describe the basic functionality of Graphite Connect.

Secondary Outcomes

If this project is successful, not only will the above outcomes be achieved, but the following indirect outcomes will be accomplished. Graphite will establish an approach and platform for training all employees.

* Any text formatted with strikethrough indicates an item that was in the original plan, but that was not achieved or completed during the project.

- Customers will also be able to use employee-facing instructional videos that describe basic functionality.
- I will gain a deeper knowledge of Graphite Connect, how to teach people about it, and how to approach company-wide training.

Project Needs and Constraints

This project requires a dedicated person who has time, resources, and instructional design abilities. Unfortunately, Graphite does not have a budget set aside for creating an onboarding program, nor paying a person to do it. We also do not have time allocated for the project. These will be the project's greatest challenges. But these challenges are not new to a growing company, and with each new employee hired, the need is becoming more obvious.

I was originally hired as an implementation manager, but also with the understanding that I have a strong background in instructional design and could find ways to contribute. My hope with this project is to demonstrate that shifting to onboarding will significantly offset the cost of me being less involved as an implementation manager. I also hope to show that investing in training will enable us to more rapidly and effectively onboard new employees, thus increasing the speed of onboarding new customers.

Learner Analysis

The procurement industry does not have a defined career path, and most people do not go to school to learn how to do procurement. There are also few entry-level jobs that help someone become a procurement professional. This, combined with the fact that our product is the first of its kind, means that our new employees experience a significant learning gap. In essence, they know almost nothing about their role or the software, and they need to acquire many new skills.

Instead of creating different learner personas within a learner group, a more helpful approach is to think about our learners based on their roles within Graphite:

- Implementation manager
- CS team member
- Customer success manager.

Implementation Manager

DEMOGRAPHICS

Age: 25-60
Language: English
Location: US



WORK EXPERIENCE

Implementation managers likely have had work experience where interacting with people has been crucial. They likely DO NOT have any experience in the procurement industry, which means they will have a lot of new vocabulary to learn.

INTERESTS

Helping others be successful. Usually interested in technology and its ability to streamline the human experience.

LEARNER ENVIRONMENT

They spend 90% of their time working on the computer and interacting with people online.

APPROACH TO LEARNING

College graduate with extensive experience working online. Is capable of processing a lot of details. Is less interested in long, detailed written documentation. Has to task switch often to respond to clients.

OTHER DETAILS

So far the company has not hired someone who is highly interested in technical writing. But this job requires a lot of that, so it's a hard adjustment.

EXPERIENCE WITH GRAPHITE CONNECT

This person will have zero experience with a tool that they will have to know better than anyone else. This will likely lead to quick fatigue as they are expected to know a lot in a little amount of time.

LEARNER GOALS

Be able to confidently lead customers to make process changes. Be able to write tickets for the Hammer. Understand procurement best practices.

WHAT TO REMEMBER ABOUT IMPLEMENTATION MANAGERS

This job is extremely demanding and technical. Be careful not to overwhelm the learner, but also remember that they have to ramp up quickly. Learning will always need to be actionable and not theoretical.

CS Team Member (tech support)

DEMOGRAPHICS

Age: 20-60
Language: Various
Location: All over the world.



WORK EXPERIENCE

CS Team members often have very little work experience, on average 2-6 years. Their experience is often in tech support, which makes them good at this particular job.

INTERESTS

Helping others be successful. Usually interested in technology. Excited to join an American company. Often very social.

LEARNER ENVIRONMENT

They spend 90% of their time working on the computer and interacting with people online.

APPROACH TO LEARNING

These people are very diligent learners. Happy to take on anything and they will persist when it is difficult. Often they don't speak English as a primary language so closed captioning and simple language is important.

OTHER DETAILS

They often have to jump in and start performing their jobs within just a few weeks.

EXPERIENCE WITH GRAPHITE CONNECT

This person will have zero experience with a tool that they will have to be able to understand well enough to troubleshoot. Their required knowledge is much less than implementation managers.

LEARNER GOALS

Confidently interact with frustrated customers. Be able to document needs and respond in a customer-centric way.

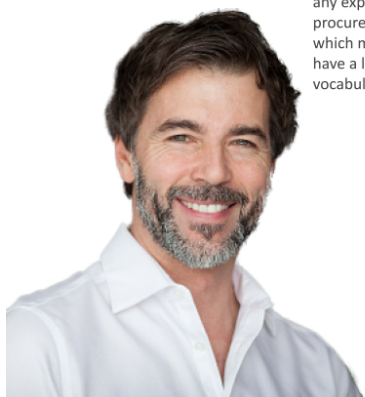
WHAT TO REMEMBER ABOUT CS TEAM MEMBERS

These are exceptional learners who are excited to work for a great company for great pay. They have to deal with a lot of repetitive tasks so providing a lot of meaning for their work is important. They are social with each other and have a lot of positive energy.

Customer Success Manager

DEMOGRAPHICS

Age: 25-60
Language: English
Location: US



WORK EXPERIENCE

CSMs likely have worked as CSMs before so they have a lot of valuable knowledge and they know what their job will be like. They likely DO NOT have any experience in the procurement industry, which means they will have a lot of new vocabulary to learn.

INTERESTS

Helping others be successful. Usually interested in technology and its ability to streamline the human experience.

LEARNER ENVIRONMENT

They spend 90% of their time working on the computer and interacting with people online.

APPROACH TO LEARNING

College graduate with extensive experience working online. Is capable of processing a lot of details. Is less interested in long, detailed written documentation. Has to task switch often to respond to clients.

OTHER DETAILS

CSMs need to know enough about the details of the product so they can respond. These folks are primarily skilled with helping people and finding answers.

EXPERIENCE WITH GRAPHITE CONNECT

This person will have zero experience with a tool that they will have to know well. This will likely lead to quick fatigue as they are expected to know a lot in a little amount of time.

LEARNER GOALS

Know the tool well enough to provide answers and help. Be able to write tickets for the Hammer. Understand procurement best practices.

WHAT TO REMEMBER ABOUT CUSTOMER SUCCESS MANAGERS

This job is fairly demanding and technical. Be careful not to overwhelm the learner, but also remember that they have to ramp up quickly. Learning will always need to be actionable and not theoretical.

Environmental Analysis

As previously stated, the greatest environmental challenge is the influx of customers, thus creating a time constraint for creating the learning content. Despite this fact, my most recent client assignment is more light, which should allow me the time to complete the project.

Stakeholders care deeply about the success of Graphite and the first, and most obvious, priority is gaining customers. However, if adding more customers is not equally as important as retaining those customers year after year, this might result in short term gains, but eventually it will lead to unnecessary future losses. My hope is to quickly demonstrate through data, and real experiences, that effectively educating our new employees (and potentially customers) will dramatically impact the long-term success of Graphite.

Current instructional materials exist in the form of one-hour meeting recordings. These videos are literally weekly team meetings that were conducted to answer questions and talk about the software platform—they were not planned or recorded with the intent to use them as training content for new employees. These meeting recordings were gathered and presented as training videos. Much of the video content is irrelevant to the topic and in many cases, because the meeting participants are familiar with the software, the content is far too advanced for a new learner.

Based on my learner analysis, these materials are quickly abandoned due to the length of the videos, the irrelevance of subjects covered, and the complexity of the content. Unfortunately this means that most learning occurs accidentally. However, this also

means that implementing a new approach will likely be met with enthusiasm because content will be presented in short, relevant, and simple ways.

The following are existing Graphite tools that could be used to deliver the content:

Google Classroom

Currently Graphite pays for a subscription to Google Workspace, which includes Google Classroom. Every employee at Graphite has access to this potential delivery mechanism.

Benefits

- Enrollment and tracking of progress
- No additional cost
- Allows for assessment

Risks

- Requires an administrator who enrolls and tracks progress.
- Stakeholders might see this as an unnecessary cost.
- New hires might be resistant to completing “assignments” and assessments.
- It cannot be integrated into our support ticket system for quick reference during troubleshooting calls with customers.

Confluence (by Atlassian)

Graphite pays for this service and every employee currently uses it during the first week of being hired. After that first week, only the development teams use it to create and track all technical documentation.

Benefits

- No additional cost
- Allows for check lists to track progress

Risks

- Most teams are using other tools on a day-to-day basis
- It cannot be integrated into our support ticket system for quick reference during troubleshooting calls with customers

Zendesk

Graphite pays for this service, but seat-count is limited. This means that all non-CS team members do not have employee-based permissions. Currently the CS team uses this for all customer-facing content. There is an employee-only section that is also used for training materials.

Benefits

- The CS team is already using it daily
- Embedded Youtube videos

-
- The CS team can search for training topics during the support ticket and troubleshooting process
 - Customers could also view training materials

Risks

- Increased cost to get all Graphite employees licenses
- Stakeholders might see this as an unnecessary cost
- If not tagged correctly, employee-facing content could be viewed by customers

YouTube

Graphite pays for this service and is currently using it on a limited basis. Employees can access hidden playlists for training purposes and these YouTube videos can also be embedded into Zendesk support articles and Google Classroom assignments.

Benefits

- Widely-used platform
- Already being successfully used
- Customers could also view training materials.

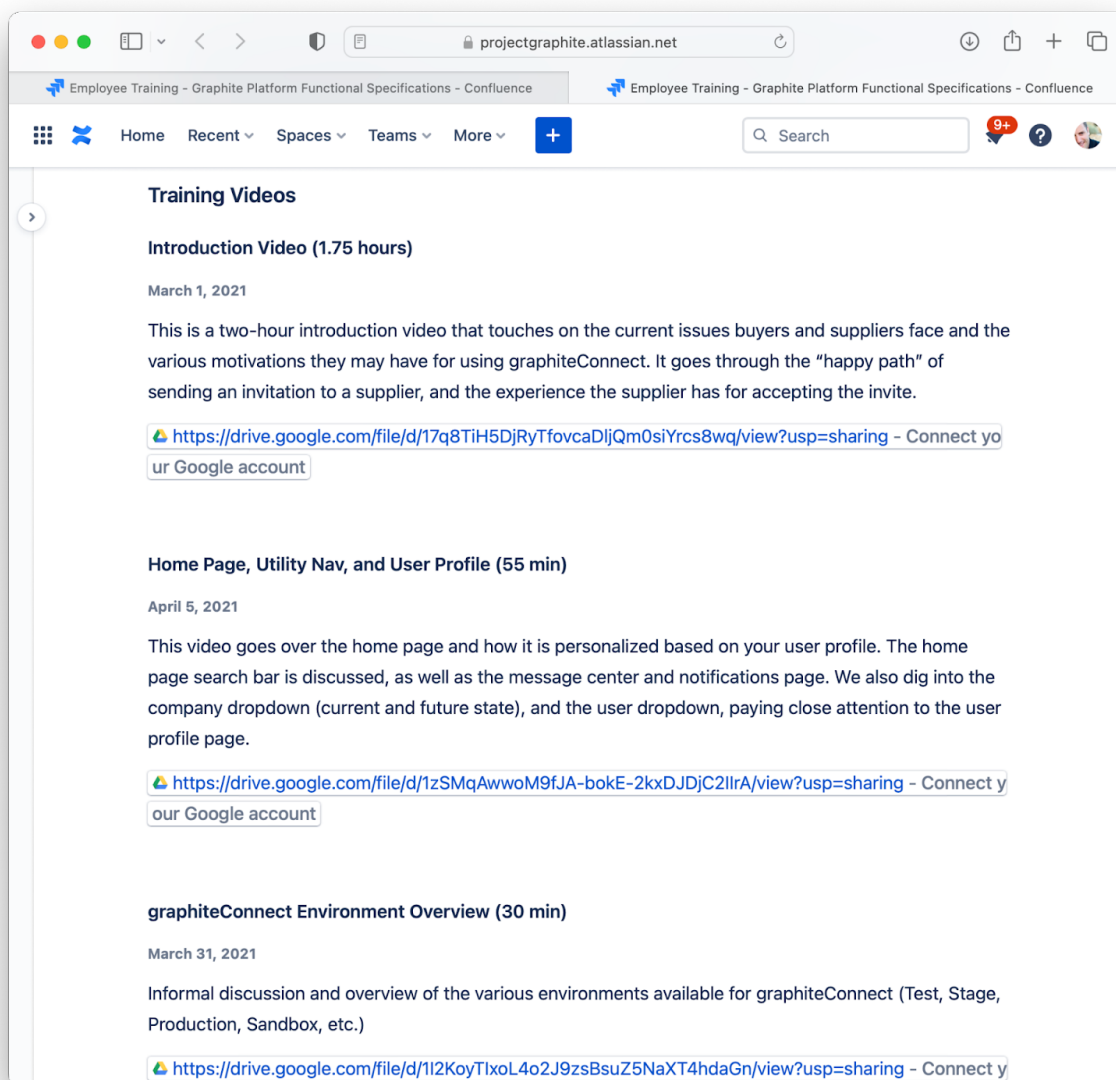
Risks

- Unlisted URL for internal training videos could potentially be viewed by non-Graphite employees.

Precedent Analysis

Graphite Connect is a complicated piece of software because it requires its users to not only understand its functions, but also the underpinning concepts that drive the software. In other words, a person must not only understand what the feature does, but also the procurement processes and industry norms that require that feature.

Here is a snapshot of the current training experience. These are zoom video recordings that were meetings and were not necessarily focused on training.



You Need a Budget (YNAB)

One company that has an analogous system is called You Need a Budget (YNAB). They have created budgeting software that helps people budget, but the software is only as useful as the person's understanding of the budgeting principles upon which YNAB is built. Because of this I decided to see how they onboard their employees and customers. In short, they do what I am proposing; using short videos and documentation, they teach the underlying concepts and then they demonstrate how those concepts play out in the software. Their videos are engaging and the instructor is deliberately really funny.

I spoke to the CEO and he remarked that though YNAB is a software company, they see themselves completely in the educational space—their mission is to educate

people on how to budget and spend effectively—their software is only there to support this knowledge. When using their software, the learner is guided directly to the [four main principles of budgeting](#). They release weekly videos that teach the principles of budgeting and how these principles pair up with the software. The videos are fun, funny, engaging and use relevant, real-life examples.

Rocketlane

Another example of software that is highly customizable and fairly complex is Rocketlane. This software allows for web-based project management and has been in development for almost as long as Graphite Connect. This company has created a lot of documentation to help users understand how to use the software, and they have also embedded videos in their documentation.

I don't necessarily think Rocketlane has an ideal system, but they use the same services for documentation and because they are a few steps ahead, it's worth watching where they go and finding out how they are solving the same problems we are facing.

Timeline and Budget

In preparation for this project we allocated \$1,000 dollars for the purchase of:

- Green screen
- Two LED lights
- One mic and stand
- Camtasia
- I also had to purchase teleprompter software for \$10.

I provided my own equipment including the following:

- Camera (\$4,000)
- High-quality Headphones (\$550)

After careful consideration and testing, I decided to use Google Classrooms exclusively. This saved us from spending any money on new systems.

Six Concept Videos

- Estimated 18:00 minutes of video — **Actual 29:32 minutes of video**
- Estimated 28 hours of creation time — **Actual was approximately 46 hours of creation time**

Using my own prototypes I estimated that each video focused on learning new concepts would take approximately 5 hours and 35 minutes (5:35) to create. Here is the breakdown. Strikethrough = not accurate. **Blue = post-project numbers**

- ~~Storyboarding: 1 hour~~
- Script writing: 1 hour
- Presentation creation: ~~45 minutes~~ **3 hours**
- Video recording: ~~1 hour~~ **45 minutes**

- Video editing: 1 hour
- Audio sweetening: 30 minutes
- Publishing: 20 minutes

15 Skill/Features Videos – Approx 45 minutes of video and 50 hours of creation time.

I estimate that each video focused on learning new skills and features will take approximately 3 hours and 20 minutes (3:20) to create. Here is the breakdown:

- Storyboarding: 30 minutes
- Script writing: 30 minutes
- Presentation creation: 20 minutes
- Video recording: 30 minutes
- Video editing: 30 minutes
- Audio sweetening: 30 minutes
- Publishing: 20 minutes

Estimated Real-World Cost

Most of my research around cost estimated the cost being at least \$1,000 for each minute of instructional video content. This would put the cost of this project at around ~~\$63,000~~ \$30,000 dollars.

Task and Content Analysis

Interviews

Based on my own personal onboarding experience, and my interactions with others, I proposed the content and approach to the project, but in order to feel confident that this plan would work, I interviewed the following people for their insights into the content plan:

Name	Description	Role
Laura Florence	She is the director for the entire learning group. She has the broadest view into what knowledge is needed.	Content expert and leader
Shannon Rupp	She has been an implementation manager for over 2 years.	Content expert
Todd Stapley	He's brand new so his feedback and knowledge will be crucial.	Learner perspective

Rachel Howell	She leads the support team and knows a lot about their needs	Customer support content expert
Sheldon Carvalliho	He is a customer success manager who has done this for other companies	CSM perspective

Interview Results — Tool and Content Deep Dive

The interviews verified that I was on the right track with content, but they also revealed that we needed many more videos for a full onboarding experience. The interviews generated a fairly exhaustive list on a whiteboard. That original brainstorm evolved into this more curated version that will eventually be our database for all instruction.

Rank	Category	Training Package	Item	Item Number	Objective	Creation Status
2	5 Overview		Connection Stages & Visual Workflow	0001	Understand the phases within the visual workflow graphic	In Progress
3	5 Overview		NSJ vs Supplier Survey	0002	Understand the difference between the NSJ and supplier survey and how the NSJ drives the supplier survey	In Progress
4	5 Overview		The network	0003	Understand the power of the network and why it is important to keep as many network questions as possible.	In Revision
5	5 Major Feature		Casual Experience	0004	Casual	Released
6	5 Tools		Task Creation	0005		
7	5 Minor Feature		Supplier Classifications/SOT	0006		
8	5 Major Feature		Validations	0007		
9	5 Minor Feature		Lists	0008		
10	5 Overview		Connection Overview	0009		
11	5 Backend		The Hammer	0010		
12	5 Major Feature		Compliance Topic Questions	0011		
13	5 Major Feature		Risk Reviews	0012		
14	5 Major Feature		Topic Reviews	0013		
15	5 Minor Feature		Non-Networks	0014		
16	5 Minor Feature		Advanced Filters	0015		
17	5 Minor Feature		User Groups/Segmentation	0016		
18	5 Overview		Testing	0017		
19	4 Minor Feature		Contact Center	0018		
20	4 Minor Feature		Doc Center	0019		
21	4 Minor Feature		Contracts	0020		
22	4		Features Enabled	0021		
23	4		Confirm Updated Fields	0022		
24	4 Overview		Delete vs Disconnect	0023		
25	4 Overview		Legacy	0024		
26	4 Overview		Export	0025		
27	4 Minor Feature		Bulk Communications	0026		
28	4 Minor Feature		OFAC/Sanctions Check	0027		
29	4		Connection Data	0028		
30	4		How to add a ticket	0029		
31	4		How to create a hammer ticket	0030		
32	3 Overview		Integrations	0031		
33	3 Minor Feature		User Permissions	0032		

After creating the initial brainstorm, I created a roadmap of all needed content (see appendix). I then whittled it down to what I thought would be the most relevant topics for a brand new employee. The final list is below in the “Content” section.

Design Process and Evolution

Product Summary

In addition to the interviews I conducted, I also asked three newer employees what they would want by way of instruction mode. Based on my interviews in the table above, and the informal research with newer employees, I determined that learners needed and wanted short instructional videos that:

- Explained high-level concepts for the procurement industry and the problems that our software is solving.
- Provided examples of the various tools within the software and how to use them.
- Described how to write effective tickets for the programmers to customize the software—this particular need was beyond the scope of this project and was not pursued.

Our primary objectives for this onboarding program were focused on gaining knowledge and skills. Success would be accomplished if learners:

- Could clearly describe the problems that Graphite Connect solves.
- Could perform validations successfully without needing the help of others.
- Could demonstrate and describe the basic functionality of Graphite Connect.

Content

The following content was delivered through Google Classroom. The learner not only consumed content, but was requested to submit videos to demonstrate understanding. An asterisk indicates content that could also be used for customers in the future.

Overview Course

Objective: Describe and demonstrate what Graphite Connect is and how it works at a basic level. Videos:

- Brief overview of life without Graphite (3–5 minutes)
- Suppliers and Buyers (2–3 minutes)
- The network (3–5 minutes)
- Basic navigation* (2–4 minutes)
- Connection phases (2–4 minutes)
- ERPs and Integrations (3–5 minutes)

-
- What are legacy suppliers? (2–4 minutes)
 - Validations (4–6 minutes)

My initial proposal included the content below, but I underestimated how much time the overview course would take. I therefore, did not create this content, but have it slated for future content to be created. I have a plan to create and release this content in July of 2023.

Navigation Course*

Objective: Describe what each item is. Videos include:

- Elements of the sidebar (2–3 minutes)
- Home button (1–2 minutes)
- Search (2–3 minutes)
- Buyer vs Supplier view (2–3 minutes)
- Risk Level (2–3 minutes)
- Action Plans (2–3 minutes)
- Topics (2–3 minutes)

Customers Basics Course*

Objective: Demonstrate the use of each tool along with one real-world use case.
Videos to include:

- Messages (2–3 minutes)
- Task assignments (2–3 minutes)
- Notifications 1–2 minutes)
- Notes (2–3 minutes)
- Topic reviews (2–3 minutes)
- Search (2–3 minutes)

Design Details

Instructional Strategy

The greatest threat to accomplishing the project's objectives is that new employees have very little time for onboarding. Secondary is the lack of context for new employees. Because nearly every new employee has never used Graphite Connect, and has no experience in the procurement industry, they don't know which questions to ask, and they don't understand the content they are learning. This required an even greater emphasis on providing context for every single segment of instruction.

Much of the instructional strategy borrowed from dual coding theory (Paivio, 2015) and Merrill's first principles of instruction (2002, Merrill). These theories have proven to be

useful when using video instruction to develop practical skills. They are especially helpful when learners work alone, are required to learn a specific set of skills, and have access to a mentor who can check their mastery and provide more content.

To test my instructional approach, I created a few low-fidelity videos and support documents that teach about the purpose of our software and how to use it. These initial experiments with content were largely positive, yet I also learned that even though the motivation to learn is high, the learners still don't naturally take time to practice or assess what they have learned. For this reason, I decided to add an assessment ("share it") where the learners have to share what they have learned.

Below is the model I created that is focused on knowledge, as opposed to skill.

Knowledge Model

1. **Anticipate It** — Learners see a list of what they will learn and an estimate for how long each assignment will take to complete.
2. **Learn It** — Learners receive instruction through short video clips with simple visuals.
3. **Share It** — Learners record a short video describing what they learned and upload it to a team learning channel within Slack.
4. **Track It** — Learners check off learning modules as they complete them.

This first model was focused on the learner's ability to understand concepts and then describe what they have learned. This focus on conceptual knowledge is in contrast to the following model, which is focused on a learner's ability to navigate and use the platform.

Skills Model

Based on my research and experience related to training and skill acquisition, I created this model that focuses on helping the learner actually be able to navigate and use the platform without looking at notes:

1. **Anticipate It** — Learners see a list of what they will learn and an estimate for how long each assignment will take to complete.
2. **Learn It** — Learners receive instruction through short video clips with simple visuals.
3. **Practice It** — Learners are given time to practice the new skill.
4. **Demonstrate It** — Learners record a short video demonstrating what they learned and share it to a team learning channel within Slack.

-
5. **Track it** — Learners check off learning modules as they complete them.

Because I was not able to complete training modules for the “Navigation Course,” I was not able to test this skill-focused model. I will complete that course in July.

Objective Achievement

New employees expressed a strong desire to have short videos that they could use for both onboarding and just-in-time resources. This led me to explore a microlearning approach. Because new employees have to start working with customers right away, this approach seemed perfect. It would allow the learner to learn in between meetings and in short bursts throughout the day. The microlearning content could also easily be re-used for customers, who are also accustomed to learning software through short video presentations and walkthroughs.

Primary Objectives: As stated earlier in this paper, this program would be successful if after three weeks, a new Customer Success employee:

- Could clearly describe the problems that Graphite Connect solves.
- Could perform validations successfully without needing the help of others.
- Could demonstrate and describe the basic functionality of Graphite Connect.

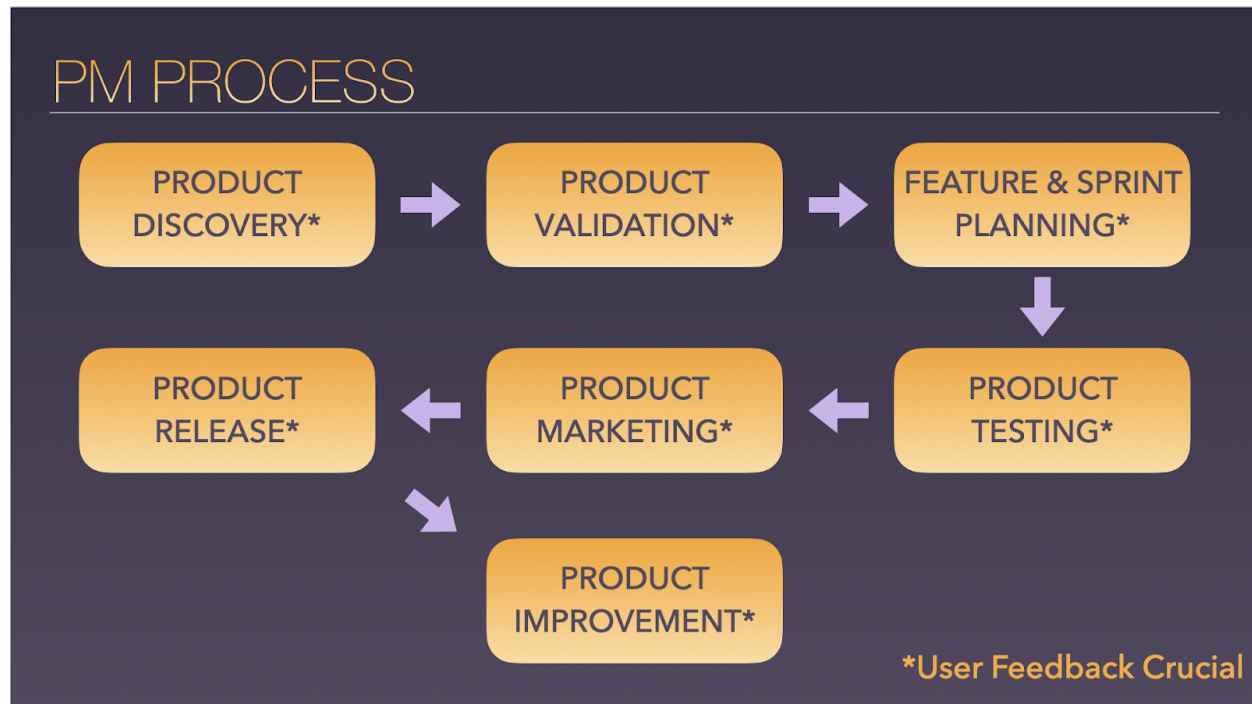
The new employee who watched all eight videos and completed the onboarding assignments demonstrated complete proficiency in the first and third primary objectives. She also expressed enthusiasm at how quickly she learned and how easy the content was to consume. The video responses she posted were very helpful in establishing these outcomes.

Design Thinking

I’m a firm believer that the actual users of the product will be the greatest guides when approaching a design project. This is why I often choose design thinking as my framework for instructional design. I completely agree with what the [IDEO website](#) says about design thinking: “To think like a designer requires dreaming up wild ideas, taking time to tinker and test, and being willing to fail early and often. The designer's mindset embraces empathy, optimism, iteration, creativity, and ambiguity. And most critically, design thinking keeps people at the center of every process. A human-centered designer knows that as long as you stay focused on the people you're designing for—and listen to them directly—you can arrive at optimal solutions that meet their needs.” I try to have this mindset.

Product Management Model

I also developed my own model for product management that I used. Here is the model:



For this project, I would say that I used a combination of both.

Empathize

Thankfully, I began conceptualizing this project as I myself was going through the onboarding processes. I immediately saw significant challenges with our current approach of inviting new employees to watch 20-30 hours worth of hour-long recorded Zoom meetings that sometimes included screen sharing of the application. As new employees were hired, I would ask them about their experience and what they would prefer.

The interviews I conducted (see pages 12-13) also helped me understand the major pain points new employees were experiencing. I also gained empathy for those who were responsible for onboarding. They had very little time to create instruction or even meet with new employees. They felt guilty for this, but they weren't sure how to solve the problem.

Define

After doing the onboarding process myself, interviewing co-workers, and being reprimanded for not knowing enough about our roles, it became clear that we were all experiencing frustration and stress in our new positions, and the most obvious solution was better onboarding and training. We not only needed training for our specific roles and tasks that we perform. But we also needed to understand the larger context of the company, its purpose, and the software it provides. People wanted videos; they needed to be short; and they needed to be able to see their progress.

Ideate

I spent considerable amounts of time brainstorming with my co-workers about which topics would need to be included in training materials. We also considered the best way to deliver the content. Should we use YouTube, Confluence, Jira, Zendesk, or Google Drive? Ultimately we decided that we should try Google Classroom as our delivery platform to help with the need to see progress. We also landed on videos as our best approach.

Prototype

Content Validation

Before creating all of the video content, I needed to make sure it was the right content. Thankfully we had a brand new employee that I could test on. I allowed this employee to go through our normal training materials, consisting of over 20 one-hour video recordings of Zoom meetings.

After she had watched the meetings—which she admittedly could not make it through all of them due to how boring and irrelevant they are—she and I met for one hour and I walked her through all of my content. She said things like, “now I understand what that one video was about! This approach is so much more helpful! Please give me more and share the videos when you have them made.”

This was an extremely low-cost way to prototype and test the content. Even though I created the content using expert feedback, I was very grateful to have real-world validation that this was the right content for a new employee.

Instructional Strategy Validation

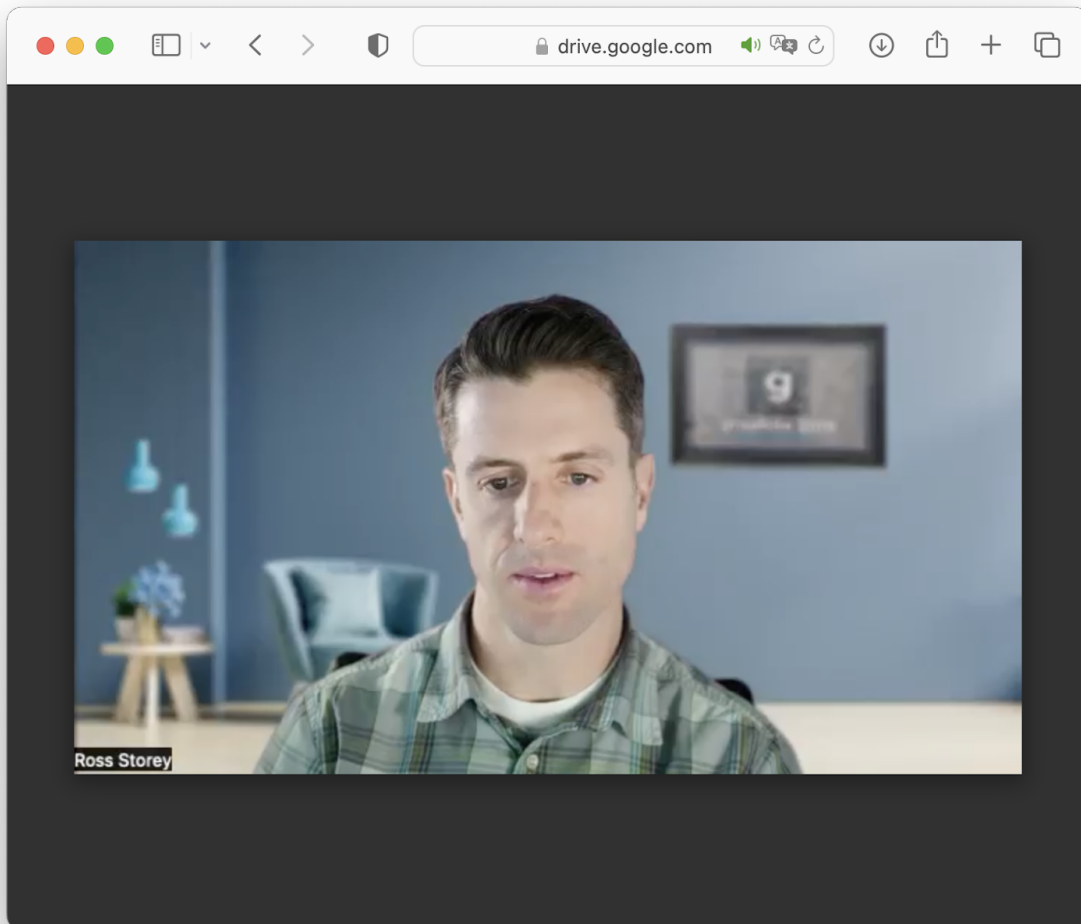
I sent a test video to eight co-workers and had them give me feedback. Overall the feedback about the course design was positive. They liked:

- Knowing what was coming.
- Having short videos that were easy to consume.
- Checking things off when they were complete.

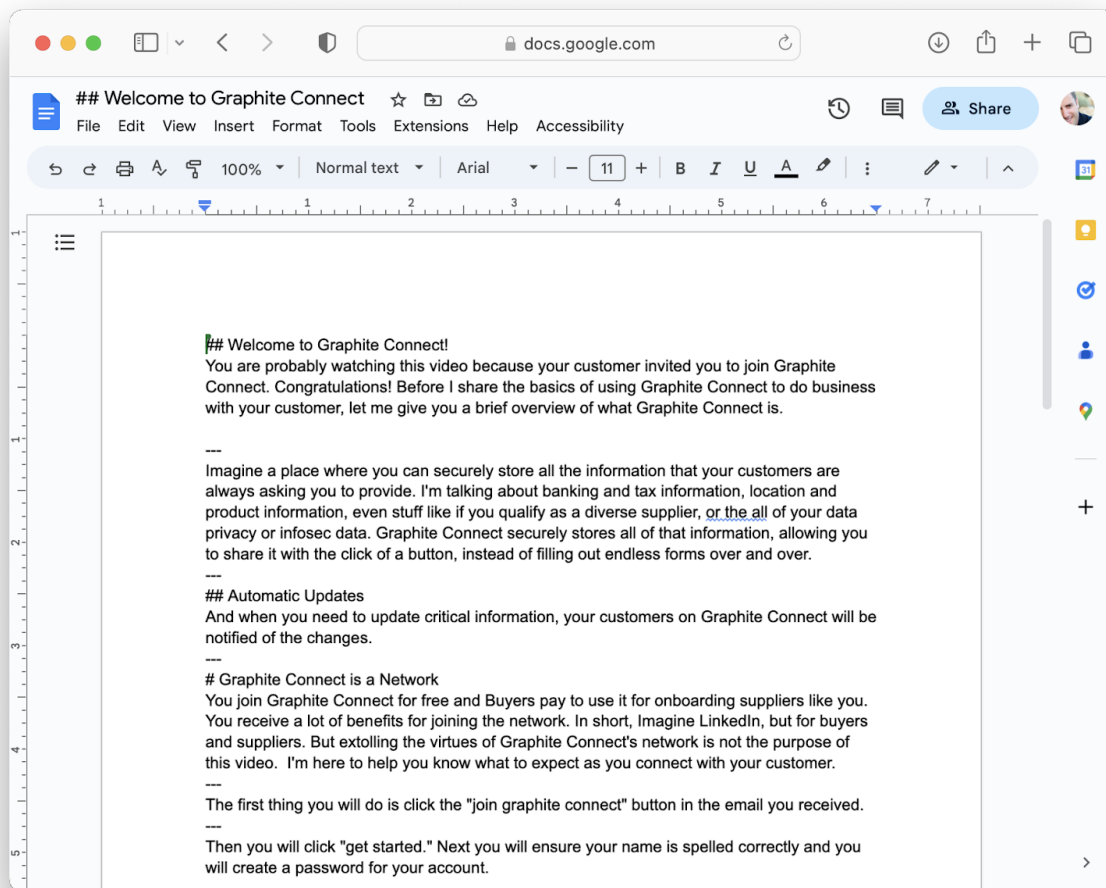
Here were the two pieces of feedback that were less positive:

- The CEO wanted me to be more excited and cheerful and less serious in my videos. “Ross, just be yourself.” This fantastic feedback helped me recognize that when reading a script, I was way too serious.
- They were resistant to the idea of submitting a video to demonstrate their mastery. I expected that, but after viewing their video submissions, I’m confident this was the right approach. Learners took a video submission seriously and their submissions were good evidence that they had learned the content.

Script vs Extemporaneous—The process of creating effective videos and support content can be approached in many ways. My initial approach was to see if I could write a simple outline and just speak extemporaneously. For the topics I had developed mastery over, this worked. For topics that were a little newer to me, this did not. Here is a screenshot of one that had a mix of script and extemporaneous. I used this recording as a concept approval with the CEO.

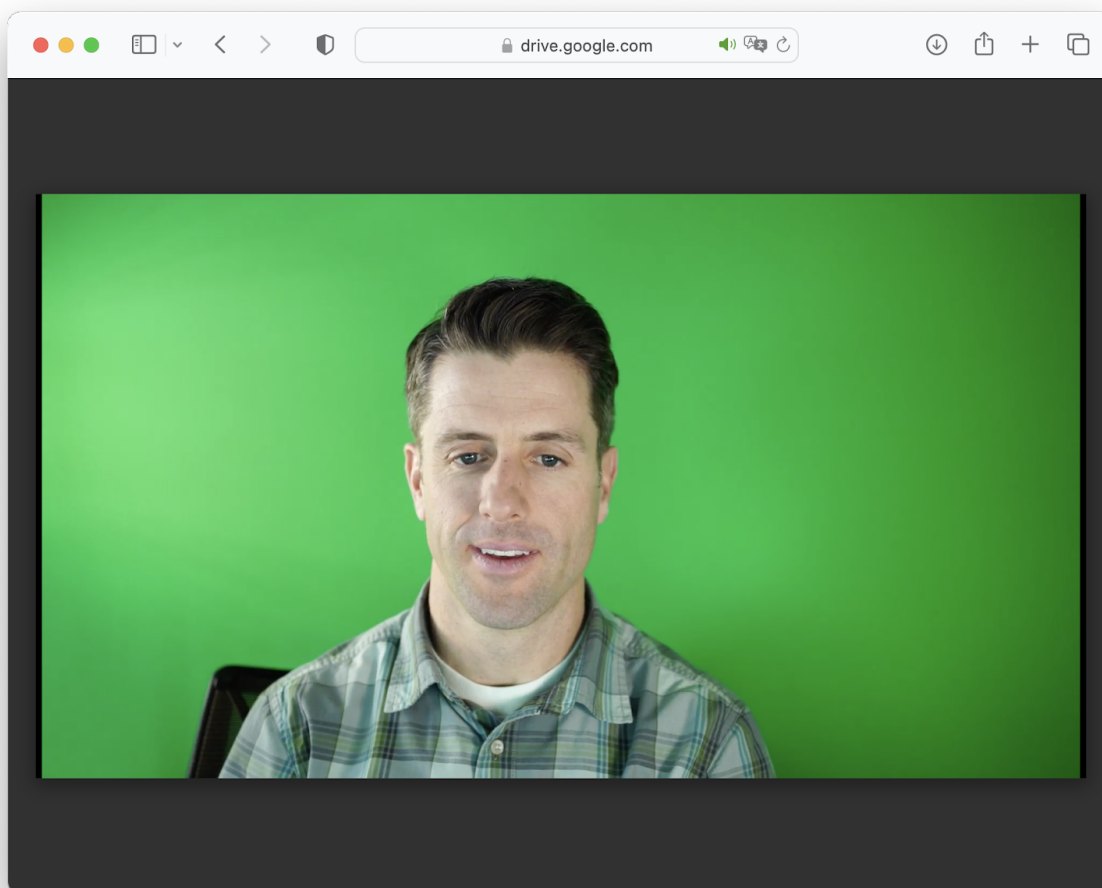


Here is another script that I wrote for a test. I wrote this script using Markdown (a universal formatting option). Markdown allowed me to quickly move the headers into a presentation using a new favorite piece of software called "iA Presenter." iA Presenter automatically converts everything I have written in Markdown into a beautifully formatted presentation. All I had to do was make sure to tag the headers to be presented. I also created a theme that uses Graphite colors and fonts, allowing me to write the script and create the presentation all at the same time.



Although I loved the idea of iA Presenter, I found that my presentations needed to contain animations if I wanted to hold the learners attention. So I abandoned using iA Writer and iA Presenter, and instead wrote all of the scripts in Google Sheets.

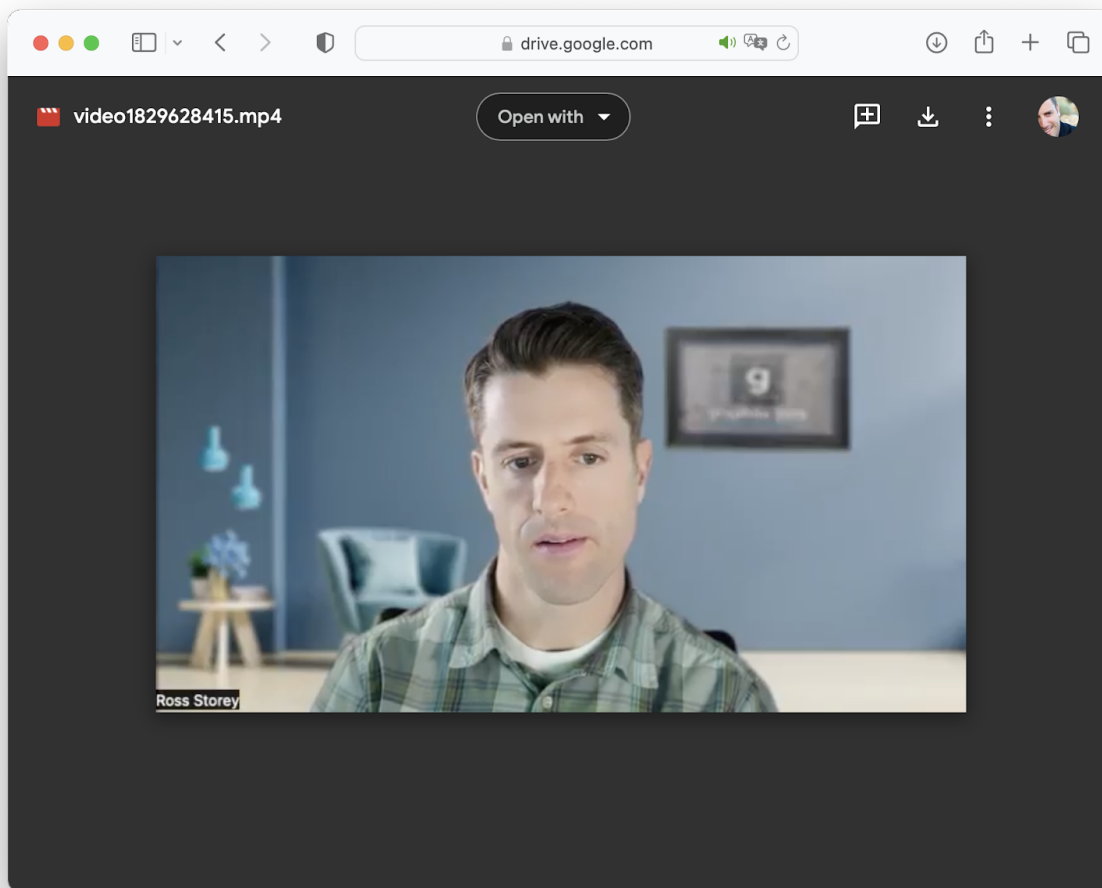
Recording Space—Graphite’s office in Lehi does not have a space that is conducive for audio recordings, and most of the work I do is from home. Because I do not have an office at home, I have to work from a corner in my dining room. This presents a challenge when recording video and audio. To mitigate this, I purchased a large green screen and two lights. I use the lights at 4000K to match my white balance. I would rather have a real background, but that is not feasible. Here is a screenshot that shows me testing my greenscreen and lighting; I was concerned that the lighting was not balanced enough on the greenscreen



Graphite-Branded Background — Because I had to use a greenscreen, I decided to create a background that would reinforce our company values and to remind us where the company began. The background matches our Graphite Branding colors and the poster with the G on the wall is an actual poster hanging in our CEO's office. It's signed by all of the original founders and angel investors. The investor who gave the most took this flag to Mount Everest and died on his way back from the summit. His son works at Graphite and this is probably the most prominent symbol we have at Graphite. Using this background allowed for focus to be primarily on the speaker, due to the simplicity of the background, while still developing Graphite culture through important symbols and artifacts.



Prototype Video — Here is a screenshot where I use a Graphite-branded background. This test was focused completely on lighting and color. I tested whether I was able to completely replace the background without having the green light (reflected from the green screen) spill onto the edges of my face and hair? Also, I tested if the lighting created depth and if there was catch light in my eyes.



The next step was to test the background while reading a script. This helped me see that my eyes were distracting as I read or did not look into the camera. You will also laugh at the background noise.

Build

After my prototyping, I created the following process to create my content:

Video Creation

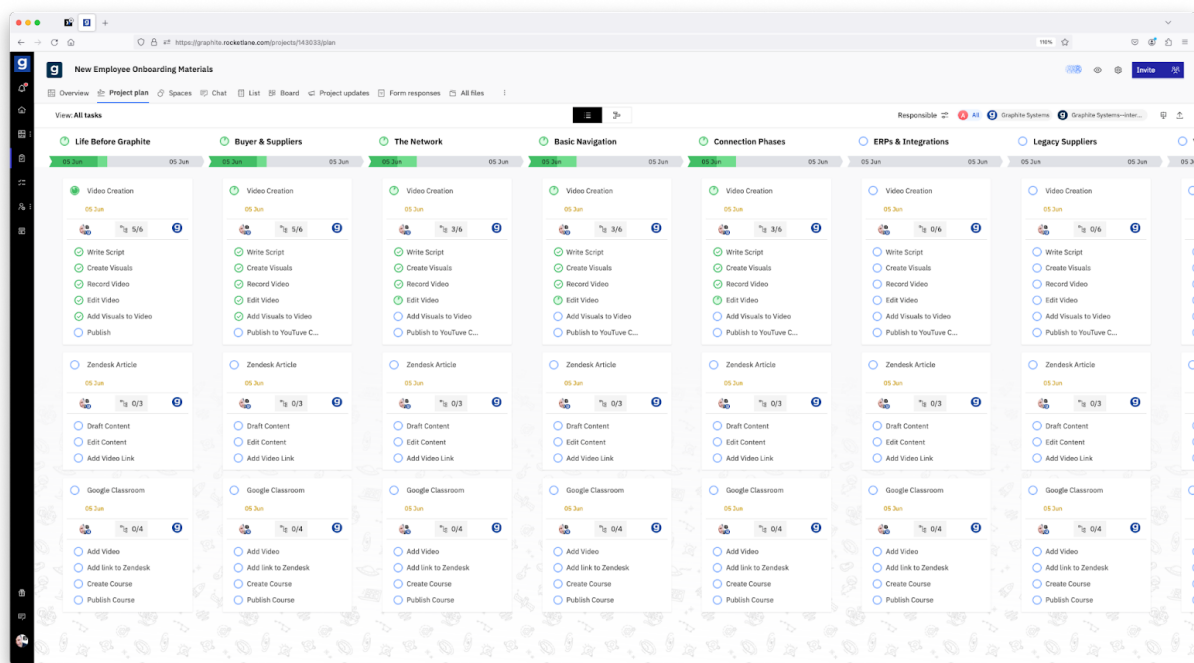
<i>Failed Process</i>	<i>Improved Process</i>
<p>This is the process I followed for the first video, but I quickly learned that creating the visuals first took me too long! And I couldn't effectively read the script (with very little eye movement) and click the</p>	<p>By the third video I felt like this was the best process. It produced video synchronized with the audio. It also produced better visuals.</p>

powerpoint at the same time.

1. Write Script
2. ~~Create Visuals~~
3. Record Video
4. Edit Video
5. Add Visuals to Video
6. Publish

1. Write Script
2. Record Video
3. Edit Video
4. Create Visuals
5. Add Visuals to Video
6. Publish

I also created a project within Rocketlane to make sure I didn't forget anything. Here is a screenshot of that project plan.



Step 1: Write the Scripts

At the end of almost every video I had a "remember" statement that summed up the most important point of the video. I started my script writing with this statement in mind first. Then I wrote the scripts. I ran my initial script by my coworkers to ensure I was on the right track. Here is a sample:

Buyers and Suppliers

In our last video I told you I'd give a little more information about what I meant by the term supplier. It's probably pretty obvious but I'll share just a little bit more so you understand what we mean when we say buyers and suppliers within the graphite connect work.

First off. Suppliers are the businesses that supply products or services to buyers. Suppliers are often referred to as vendors as well. Suppliers can join graphite connect for free. Think of the [linked](#) in analogy. These suppliers are like the people who put their resume on linked in. At the time of this video creation, we have about 90,000 suppliers in our system. The benefit for them is that they can create a profile and easily share it with buyers.

Now that I've mentioned it, we also talk a lot about buyers. Buyers in graphite connect are paid users who customize our system to meet their needs so they can effectively find good suppliers. In many cases we, at graphite refer to these buyers as our customers, or clients.

Now that you know a little more about buyers and suppliers, let's talk about how that plays out in our software. Within Graphite Connect, there is a grand division between buyers and suppliers. If a user is designated as a supplier, they will have a different experience with the interface as opposed to being designated as a buyer.

Within Graphite if you are designated as a supplier, you will see any reference to a buyer listed as a "customer." A "customer" within the user interface will always mean a buyer. For

Interestingly enough, I found that the core content for the entire instructional video was the easiest part of the process. I was surprised by this, but looking back, I shouldn't have been. After being at Graphite for one year, I knew what needed to be shared.

See the appendix for the full text for the following scripts::

- Brief overview of life without Graphite
- Suppliers and Buyers
- The network
- Basic navigation*
- Connection phases
- ERPs and Integrations
- What are legacy suppliers?
- Validations

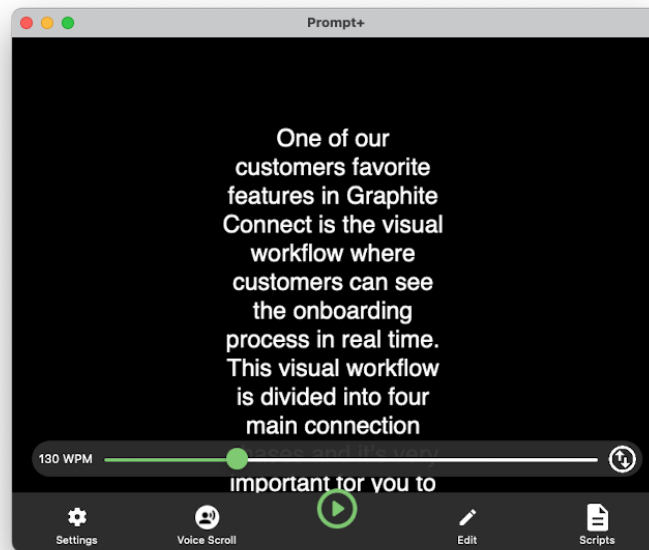
Step 2: Record the Videos

Prototyping significantly sped up this part of the process. I knew my lighting settings; I had my background; the mic was set up (as good as it could have been); and I knew exactly how I was going to use Camtasia. The one thing I was missing was teleprompting software to help me not move my eyes a lot; I didn't want learners to think I was reading a script.

I purchased teleprompting software and practiced multiple times until I could read the script without creating noticeable movement in my eyes. The software used voice recognition to advance the script and it worked flawlessly during all of my tests, but not until I did my first recording did I experience a problem with the software. After 30

seconds of using my voice to automatically advance the text, it would stop working. I purchased the upgrade kit, and it still would not work. Because of this, figuring out the best way to use the software took me nearly two hours!

Below is a screenshot of the software and how I sized it to minimize the horizontal movement of my eyes.



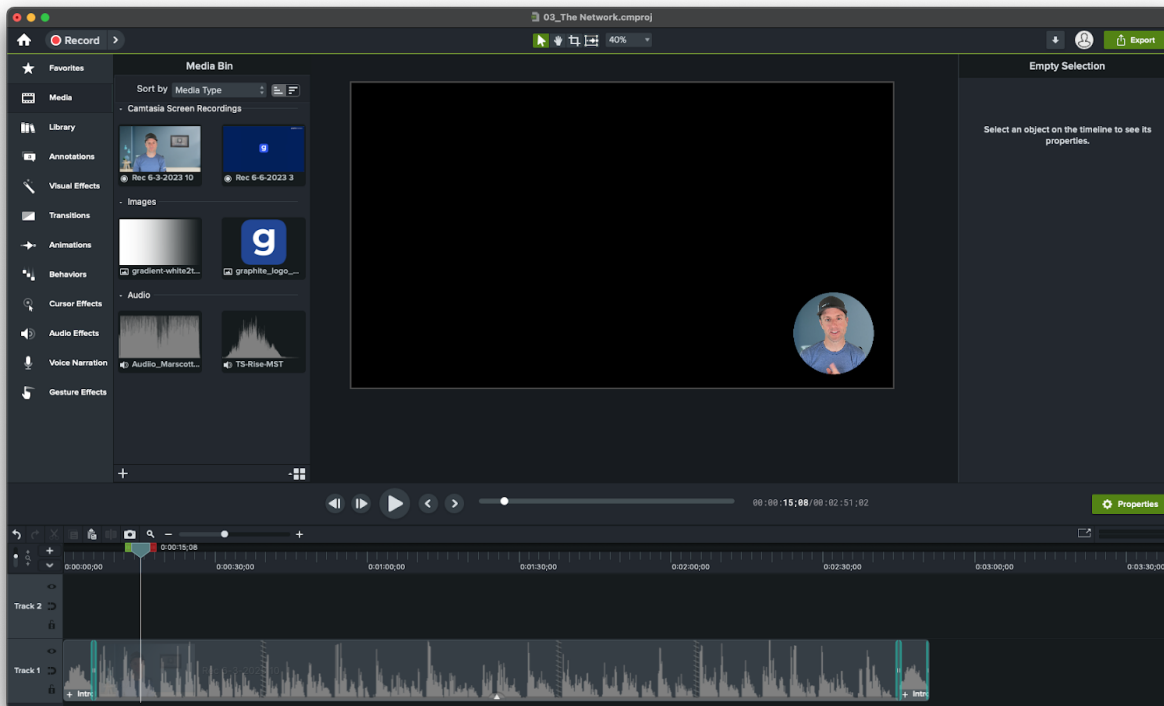
Once I had the software dialed in, I began my recordings. If you watch the videos, you will see that I got better at being normal and natural with each recording. I wish I could go back and re-record, but I decided that was not worth the cost.

Step 3: Edit the Videos

My first step in editing the videos was to create a Graphite-branded animated intro and outro (the animation is in the accompanying materials and is entitled “Graphite Animation”). After inserting the animation, I cleaned up the video and created transitions.

I edited the videos before I created visuals because I learned a hard lesson on my first video: Camtasia on the Mac will not support the PowerPoint Slide integration. This meant that the only way to time my presentation visuals was to add them as a video or export them as images (leaving out the animations).

While editing the first video, I tried to add the presentation without first synchronizing the video and the slide transitions. It was a miserable process and it took me at least five times longer than my improved process.



Step 4: Create Visuals

Having a script is a life saver! I used the scripts to determine my needed visuals. I did this by reading each script and highlighting the visual-needing-words in red. This not only provided clarity, but I found that the process of design came easier if I knew exactly which words to design for. That way I didn't have to create the word and a design at the same time; in some ways the word served as an anchor, allowing my mind to dream up animation and graphic ideas. I will always do this in the future.

Buyers and Suppliers

In our last video I told you I'd give a little more information about what I meant by the term **supplier**. It's probably pretty obvious but I'll share just a little bit more so you understand what we mean when we say **buyers and suppliers** within the graphite connect work.

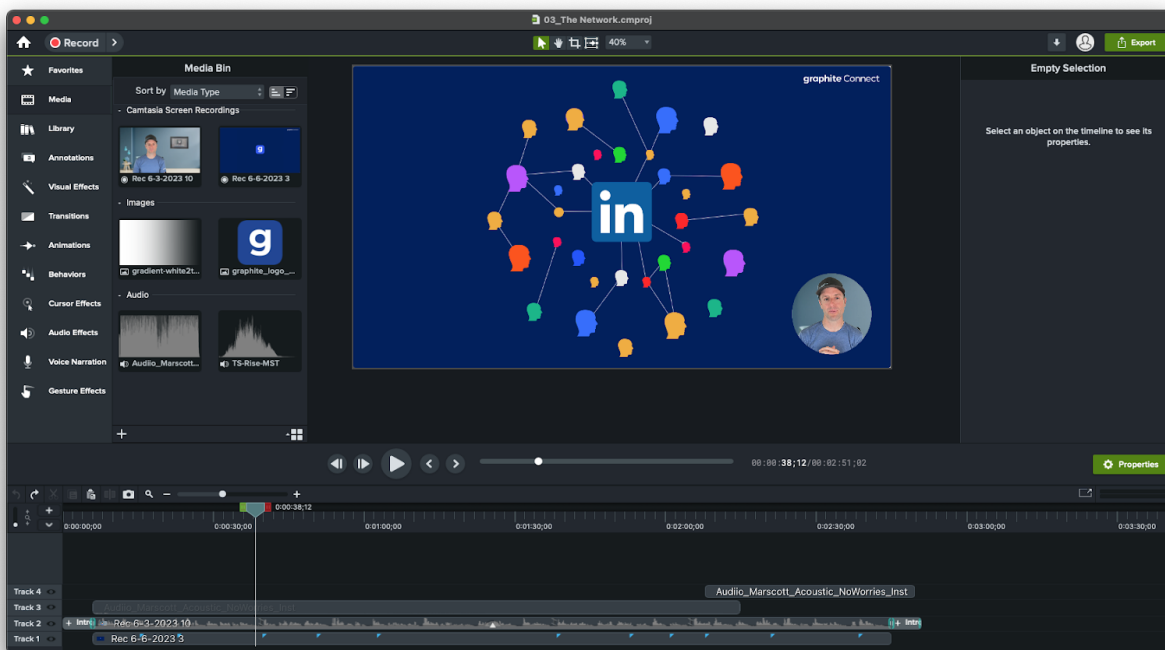
First off. Suppliers are the businesses that **supply products or services to buyers**. Suppliers are often referred to as vendors as well. Suppliers can join graphite **connect for free**. Think of **the linked in analogy**. These suppliers are like the people who put their resume on linked in. At the time of this video creation, **we have about 90,000 suppliers in our system**. The benefit for them is that they can create a profile and **easily share it with buyers**.

Now that I've mentioned it, we also talk a lot about **buyers**. Buyers in graphite connect are **paid users** who **customize** our system to meet their needs so they can effectively find good suppliers. In many cases we, at graphite refer to these buyers as our customers, or clients.

Now that you know a little more about buyers and suppliers, let's talk about how that plays out in our software. Within Graphite Connect, there is a **grand division between buyers and suppliers**. If a user is designated as a supplier, they will have a different experience with the

Step 5: Add Visuals to Video

I created roughly 80% of my visuals in Keynote. For the other 20%, I captured screen recordings while using the software. Unfortunately Camtasia does not have a “monitoring” function like sound-editing software, so I had to export my originally-edited videos from step 3 and play them back in QuickTime as I recorded myself advancing my presentation in Keynote, while also screen recording using Camtasia.



After capturing a video of the presentation, I would insert that presentation video on the timeline and lay my original recording over the presentation video. I also added background music at this time.

Step 6: Publish

After each video was complete, I published it to the Google Classroom page.

The Actual Product

The onboarding course was created in Google Classroom with 11 separate assignments to be done in chronological order. This is in contrast to the current onboarding web-page that is overwhelming to consume. The screenshot below gives a view into the course.

The screenshot shows a Google Classroom interface for an onboarding course. The browser address bar displays "classroom.google.com". The page title is "Onboarding". The navigation tabs are "Stream", "Classwork", "People", and "Grades". The "Classwork" tab is active. A "Create" button is visible at the top left. The course content is organized into two sections: "Paperwork" and "Graphite Overview".

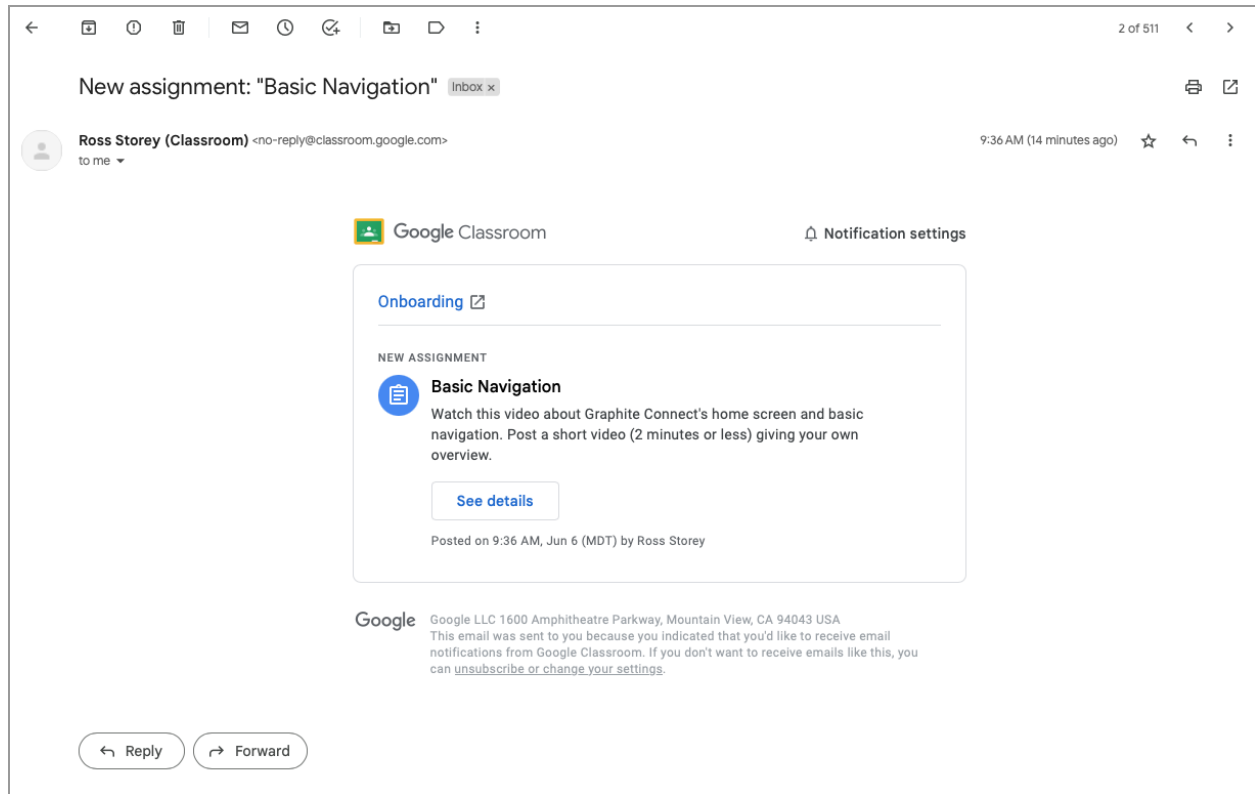
Paperwork

- Read the Employee Handbook (Posted Jun 15, 2022)
- Sign the Employee Agreement; including Co... (Edited Jun 15, 2022)
- Information Security Policy - Information Se... (Posted Jun 15, 2022)

Graphite Overview

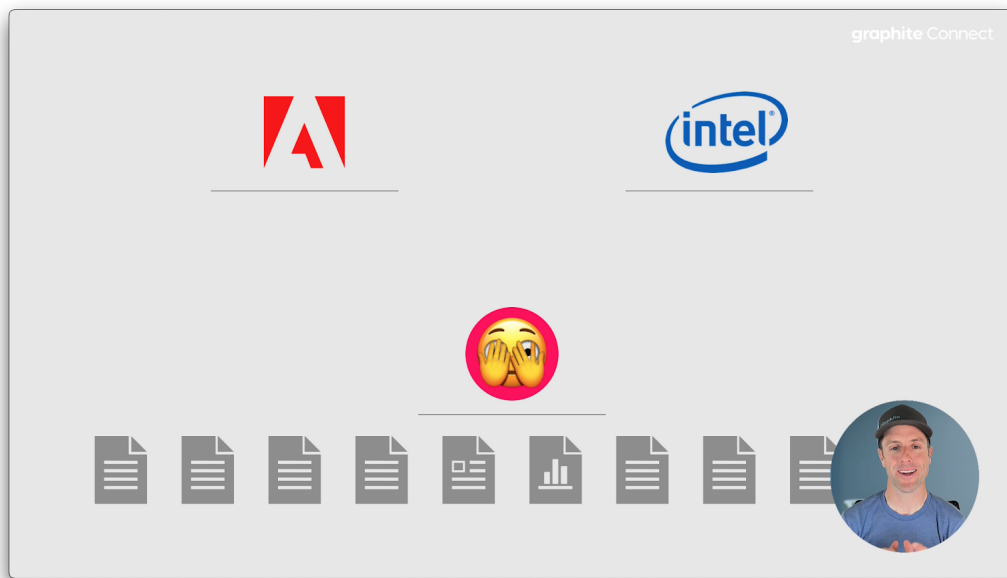
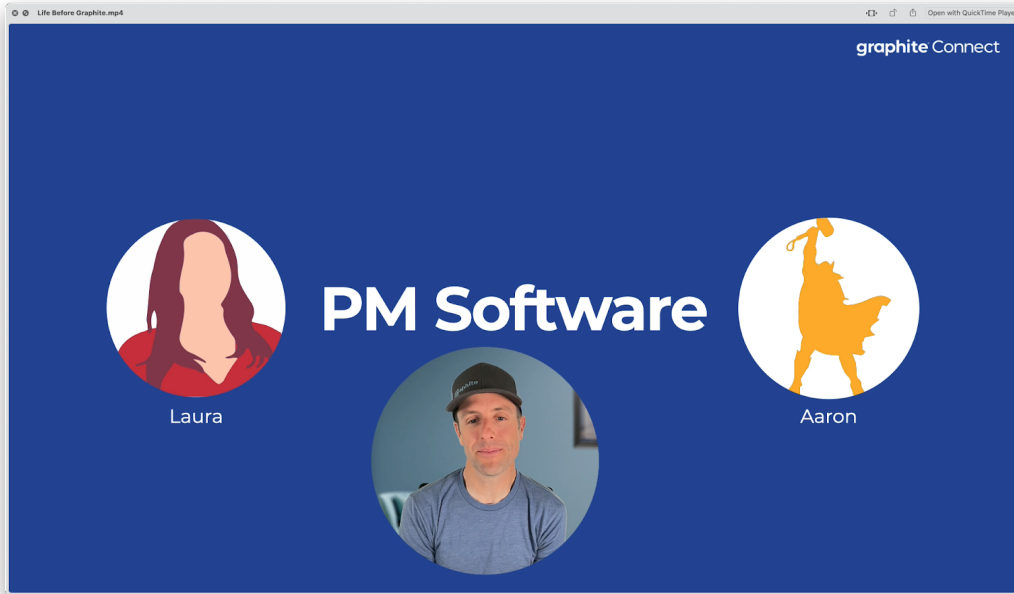
- Life Before Graphite (~10 min.) (Edited 7:40 PM)
- Buyers & Suppliers (~5 min.) (Edited 7:40 PM)
- The Network (~5 min.) (Edited 7:40 PM)
- Basic Navigation (~10 min.) (Edited 7:41 PM)
- Visual Workflow (~10 min.) (Edited 7:41 PM)
- ERPs and Integrations (~5 min.) (Edited 7:41 PM)
- Legacy Suppliers (~5 min.) (Edited 7:42 PM)
- Validations (~5 min.) (Edited 7:42 PM)

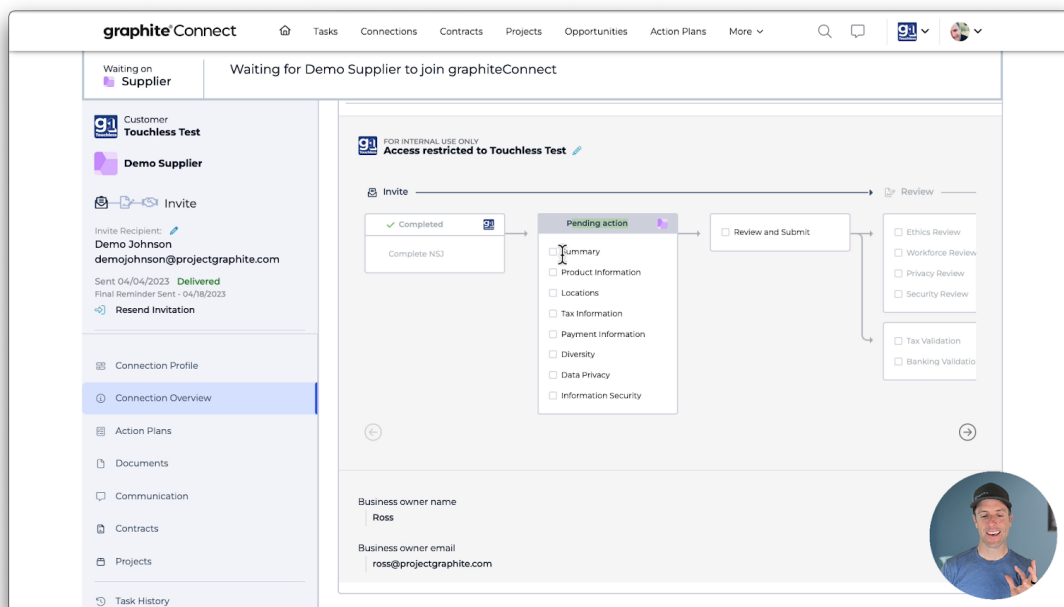
Once a new employee is hired, I invite them to the course and they are given a timeframe in which they must complete the course. Assignment emails look like this:



My content ended up being almost exactly what I had anticipated, though I wish I had more time to create higher-quality visuals and animations. Despite my own high standards for the visual elements, I admit that they accomplished the purpose of their creation. Here are a number of screenshots of the videos I created:







Video Walkthrough

Find the video walkthrough in the accompanying materials. It is entitled "Course Overview."

Product Implementation

The process I followed to implement the Onboarding Course is as follows:

1. Create Google Classroom account
2. Create Course
3. Create assignments
4. Upload video to assignment
5. Assign new employees to the course
6. Watch their submissions and provide feedback if necessary

Here is the process from the learner's perspective:

1. Login to company-issued gmail account
2. Receive invitation to Onboarding Course through link.
3. Click link
4. Click assignment
5. Watch video
6. Submit response
7. Receive feedback
8. Review assignment progress

Based on my user research my design assumed that users knew nothing about Graphite Connect, the procurement industry, and their roles. This required the learners to have no prior knowledge to get started.

Although learners were not required to have prior knowledge, they were required to have access to Graphite Connect, Google Drive, and their email accounts. Employees receive access to these services on their first day so this is not a problem.

I did find, however, that the Google Classroom interface was not as intuitive as I would have liked. Learners had no trouble accessing and consuming the content, however, they did struggle figuring out how to upload their own video responses. I am going to explore better options for this.

Google Classroom is also geared toward an environment where grades and points are important. This made the interface feel like a mismatch at times. If Google is going to sell Google Classroom as part of their Google for Work package, they should tailor their tools for a business environment. A lot of startup companies purchase Google for

Work and I believe Google is missing an opportunity to sell a product that could help with corporate training.

Assessment of Student Learning

Because we all have very little time to dedicate to onboarding and training, assessment was as efficient as possible. For this reason I chose a very simple process for assessment.

1. Video Demonstration

To assess employee understanding, they submitted a video demonstrating an understanding of the knowledge and skill. I watched each video submission and assessed understanding and skill ability. I then reached out to the person and told them if they needed to re-submit a video, or if they could move forward.

Only one person has been recently hired, so I only had one test subject. She never needed to re-submit, and I was quite pleased by her level of understanding. In her own words, she summarized the concepts that were taught in the videos. She even prepared written responses to ensure she could clearly communicate.

2. Meeting with Supervisor

Once the learner completed an entire course, they met with their supervisor (I had to play that role because the supervisor was on a cross-country trip) and reviewed their progress by sharing the completed items on their checklist.

While I was tempted to make the assessment more thorough, I did not think any further measures were realistic for the fast-paced, bottom-line driven environment we are working in. If learners accomplished the objectives in each course, then I considered this a successful project.

Evaluation

Content Review

To ensure that the content was correct, two experts (two of the three founders who built the software) reviewed the overall content plan, answered my questions, and shared their own recommendations about what I should specifically address in each of my videos.

Outcomes

The intended primary outcomes of this project were that learners:

- Could clearly describe the problems that Graphite Connect solves.
- Could perform validations successfully without needing the help of others.
- Can demonstrate and describe the basic functionality of Graphite Connect.

The indirect, but hoped outcomes were:

- Graphite will establish an approach and platform for training all employees.
- Customers will also be able to use employee-facing instructional videos that describe basic functionality.
- I will gain a deeper knowledge of Graphite Connect, how to teach people about it, and how to approach company-wide training.

Evidence

Outcome	Evidence
Learners can clearly describe the problems that Graphite Connect solves.	The submission videos demonstrated clear understanding, and in one day, the learner could state the purpose of Graphite Connect. In contrast, accomplishing this outcome took me at least three weeks when I was a new employee.
Learners can perform validations successfully without needing the help of others.	I did not create learning content for this outcome, therefore it was not accomplished.
Learners can demonstrate and describe the basic functionality of Graphite Connect.	The submission videos demonstrated clear understanding.
Graphite will establish an approach and platform for training all employees.	I am unsure if we established this. If video submissions for assignments were more clear, then I think the answer would be yes. I need to do more prototypes and testing to feel confident about this.
Customers are able to use employee-facing instructional videos that describe basic functionality.	This content ended up being beyond the timeline of this project. Therefore, I did not measure this outcome.
I gained deeper knowledge of Graphite Connect, how to teach people about it, and how to approach company-wide training.	Yes, I accomplished this outcome.

Procedures

My evaluation procedures are contained throughout this document. My approach using design thinking and product management processes led me to focus much more on formative evaluation rather than summative assessment. I gathered a lot of feedback during the creation process, but very little after the course was complete. Part of this was due to the lack of time, and also the lack of more learners prevented me from feeling comfortable about any summative metrics.

Design Knowledge and Critique

Design Insights

Prototypes should be quick and dirty, but they should also be thorough!

I believe in prototyping, and this project was no exception; however, I wish I had prototyped a complete video. Instead, I created a few very short video clips. This helped me understand each element of a successful video, but it did not help me fully understand the complete process.

For example, if I underestimated what it would take to create visuals that had to align with a 5-minute script. If I had prototyped a full-length video, I would have had more realistic expectations and time allotments when it came to visual creation.

Sometimes stakeholders need a high-fidelity example to fully grasp the value of the product.

Leadership at Graphite are very busy, and they only half-heartedly agreed to this project. At times, this lukewarm buy-in created challenges as I needed to conduct interviews and have them review content. Only after I showed them one of my final videos did they get really excited. If only I had had that kind of excitement and support during the earlier stages of this project!

As a designer, if I am clearly solving a problem, and the actual learners are excited but the stakeholders are not, step back and take time to figure out what will best communicate to the stakeholders.

Schedule time with testers, even reliable ones, so you can ensure they test your learning experience.

Everyone is busy. The best way to ensure they have time to help you is to put it in their calendar. I would have saved time if I had done this.

Remember, some people don't care about learning as much as you do.

This harsh reality shocks me every time I come to terms with it. Some people don't get excited when presented with a learning opportunity, even if they know they need it.

I personally believe humans naturally love to learn, but somewhere along the way some people become afraid of it. Maybe math tests did it to them. Who knows?! Look for ways to remove obstacles and ignite that love, but don't be too offended if some people don't get as excited as you do.

Check the entire video after recording!

This sounds very obvious, but I keep learning this lesson over and over. In this case, I set up my recording equipment, dialed everything in, worked out the lighting and sound issues, and then produced a successful video. I was on a roll, and I had my scripts completed, so I recorded more videos.

I took down my portable recording studio and was pleased with my work. Only until the next day while I was editing did I notice that during a few moments in the videos I touched my desk which made the camera slightly wobble! I wanted to go back and re-record, but I did not have time.

Don't get too focused on content.

If you are passionate about the content, it's very easy to focus on getting the content right. But if the learning approach or design is not effective, the content will likely not be consumed. I believe I spent too much time with stakeholders talking about content, and not enough time walking them through the learning strategy and systems I would need to be successful.

You can't effectively read a script, do a screencast, advance a presentation, and have the camera on your face all at the same time.

When I envisioned content creation, I thought I would be able to record everything at once, but I learned that the best way to include visuals (the presentation) was to add them after recording myself.

Create your most important content last.

I should have known that the first learning experience needed to be strong! It needed to set the stage for the rest of the learning experiences. Instead, my first learning experience was the worst one. If I could do it over again, I would have made my first training video after I had gotten into a creation rhythm.

Stay close to the learner, yes so you can know their pain points, but also so you can feel their joy.

Don't forget why you are a designer! The best way to remember why you do this work is to stay close enough to the learner that you get to watch them experience the joy of learning. Today I watched as two learners experienced my videos. They were absolutely blown away and immediately called their co-workers over to watch the videos. That brought me a lot of joy and made it all feel worth it.

Strengths and Weaknesses

Strength - The content was right.

I feel confident that we nailed the content. Based on the reactions from the learners and leaders, I feel really good about the content. This came from really empathizing with the learners.

Strength - Videos were an ideal length.

The videos needed to be short enough that people would watch them and stay engaged. This happened.

Weakness - Google Classroom was confusing.

I have yet to find an LMS that brings joy and clarity to non-academic environments. They seem to all be built around grading and assignments. For this reason, the learners were a little confused about the terms "points" and "grades" and they weren't sure what to do.

Weakness - My first video was not well designed.

The first video has visuals that are all over the place. They are not timed well, and my video bubble is too large. I wish I had made that one last.

IP&T Contributions

How does the design knowledge you learned while designing/developing your project compare/contrast with the theories, strategies, principles, or frameworks you learned as a student in the IP&T program? This should extend beyond the literature you reviewed for your annotated bibliography, and also consider the scholars you studied throughout your coursework.

Final Reflection

Much of my most poignant thoughts are contained throughout the body of this paper, however, I will write some final reflections on my most important takeaways.

Momentum

I'm consistently amazed at the importance and power of momentum during the creation process. Momentum in this case refers to the first initial push into something uncomfortable, to conquer the blank page, to dive head first into deep water. This principle is all around us, but we often forget about its importance. It applies to going on camping trips, learning a new skill, loading up the family for a bike ride, going to a wedding reception, or preparing a speech. Once momentum is achieved, the project often becomes enjoyable and takes on a speed of its own.

In the case of this project, I wish I had created my first script sooner. I knew that a script was the right way to go, but I kept trying to make it easier by ad libbing. In the long run, this "easier way" took longer and was much less fulfilling. Once I stepped down the right path and gained momentum by writing that first script, everything sped up!

The project started humming along, and it was hard to stop. I think achieving a state of flow requires that first bit of inertia, or momentum.

School

This will be my second graduate degree and perhaps final project as a student at a university. Approaching this moment is like anything worthwhile in life, deeply meaningful, causing a range of emotions. One of my favorite professors, when talking about college, once said: "what's the rush? Why is everyone so eager to get on with the 'real world?' This is a special time in your life! Don't rush it."

I couldn't agree more. Dedicating time solely focused on learning is one of the great joys of my life. "School" is uniquely positioned in my mind as a sacred and blessed opportunity to focus on expanding my capacity to try and do good in this world, and I am thankful that I was able to learn from incredible faculty and students who feel very much the same way.

My greatest desire at this stage in my life is to create the same hunger in future generations of students.

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Appendix

Test Script

Welcome to Graphite Connect!

You are probably watching this video because your customer invited you to join Graphite Connect. Congratulations! Before I share the basics of using Graphite Connect to do business with your customer, let me give you a brief overview of what Graphite Connect is.

Imagine a place where you can securely store all the information that your customers are always asking you to provide. I'm talking about banking and tax information, location and product information, even stuff like if you qualify as a diverse supplier, or the all of your data privacy or infosec data. Graphite Connect securely stores all of that information, allowing you to share it with the click of a button, instead of filling out endless forms over and over.

Automatic Updates

And when you need to update critical information, your customers on Graphite Connect will be notified of the changes.

Graphite Connect is a Network

You join Graphite Connect for free and Buyers pay to use it for onboarding suppliers like you. You receive a lot of benefits for joining the network. In short, Imagine LinkedIn, but for buyers and suppliers. But extolling the virtues of Graphite Connect's network is not the purpose of this video. I'm here to help you know what to expect as you connect with your customer.

The first thing you will do is click the "join graphite connect" button in the email you received.

Then you will click "get started." Next you will ensure your name is spelled correctly and you will create a password for your account.

You will then share simple tax information. This step is critical because Graphite Connect uses your tax information to ensure you have a unique profile in Graphite Connect.

Welcome to your connection overview page! Here you will see an overview of all that you need to do to connect with your customer.

Let's start by providing the company summary information. Here you likely only have a few required questions, but keep in mind, you can use this section to advertise all that your company is capable of providing, thus allowing other users of Graphite Connect to search for you. Remember, this is like LinkedIn.

If you ever need to delegate the task of filling something out, do that by clicking the assign users button.

After you have filled out all of the required information, you will have one last step...to certify that your information is correct. After you have done this, your customer will be notified and then the ball is in their court to do any risk review or final checks before you connect.

Suppliers often tell us how much easier this process is. So go ahead and give it a whirl. We hope you enjoy speeding up business using Graphite Connect.

Final Scripts

01 Life Before Graphite

Welcome to the graphite team! We are so excited to have you with us. And we are also so glad you have begun your learning journey by watching this first video.

This first training video is to help you know what life is like before graphite. Now I'm not talking about your life. You know all about that. But I'm talking about what it's like to be a procurement professional without graphite.

Wait! Did your brain instinctively react with curiosity to the word "procurement professional?" If it did, then you are not alone.

The simplest definition for a procurement professional is a person who is responsible for buying stuff for their company. That's not a great definition, but it gets us started. There are many names for these people. In many cases, the department is called purchasing. In some companies they call themselves strategic sourcing. But the simplest way to think about it is that these people are responsible for finding the best suppliers of products and services, for the best pricing. They do this by building great relationships with suppliers.

Wait, I just used another word. Suppliers! I'll get to that in the next video.

I've worked for a lot of companies who had procurement teams, but to be honest I had no idea what they did. And I definitely had no idea how much information they have to gather from suppliers before they can actually buy stuff. I won't get into all the details, but let me share just a little bit about what the process looks like.

Let's say Laura really wants to buy some project management software because she just can't keep everything straight in her fast-growing business. Instead of just buying some expensive software that may or may not be secure and effective to use, she reaches out to Aaron on the procurement team and asks for help. She tells him exactly what she needs and Aaron's team gets to work finding a supplier. This first step in finding a supplier is often called an RFP event, RFP stands for request for proposal. Basically this means the procurement team outlines exactly what they need to buy, and then they find a few different suppliers who sell that product or service. They then ask the suppliers to propose their pricing and their product to see which supplier wins!

Once they have selected the supplier, the procurement team has to **MAKE** sure the supplier meets their standard for doing business. In this case, the software will be processing the company's data, tying into their email system and calendar. This poses an information security risk so one thing is sure, they need to make sure the project management software adheres to the strictest standards for information security and data privacy.

In addition to understanding the suppliers infosec and data privacy policies, Aaron's team needs to know A LOT more about the supplier. Is the supplier trustworthy? Do they follow anti-corruption policies? Is their banking information correct? What tax laws do they follow? Do they have any violations of law in their past? Are they really located where they say they are? And so on.

As you can imagine, gathering all of this information about a supplier takes time and it's potentially fraught with a lot of back and forth communication. And to be honest every company typically chooses to gather this information in different ways. Some companies use PDFs' some use online surveys. Some subscribe to services that check only a portion of what they care about when it comes to risk.

And think about it. Aaron's team is not just helping Laura! They may have 50 other similar requests, depending on the size of the company.

SO how do we make sure Laura gets her needed software in a timely manner?

Graphite Connect of course! No honestly, Graphite is truly the answer. Imagine a place where all of that supplier information is already stored. Imagine a place where procurement teams can go to gather all of the needed information from the supplier. All communication, surveys, banking information, information about fraud, data privacy...everything stored in one place. And if the supplier is already a part of the network, much of the needed information is already there. Aaron's team only has to ask the questions that are unique to his company.

One more thing. Graphite Connect not only stores this information, but for crucial information like Banking, tax, and location information. our system and our teams validate that data to make sure it is accurate, protecting against fraud and errors.

So now I hope you have a good idea of what life is like without graphite. And what life could be like with it. The cool thing? You get to be a part of improving the lives of procurement professionals around the world!

02 Buyers and Suppliers

In our last video I told you I'd give a little more information about what I meant by the term **supplier**. It's probably pretty obvious but I'll share just a little bit more so you understand what we mean when we say **buyers and suppliers** within the graphite connect work.

First off. Suppliers are the businesses that **supply products or services to buyers**. Suppliers are often referred to as vendors as well. Suppliers can join graphite **connect for free**. Think of **the linked in analogy**. These suppliers are like the people who put their resume on linked in. At the time of this video creation, **we have about 90,000 suppliers in our system**. The benefit for them is that they can create a profile and **easily share it with buyers**.

Now that I've mentioned it, we also talk a lot about **buyers**. Buyers in Graphite Connect are **paid users** who **customize** our system to meet their needs so they can effectively find good suppliers. In many cases we, at Graphite refer to these buyers as our customers, or clients.

Now that you know a little more about buyers and suppliers, let's talk about how that plays out in our software. Within Graphite Connect, there is a **grand division between buyers and suppliers**. If a user is designated as a supplier, they will have a different experience with the interface as opposed to being designated as a buyer.

Within Graphite if you are designated as a supplier, you will **see any reference to a buyer listed as a "customer."** A "customer" within the user interface will always mean a buyer. For example, this company "demo supplier 2" is designated as a supplier and they have been asked by their "customer" Touchless Test, to onboard using Graphite Connect. If you are on the support team most of your work will be with suppliers and their interface will always say customer when referring to the buyer.

On the other hand, if you are Touchless Test and are designated as a "buyer," and you have asked Demo Supplier 2 to onboard, you will see them designated as a "supplier." If you are working with one of our clients who pays Graphite Connect to configure the software like Adobe, you will always see references to the suppliers and you will never see the word customer.

I know what you are thinking, **"but wait!** Companies are not just one or the other!" and you are right, most companies buy things from others, but they also sell their own products. For this reason Graphite will always allow users to change their settings.

Let me show you how to designate yourself as a buyer or supplier and how it impacts your experience. When adding yourself as a user to an entity within Graphite Connect. When setting yourself up as a company on the manage entities page you will be given the option to designate yourself as a buyer or supplier or both. In most cases you will want to select both so that you can easily toggle between the two.

So remember: **Graphite's interface will change depending on the designation of buyer or supplier.**

03 The Network

Not only does Graphite Connect help buyers on board suppliers, but because Graphite Connect is also a **network**, this on boarding process can be significantly expedited. To help you understand the benefits of the network, think about **linkedin**. LinkedIn is also a network with **thousands of potential employees**, who have carefully curated their profiles so that when their dream employer looks at their profile, that employer can immediately know a lot about that person.

Graphite Connect works in the same way. Companies **create a profile**, store it in Graphite connect, and when a buyer needs to know more, the **information sharing is instantaneous**. Now if you watched the “life before Graphite video, you already knew this,” so this video goes a little deeper.

Our customers, like **Adobe and Intel**, **pay us** to make sure their suppliers provide the information that **Adobe and Intel care about**. This is all fine and dandy, BUT what do you think would happen to the network if every one of our customers wanted to ask their suppliers Their own custom set of questions? The network would become rather pointless, requiring every supplier to **always answer new questions** when they connect. Imagine creating a different profile in linkedin for every single employer you were interested in!

For this reason, **Graphite Connect** has worked for 100s of hours creating what we call **network questions**. These network questions can be used by all of our customers, so instead of Adobe asking their own custom question:

Example.: **Do you audit your financial statements?**

We would rather have them use our network question of:

Example. **Are your company's financial statements regularly audited?**

That way when Intel chooses to ask the same question, the supplier only has answer the same question once, it's stored in their profile and Intel gets the

For this reason, we REALLY want our customers to **use our network questions**. Of course they will have their own very specific questions, but we keep these to a minimum, so the suppliers only have to answer a few new questions rather than an entirely new set of questions every time.

So remember! **Help our customers leverage the power of the network by using our network questions.**

04 Basic Navigation

Graphite connect has a lot of functionality that I will show you later. In this video we will focus on a few main elements of the user interface.

Home button

Main onboarding screen

05 Connection Phases

One of our customers favorite features in Graphite Connect is the visual workflow where customers can see the onboarding process in real time. This visual workflow is divided into four main connection phases and it's very important for you to understand these phases and how they impact what happens during the onboarding process.

During the Invite phase....

During the Connect phase...

During the review phase...

So remember...the connection phases determine a lot of different functions within graphite from, what is visible to the buyer, which tasks fire, and ...

05 ERPs and Integrations

If you are like me, when I started, you are probably wondering "what on earth is an **ERP or integration?**" By the end of this video, you will know.

Let's start with an ERP. The term ERP technically stands for **Enterprise Resource Planning**. Does that sound broad? YES! And ERPs really can do a lot! But In the graphite connect world, what this is really referring to is the **system our customers use to track their crucial supplier information** so they can create purchase **orders** and issue **payments**. Examples of ERPs include, **Oracle, WorkDay, and SAP**. There are Many Many different ERPs.

ERPS store critical data like **tax and banking information** and procurement professionals rely heavily on their ERPs to keep this data secure and on hand so they can pay their suppliers. Where does graphite come in? It is common for companies to hire master data teams who are responsible for taking all fo the suppleir information and getting that information into their **ERP**. **This is often a manual process** requiring a lot of steps. So Imagine having **Graphite send** information directly to the ERP!

This is where the term **integration** comes in! Graphite Connect can integrate with the ERP, securly sending all relevant information directly into the ERP.

Once graphite is integrated, all the procurement team has to do is sync the supplier data to the

ERP and voila! They can issue POs, track spend, and so on. This is the reason “ERP connection data” is the final step in our visual workflow.

SO remember: When you hear the words, ERP, Oracle, SAP, or PO, the person is talking about their very important system that allows them to pay suppliers. And remember that, with some technical work, Graphite connect can Integrate with those systems.

07 Legacy Suppliers

Now that you are really rolling with your understanding of Graphite, procurement, ERPs, suppliers and buyers, you are ready to understand the concept of Legacy Suppliers!

As you can imagine, our customers have been doing business with suppliers for a long time, and they already have a lot of suppliers within their ERPs. Rather than start completely from scratch, our customers often want to get their suppliers into our system. We refer to these suppliers as “legacy suppliers.”

At Graphite we have a vision we call “winning the network.” essentially we want everyone in the buyer and supplier world to know about graphite and think of it as THE option for connecting buyers and suppliers. One of the fastest ways to do this is to add legacy suppliers to our network. For example, one of our customers had 200,000 legacy suppliers stored in their ERP. That’s an immediate boost to our network!

AS you can imagine, loading 200K suppliers to our network is no small task, and you can’t do it all at once. But creating a strategy to onboard this suppliers is essential and we have done it many times.

The process of importing legacy suppliers is often challenging and it requires a team of people determining how to do it, but it’s totally possible and our customers love seeing their suppliers in our network.

So remember, a legacy supplier is a supplier that is already stored in our customers erp. And in most cases these suppliers will be imported into graphite connect.

08 Validations

Imagine you are part of a small procurement team and your job is to validate the information of over a 100K suppliers! Sound like an easy task? No way! Graphite’s ability to validate information is a huge benefit to our customers.

So what do I mean by validation? Well, each time a company, like Adobe, works with a supplier, Adobe needs to make sure that supplier is providing accurate and honest information. You see,

sometimes suppliers lie about their location, banking information, supply chain, ect. So they can get **paid and disappear** without providing the promosed service or product.

With a process that leverages **third-party tools and a team of data validation** experts, our customers can be confident that their supplier data is accurate and verified. We validate key supplier commercial data including **TIN, W-9, OFAC, bank routing**, and more.

Our system does some of this validation **automatically** using address lookups, TIN checks through the IRS's website, and optical character recognition for w-9's. But we also have a team of **phenomenal people** who check bank documents and certification documents to make sure the supplier is legitimate.

Show the map and explain the final steps. **Also give a view into the data validations page. And how they resolve challenges with the suppliers.**

Learning & Instruction Action Plan

Phase 1 - Onboarding Employees

The following content will be delivered through Google Classroom and will be a mix of short videos and written documentation. The learner will not only consume content, but be requested to submit videos to demonstrate understanding. A * indicates content that could also be used for customers.

Overview Course

Objective: Describe and demonstrate what Graphite Connect is and how it works at a basic level.

Lessons to be included:

- Brief overview of life without Graphite (3–5 minutes)
- Suppliers and Buyers (3–5)
- The network (3–5)
- Basic navigation* (2–4)
- Connection phases (2–4)
- ERPs and Integrations (3–5)
- What are legacy suppliers? (2–4)
- Validations (4–6)

Navigation Course *

Objective: Describe what each item is.

Lessons to be included:

- Elements of the sidebar (TOC)
- Home button
- Search
- Buyer vs Supplier view
- Risk Level
- Action Plans
- Topics

Graphite Customer Tools Kit *

Objective: Demonstrate the use of each tool along with one real-world use case.

Lessons to be included:

- Messages
- Task assignments
- Notifications
- Notes
- Topic reviews
- Search

Admin Features Kit *

Objective: Demonstrate the use of each tool along with one real-world use case.

Lessons to be included:

- Company profile
- User permissions
- User groups
- SSO
- Getting help

Implementations Kit

Objective: Describe what each feature is and write an example Hammer ticket for each item.

Lessons to be included:

- The Hammer
- NSJ vs Supplier Survey
- Implementation Process Overview
- Casual Experience
- Supplier Classifications/SOT
- Lists
- Compliance Topic Questions
- Risk Reviews
- Topic Reviews
- Non-Networks
- Advanced Filters
- User Groups/Segmentation
- Testing
- Contracts
- Confirm Updated Fields
- Delete vs Disconnect

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- Legacy
 - Export
 - Bulk Communications
 - How to create a hammer ticket
 - Integrations
 - User Permissions
 - NDA's/T&Cs,Click to accept
 - Guided Intake
 - Rescreens
 - Bulk Upload
 - Diverse Supplier
 - Opportunities
 - Action Plans
 - Security Incident response
 - Operational Reports
 - Projects/Kits
 - Email Templates/Send Grid
 - Translations/Localization
 - Badges
 - Preferred Supplier
 - Supplier Information Update
 - Supplier Change Requests & options therein
 - Disconnect
 - Rescreens
 - Quick Links
 - Expedite NSJs feature
 - Graphite Responder
 - Questions/Admin pages

TOUCHLESS

- TouchlessOne

the different environments in use and what they are for

Testing Tricks

How to Use the Sandbox > this attached document (which, yes, is outdated)

Ready to Transact (probably)

More Actions button

Task creation and Reassigning Tasks