

Spring 5-10-2014

# A Rhetoric of Data: How a Technology Company Communicates Research

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# A RHETORIC OF DATA: HOW A TECHNOLOGY COMPANY COMMUNICATES UX RESEARCH

by

LAURISSA WOLFRAM-HVASS

Under the Direction of George Pullman

## ABSTRACT

This dissertation provides a new understanding about the role of communication in the User Experience design process. For eight months, I conducted an ethnographic, participatory case study of “the EmailFactory,” a mid-sized technology company that builds and runs a web-based email-marketing platform. Throughout the study, I explored how the company collects user research, shares it, and uses it to inform their design process and company decisions. Through this dissertation, I examine the entire rhetorical situation of user experience research at this company: the author (those who gather and share the research), the audience (the designers, developers, corporate executives, other company employees, and, at times, the public), the context (the company culture and everyday environment), and the purpose (a company and web-based application that directly benefits from the research

findings). First, I provide a thick description of the company and its culture then describe and analyze how the company shares and communicates user experience research to both internal company audiences and external public audiences. I argue that as a field Technical Communication knows very little about how user research is used and communicated once it is gathered and analyzed. My findings—the descriptions of how user research is communicated and then used to improve both the EmailFactory product and company—fills this gap in current research and contributes to our knowledge about what writing and communication looks like within User Experience work.

INDEX WORDS: Rhetoric, User experience, UX, UX research, Ethnography, User-centered design, Technical communication, Workplace study

A RHETORIC OF DATA: HOW A TECHNOLOGY COMPANY COMMUNICATES UX RESEARCH

by

LAURISSA WOLFRAM-HVASS

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

In the Colleges of Arts and Sciences

Georgia State University

2014

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Laurissa Wolfram-Hvass  
2014

A RHETORIC OF DATA: HOW A TECHNOLOGY COMPANY COMMUNICATES UX RESEARCH

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May 2014

## **DEDICATION**

*To my family, who never once doubted that I could do this.*

## ACKNOWLEDGEMENTS

“I have fought a good fight, I have finished my course, I have kept the faith. . .”  
1 Timothy 4:7

I couldn't have asked for a more supportive and encouraging family—who cheered me on even from 9,000 miles away. I don't know any other mom who, while visiting and on vacation, would get up at the crack of dawn just so her daughter wouldn't have to sit and work alone. Mom, your sweet, gentle spirit is something I'll always strive to emulate. Dad, you taught me not to care about what anybody else thinks (a lesson I'm still learning). Thank you for helping me live my dream and for challenging me to never, *ever* settle. I inherited the heart of a fighter from the both of you, along with the stubborn will to keep pushing through. Thank you for teaching me to set the priorities that kept me sane throughout school: God first; everything else will fall into place. This whole PhD thing is your fault, you know. You both always told me I could do anything I wanted to do or be anything I wanted be—and I believed you.

My Viking, I cannot thank you enough for the strength and support that you've been for me these past two years. Thank you for patiently putting up with my long hours of work, for listening enthusiastically to all my ideas, for calming me down, and for helping me carry the load. Most especially though, thank you for loving me through it all. We vowed to love each other “for better or for worse.” I'm pretty sure the final stretch of grad school falls under the “for worse” category.

George, three years ago I sat in your bright orange office in the GCB and asked if I could work with you. I thought you could push me further than anyone else could and you would take the time to challenge me more than anyone else would. You did both. Week after week, you quietly raised the bar of expectation—just high enough so that it was beyond my reach but never high enough to discourage me. Thank you for making your office a safe space to talk through ideas, to question, to fall, and to get back up again.

To the rest of the academic community at Georgia State University, it's been a pleasure working with and among you. To my committee—George Pullman, Mary Hocks, Elizabeth Lopez, and Beki



Grinter—thank you for your feedback, encouragement, and expertise. Lara, I won't ever be able to look back on my graduate school years without thinking of you, your advice, your kind critique, and—most of all—your friendship.

Finally, I would be remiss not to extend a very special and heartfelt *thank you* to my research participants at “the EmailFactory.” Thank you for welcoming me among your ranks, for letting me pester you with questions, and for sharing your wealth of knowledge and experience. I learned so much from each one of you. While the dissertation process wasn't exactly easy, you all made it enjoyable and so very, very rewarding.

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## CHAPTER 1:

### INTRODUCTION: EXAMINING THE OTHER HUMAN IN THE HUMAN-CENTERED DESIGN PROCESS

#### Introduction

Organizations put a lot of time and money into understanding the people who use their websites and applications—and justifiably so. If users cannot understand how to use an application then the application has failed to meet its purpose. User experience (UX) researchers encourage designers and developers to include their users in the design process early and often. Researchers take great care to understand users' needs by interviewing them, learning about their workflows, letting them test prototypes, and observing how they interact with iterations of a product. This focus on the user is known as “human-centered design” (also known as “user-centered design”), a design philosophy that prioritizes the human user over the technology. To do this, designers and developers have to be aware of how their users think, how they learn, how they make decisions, what they value, and what limitations they may have.

The growing field of User Experience operates under the human-centered design philosophy to create products that users are not only *able* to use, but also *want* to use. Jakob Nielsen and Don Norman define the “User Experience” as “encompass[ing] all aspects of the end-user’s interaction with the company, its service, and its products” (n. pag.). Successful companies take all of these three interaction points into account. They consider the direct interactions customers have with their product: Is it easy to use? Does it perform tasks quickly? Is it pleasant and enjoyable to use? Or is it difficult and frustrating? They scrutinize the language and tone that they use with their customers: Is it over-technical and filled with jargon? Is it patronizing and condescending? Is it clear, informative, and helpful? Is it human? They scrutinize the power and flexibility of the product they offer: Does it provide what users really need? Does it help them perform tasks and accomplish goals? Or do users’ needs



exceed the software's capabilities? The goal of user experience research is to answer these questions and to use those answers to inform the design and development of products.

While the user is the focus and purpose of the human-centered design process, we have neglected an opportunity to understand more about another human who is integral to this process: the UX researcher. The UX researcher is the bridge of communication between the users and the rest of the company. He or she is the one asking the questions that uncover insights about users, their behaviors, wants, needs, and limitations. The researcher advocates for the user and makes sure the designers and developers have the information they need to make usable and engaging products. Communication plays a very important role in the effectiveness of user experience research. If the researcher can't present his or her findings about the user or product to the rest of the company in a compelling way, those findings won't be acted upon, rendering them useless. Despite how important clear and effective communication skills are to the user experience design process, the fields of Rhetoric and Technical Communication know very little about what happens to UX research after it's gathered and how it's used to improve companies and their products.

Even though "communication" is what our discipline is about, our publications and academic inquiries don't address how user experience researchers should or could communicate their findings in a compelling and persuasive way. Within Technical Communication, our most notable academic journals are the *Journal of Technical Writing and Communication*, the *Journal of Business and Technical Communication*, and *Technical Communication Quarterly*. I did a review of all the articles printed in these publications over the past five years (2009—present) and was disappointed to find *only one article* (Friess *Designing from Data*) that addresses how user research findings were communicated within a design team and used to support and influence design decisions. Even the Society of Technical

Communication's more industry-focused publication, *Technical Communication*, lacks content about how user research is communicated and used to influence product and company design.

This means that over the past five years, a discipline that is focused on taking a "user-centered approach to providing the right information, in the right way, at the right time to make someone's life easier and more productive" (Society of Technical Communication "Defining Technical Communication") has said virtually nothing about how to effectively communicate user research findings to the people in the product design process who are responsible for creating programs and applications that millions of people use every day.

In her dissertation research at Carnegie Mellon, Erin Friess found the same problem with our discipline's textbooks and professional handbooks. Both genres lack information on how to incorporate usability research back into design solutions. Friess found that Technical Communication textbooks "often highlight the methods and practice of usability study, but gloss over the process of analyzing and incorporating findings accurately into the product" (6). Professional guides for Technical Communicators have the same problem and lack information on how to go from conducting usability research and testing to improving product design. Friess argues that "[G]iven the lack of discussion on the topic of retaining usability in the move from research to iteration, it appears that authors of usability textbooks for students and usability guides for professionals believe that designers and technical communicators will innately incorporate accurate findings from their research into their solution" (7).

This dissertation seeks to fill this gap in current Technical Communication literature through an in-depth ethnographic study of an email marketing service provider, which I call the EmailFactory. The EmailFactory allows users to send bulk emails through a web-based application that is entirely designed and built in-house. My goal was to understand the role of research in the company's user experience design process, how they share and communicate research findings, and how they use those findings to

inform their design choices and company decisions. I joined their UX research team as a participant observer. This role allowed me to spend time getting to know the teams, studying the team's work processes, and understanding the company that their research serves. Several broad questions guided my research through the study:

1. What role does user research have in the EmailFactory's design process?
2. How does the EmailFactory communicate and share user research? What forms (written, verbal, visual) does research take when it's being shared?
3. With whom is user research shared and how do people gain access to it?
4. How does user research inform and influence decisions about the EmailFactory company and product?

### **Definition of Terms**

One of the most challenging parts of writing this dissertation was muddling through terms, definitions, and labels. UX is a developing field of work, which means people are still trying to define what that work looks like and what to call the people who perform it. Each decade seems to have its own buzzwords to describe the work of designing with the user in mind. In the '80s the term "usability engineering" was popular, which gave way to the "user-centered design" philosophies of the '90s, and then "user experience" in the 2000s. The principles from each of these decades never really went away. Instead, they morphed and matured as people learned more and more about designing for users. Titles for the people who perform UX work can also be problematic. Are they UX designers? UX researchers? Information Architects? Interaction Designers? Technical Communicators? In reality, they all work to construct the user's experience, but they specialize in a certain area of that experience. Before I go any further, I'd like to first list and explain a few of the terms I'll use most frequently in this dissertation:

- **User Experience (UX):** What we now know as “User Experience” is a constantly evolving field, built upon principles that have formed over the past several decades. For the purpose of this dissertation, I refer to User Experience (or UX) as a professional career that is concerned with creating and constructing every aspect of a user’s interaction and experience with a software or physical product. This product might, for example, be a web application (like Mint.com) a website (like gsu.edu), a smart phone app, (like a Instagram or Vine), a kiosk (like Redbox), desktop application (like Microsoft Word or Excel), or hardware (laptop or desktop). This dissertation looks at a web application, the EmailFactory.

User Experience is an umbrella term that covers all areas and specialties of UX work, and within this discipline professionals can take on a number of different titles and roles: Information Architect, Interaction Designer, UX Researcher, UX Designer, Technical Writer, Digital Strategist, Human Factors Engineer—and many, many more.

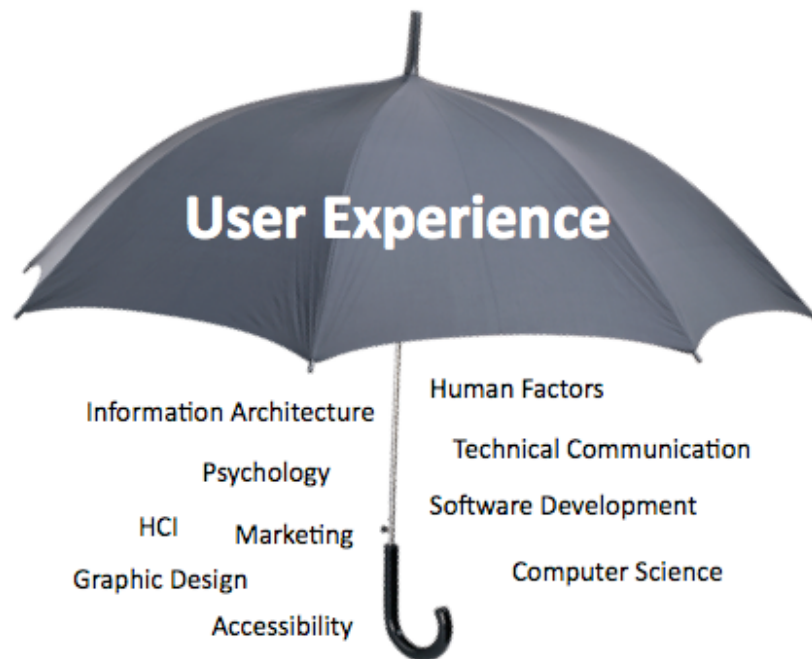
- **user experience:** Written without capital case, “user experience” describes a person’s entire experience with a product, company, or service.
- **usability:** Usability is one part of the user experience. It refers to how easy a product is for someone to understand and use to accomplish a particular task.
- **UX professional / UX practitioner:** According to the User Experience Professional’s Association, UX professionals are “people who research, design, and evaluate the user experience of products and services” (“About UX”). “UX professional” is a generic term to describe job titles such as Information Architect, Interaction Designer, UX Researcher, UX Designer, etc. I use the term “UX professional” throughout this dissertation, unless I’m quoting someone else who happens to use the term “UX practitioner.”

- **UX research / user research:** Both terms are used interchangeably to refer to any information and data gathered by UX professionals through methods such as expert review, usability tests, interviews, surveys, analytics, data queries, and ethnographic observations. The task of collecting UX or user research might fall to someone with the specific title of “UX Researcher”; however, this is not always the case. User research might come from anywhere within an organization—from designers, developers, data scientists, marketers, technical writers, etc.
- **UX Researcher / UX Design Researcher:** UX researchers or UX design researchers are the people tasked with gathering information about and from a product and its users and incorporating that research back into a product’s design. Often, UX researchers are also called user researchers or usability researchers. The case study group I worked with at the EmailFactory refers to themselves as “UX design researchers” or “UX researchers,” and for the sake of consistency, I stick to using these two terms throughout the dissertation.
- **Technical Communication:** Technical Communication is a field of study that focuses on communicating about technology, with technology, or explaining how to use technology. As a field, Technical Communication has contributed a great deal the development of User Experience, and students of Technical Communication often seek UX jobs. I happen to be one of those students and have written this dissertation from my perspective within a Technical Communication discipline of study.

### **UX Design: Person or Process?**

User experience involves designing products or systems that take into account the entire experience of the people who use them. Stephen Anderson, author of *Seductive Interaction Design: Creating Playful, Fun, and Effective User Experiences*, explains that user experience requires much more from systems than functionality and ease of use: “Usability clears the way for a good experience by

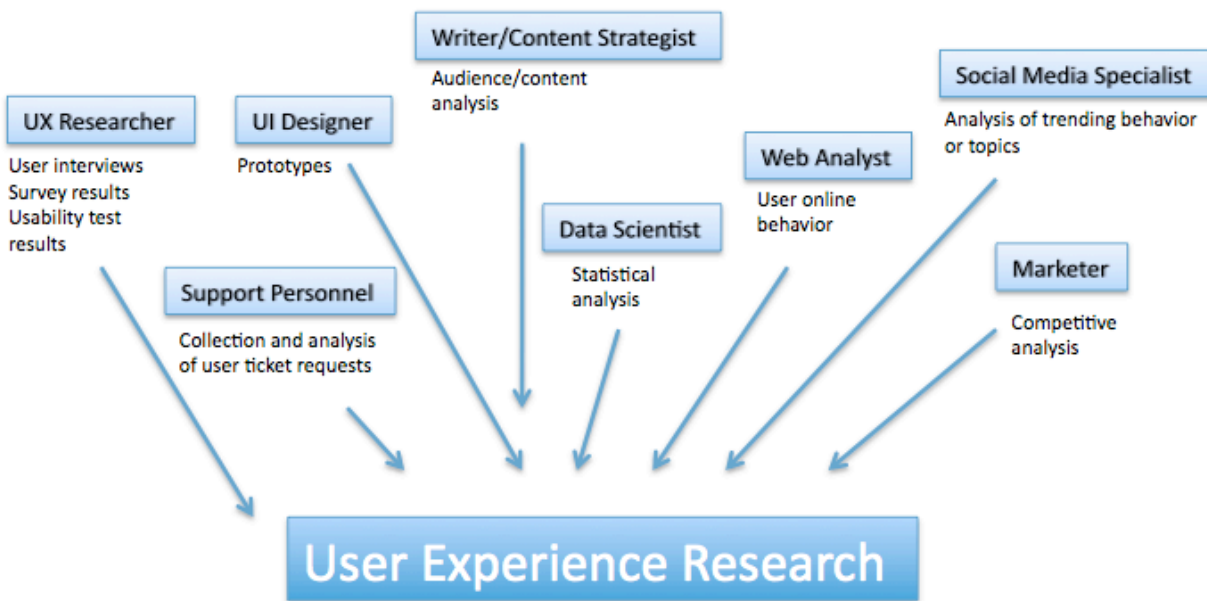
eliminating troublesome interface distractions, but a great experience stems from something more—an awareness of why people could or do care. The danger is in confusing ‘ease of use’ with actually desiring to use something” (463). In other words, the goal of UX is to create something that people *want* to use. This process requires a constant awareness of how fields like graphic design, marketing, technical communication, accessibility, information architecture, cognitive psychology, HCI, and usability all come together to create a system or product that people enjoy. As Figure 1.1 illustrates, UX has become an umbrella, under which all these other fields fit.



**Figure 1.1 User Experience, the "Umbrella" discipline**

UX professionals can work in any number of places—on in-house teams that exclusively work for one company, for agencies that take on products for several different clients, or for themselves as independent contractors who do work for companies or individuals. Each of these situations is a bit different, and for the purpose of this dissertation, I focus on UX work that takes place in-house, within one company, the EmailFactory. At companies, UX professionals can specialize in many different areas,

such as graphic design, user interface design, frontend development, backend development, research, and technical writing. Depending on the size of a company and the structure of its teams, one person might be responsible for several areas of UX work at one time, such as graphic design and front-end development, interface design and user research, or graphic design and technical writing. Even when job roles *are* narrowly defined and teams have individually designated designers, developers, researchers, and writers, tasks like research and writing can't be realistically isolated to specific job titles. In many ways, the responsibility of understanding users falls to everyone at the company. In order for product design and company processes to run smoothly, everyone must collectively contribute to user experience research by sharing what user insights they have (See Figure 1.2).



**Figure 1.2 People responsible for user experience research**

User experience research isn't the responsibility of just one person or team. This illustration is not an exhaustive list of all the people who might be involved in collecting user experience research, but it does provide a few examples, along with the types of user insights they might have access to.

In 1987, Lee Odell and Dixie Goswami published a collection of essays titled *Writing in Nonacademic Settings*, which explores workplace writing. Up until this point, no one in academia had

taken the time to understand what professional writing looked like, and the collection describes how writing takes places in a number of different settings, for a number of different purposes, and by a wide range of people. University English professors were teaching writing to students without really knowing what kind of writing these students would be expected to do once they graduated and began their professional careers. The chapters of *Writing in Nonacademic Settings* describe the writing processes of engineers, medical personnel, computer analysts, and lawyers—professionals with different backgrounds, expertise, and job descriptions who all engage in the process of writing. This dissertation project contributes to the early research conducted by Odell and Goswami by focusing on how the EmailFactory and its employees communicate user research within and outside the company.

By choosing to focus my work on the *process* of research and communication rather than the job *titles* of researcher or writer, I'm able to draw from a more comprehensive body of literature and background information. This includes, for example:

- Erin Friess's research which evaluates how a group of novice **graphic designers** and **interaction designers** (in some publications, Friess refers to them as **technical communicators**) make decisions about incorporating user data into their designs
- Marcin Treder's research on the user-centered design methods and processes of professional **UX designers**, which involves incorporating research into product design and development
- Patricia Sullivan and James Porter's longitudinal study on the design process of **professional writers** and how they incorporate usability findings back into their documents
- Rolf Molich, Robin Jeffries, and Joseph Dumas's analysis of the usability recommendations from seventeen professional **usability evaluators**

I bolded the professional titles in each example to make this point: While each study focuses on a different set of people, their shared activity of communicating UX research and implementing it back into the design of products is the same. My work draws upon each of these studies, in addition to others



(which I will discuss in the full literature review), and extends them through a case study that explores how the EmailFactory uses their UX research and communicates it to internal audiences within the company and to external, public audiences.

## **Literature Review**

### ***Why study communication in the UX design process?***

If rhetoric is defined as effectively and persuasively communicating a message to a particular audience in a given situation, then rhetoric plays a very clear role in the human-centered design process. UX researchers are tasked with gathering information about their users, their product—even their company—and communicating it in a way that is purposeful and actionable. UX researchers work as advocates on behalf of their users, pushing for changes in an app’s design or workflow that will make it easier to use. But their users are not their primary audience. Their primary audience is their colleagues: the designers, developers, marketers, copywriters—anyone who has a part in constructing the users’ experiences. The ability to communicate research findings effectively to this audience of fellow employees plays a very important role in whether or not necessary changes to an app are made, which means the researcher must carefully consider to whom in the company they are communicating and how best to pass along information to them.

In industry, research that looks carefully at how UX findings are communicated and used is very valuable. Understanding how to communicate user research findings effectively within a company means that products can be designed more quickly and with a heightened awareness to users needs. A number of usability professionals, like Susan Dray, make calls for stronger connections between the research conducted by academics and the work performed by UX professionals. Dray asserts that the future of the usability profession is threatened unless we are able to bridge the divide between academia and industry. She highlights the value of academic research, citing its self-reflective qualities

and rigorous research methodologies as things that industry would find valuable. The problem, she states, is that academic research it is often too narrow to be helpful to practitioners. In other words, industry needs the critical thought and foundational grounding that academic research provides, but academic research often doesn't look at the "real-world" problems practitioners face. Instead academic research tends to focus on "isolating variables to discover the abstract relationships among them, using artificial simulations" (2). By conducting more practical academic research we can open the lines of communication between the university and industry, encouraging academics and practitioners to close the gap between their research agendas and work more closely to define and solve problems that would be useful to them both. This dissertation aims to provide practical academic research by exploring and describing examples of how companies can use and act upon the insights they gather about the users their products serve.

In the field of Technical Communication, the communication processes of UX professionals are understudied, even though UX work relies heavily on rhetorical principles. According to a study of 963 UX professionals conducted in 2013 by Susan Farrell and Jakob Nielsen of the Nielsen Norman group, 90% of respondents graduated from a university. Of that number, 21.3% hold bachelor degrees and 11% hold master's degrees in a communication-driven field, such as English, Communications, Journalism, Technical Communication, or Linguistics (45, 47). When asked which subjects were the most useful to their usability career, "writing" was the second most popular response (after "HTML/CSS/web design") (51). Also in their study, the Nielsen Norman group asked respondents to identify areas in their backgrounds that served them well for the work they do in User Experience, and several pointed to their backgrounds in writing, communication, and rhetoric (I've bolded parts of the quotations below for emphasis):

- “Good **persuasive writing skills** (from college) and good **persuasive speaking skills** (from a stint in Toastmasters) have helped me communicate to clients those messages they don’t always want to hear” (60).
- “**Strong communication skills** have been a big asset. . . . I always have to fight for and justify my changes. This involves **presenting observations, including summarizing the facts so that they can be quickly understood, being prepared to present enough detail to back up those summaries, and understanding the needs of your audience**” (60).
- “I was a journalist for several years, and every day, I was under great pressure to **absorb a large body of material, ask sources a lot of questions and integrate it into a polished, organized piece of writing**. Doing this makes you good at seeing important themes and commonalities in a large body of information” (62).
- “**Training in classical rhetoric** has also been helpful. So much of being a usability professional is about **persuading stakeholders that something is a problem**, and that you have viable ideas for how to address it. **Rhetorical instruction taught me how to structure arguments and how to appeal to people** on different levels (emotion, ethics, logic, etc.)” (63).

Despite the value that UX professionals see in their own writing and communication training, within Technical Communication (and English Rhetoric, in general), we have not actively taken part in researching how our work and teaching instruction directly affects the field of UX.

Based on conversations over the past few years with colleagues in my own department, I venture to guess that very few instructors who teach writing and communication know the kind of work UX professionals do and how valuable strong writing and communication skills are to their everyday tasks. My guess is confirmed by tracing the history of Technical Communication research from 1980s—when technology was becoming more prevalent in the workplace—onward: Odell and Goswami set a precedent in their 1987 collection, *Writing in Nonacademic Settings*, by emphasizing research that

explores writing in the workplace, and Technical Communication research methodology has continued to follow this tradition. Rachel Spilka followed in 1993 with the anthology *Writing in the Workplace: New Research Perspectives*. Patricia Sullivan and James Porter, in their 1997 text *Opening Spaces: Writing Technologies and Critical Research Practices*, examined the methods and research frameworks we use when exploring how computers and technology are changing writing practice. Sullivan and Porter filled a gap in current writing research at the time by offering “a distinct philosophy and rhetoric for the design of studies of computer writing” (xv). Ten years later, in 2007, Heidi Mckee and Danielle DeVoss published *Digital Writing Research: Technologies, Methodologies, and Ethical Issues*, an edited collection of essays that critically and reflexively examines the research methods used in the field of Computers and Composition. *Digital Writing Research* demonstrates that our views of what we do as “writers” is changing by the very fact that the messages we create, the ways we create them, and the ways we study them are changing. McKee and DeVoss explain in their introduction that their collection “focuses on how writing technologies, specifically digital technologies, affect our research—shaping the questions we ask; the sites we study; the methodologies we use (or could use); the ethical issues we face, the conclusions we draw; and thus, the actions we take as scholars, researchers, and teachers” (3). Finally, James Conklin and George Hayhoe’s 2011 text *Qualitative Research in Technical Communication*, presents a “representative sample of qualitative reports” from technical communication practitioners and academics.

As anthologies, these texts represent the current issues, debates, and challenges within the discipline, and as such can be used as a landscape view of the discipline at their given times of publication. All of these texts provide a strong foundation for understanding what it means to write and communicate in a technology-driven world, where the roles and expectations of professionals are constantly shifting. However, I argue that in current Technical Communication research, we have

neglected to understand the communication process of UX professionals and the ways they persuasively use research data to inform changes and improvements in their products and companies

As I've explained, there is little published within the field of Technical Communication that explores the role UX researchers play in the design process. However, the work of five studies offers a starting point for my research: Sullivan and Porter (1990), Vredenburg, et al (2002), Friess (2008), Depew (2007), and Treder (2013). I discuss each of these studies at length, below, and describe how each relates to the research I've conducted for this dissertation.

In 1990, Sullivan and Porter conducted and published a case study of how a group of technical writing students incorporate usability findings into their drafts of user documentation. That same year, Sullivan and Porter published another article that followed up on one of the students from their original study. By the time of the second article, the student had graduated and began working for an unnamed computer software company. In the article, Sullivan and Porter highlight the fact that no one had explored how technical communicators perceive usability findings from tests run on their own work. In response to this gap in literature, Sullivan and Porter's purpose for the study was to identify how one technical writer interpreted and incorporated usability test results from his own work. They found, unsurprisingly, that this process is messy and far from straightforward:

Usability test data is not "pure"—and data never tells writers how they should revise documents. It tells them only what is working well and what is not—depending on their perception, writers may not see everything that "data" is telling them. . . .

Writers/researchers have to interpret results, make judgments about what they mean, decide how (if at all) tests should influence revision. (35)

The work of Sullivan and Porter directly relates to my research by following user research *after* it's been collected. Sullivan and Porter also present their work in a qualitative, narrative form, as I also do in the

next few chapters. However, the focus of their research is on just one person, working in isolation; I am more interested in understanding how user research is communicated among a group of people, working together on a web app. In addition, Sullivan and Porter study the relationship between a writer, usability data, and a document; I'm interested in taking a different perspective to understand more about the relationships between UX professionals, user research, and a piece of software.

In 2002, Karel Vredenburg, Jin-Yo Mao, Paul W. Smith, and Tom Carey published an article surveying current user-design practice among one hundred experienced usability practitioners.<sup>1</sup> The study, which was predominantly quantitative, discovered that the five most common user-centered design methods were iterative design, usability evaluation, task analysis, informational expert review, and field studies. In addition, they found that some of the characteristics considered part of an “ideal” user-centered design process—such as focus on the total user experience, end-to-end user involvement in the development process, and tracking customer satisfaction—were not part of the respondents' typical design practice. They also discovered that some of the methods considered *most* important to the user-centered design process—field studies and user requirements analysis—were the most infrequently used in common practice. This study relates directly to my work, by providing a snapshot of the popular and preferred design methods. The value of the study lies in its broad overview of user-centered design methods for product development. However, as a quantitative study, it answers *what* UX practitioners are doing; it doesn't descriptively explain *how* these individual methods are being used in practice, *why* practitioners are using them, or *how* effective these methods actually are. In addition, the article does not explore what practitioners do with the data they collect from these methods or how they use findings to influence their company or product.

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<sup>1</sup> The article refers to its participants as “usability practitioners,” rather than “user experience practitioners” or “user experience professionals.” The article was written in 2002, when the term “user experience” was not yet in vogue.

<sup>2</sup> *Smashing Magazine* is the lead publication of SmashingMedia, a publishing house for the international Web design community. *Smashing Magazine* is a very well-respected resource for designers, developers, usability

Erin Friess’s ongoing research looks closely at the ways designers adhere (or don’t) to traditional principles of user-centered design. Her dissertation research—and the subsequent articles published from it—all report on how a group of technical communicators collaborate and justify design decisions. She points out that current literature does not explain how technical writers should go about analyzing usability findings and using those findings to make design decisions. In her study, Friess discovered that when her group of novice technical communicators made appeals to support their design decisions, a surprisingly small number (only 12.1%) of these appeals were derived from user data. Instead, the technical communicators relied on other forms of evidence, such as personal opinions, appeals to authority, or anecdotal evidence through storytelling (“The Sword of Data”). Friess’s study provides an excellent foundation for my research, as it highlights the fact that our field still does not have a clear understanding of how usability findings are incorporated back into designs. Her work, however, predominantly focuses on novice designers creating technical documentation, and her data collections are limited to transcriptions of the designers’ bi-weekly team meetings.

Kevin Eric Depew, in “Through the Eyes of Researchers, Rhetors, and Audiences: Triangulating Data from the Digital Writing Situation,” argues that digital writing research tends to focus on analyzing the final text or written artifact—from the sole perspective of the scholar, the person conducting the research. According to DePew, considering just one perspective is limiting and keeps us from understanding how digital writing fits within the entire rhetorical situation:

In essence, I am advocating that digital rhetoric research adopt strategies framed by the communicative triangle—the rhetor, the audience, the digital text or discourse, and the contexts. By designing such methodological strategies, researchers insert communicative participants into the process, which gives researchers the opportunity to see both the complex nature of the research site and apertures in the field’s tropes. (52)

To do this, DePew suggests researchers collect data from a variety of sources and through multiple research methods (such as interviews, case studies, usability tests, and observations), which allows researchers to construct a picture that reflects the entire rhetorical situation, rather than focusing on just one portion of it in isolation. While DePew is more focused on how technology affects writing and communication practices, I'm more interested in how writing and communication affect the process of design at the EmailFactory. However, I share DePew's opinion that current writing research needs to consider the entire rhetorical situation, and in this dissertation I answer that challenge by exploring the entire rhetorical situation of writing and communication within the field of User Experience. Over the course of my study, I didn't just focus on analyzing the written, visual, and spoken products of user research at the EmailFactory; I spent eight months embedding myself into the company, understanding the "context" of company culture, getting to know the people who wrote about design research, and learning about the audience of people for whom the research was intended.

The final source I use as a starting point for my research is a 2012 article by UX designer and entrepreneur Marcin Treder in *Smashing Magazine*.<sup>2</sup> Treder calls attention to how UX design work actually looks in practice, arguing that it does not closely follow what's outlined in traditional user-centered design theory. Through interviews with fifty designers, he learned that design teams rarely conduct user interviews, personas aren't backed by user data and are seldom consulted again once created, and designers rarely test lo-fi prototypes of designs before building them out. Reflecting on his own team's design process, Treder notes, "Of course, in general terms, it was a user-centered process, but . . . we used about 20% of the recommended tools and studies. . ." (n. pag.). Treder's article confirms the more formal academic study by Vredenburg, et. al, referenced above, by pointing out that "field studies and user analysis are hardly used by any of the designers we interviewed" (n. pag.).

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<sup>2</sup> *Smashing Magazine* is the lead publication of Smashing Media, a publishing house for the international Web design community. *Smashing Magazine* is a very well-respected resource for designers, developers, usability professionals, and digital creatives.



The strength of the Treder article lies in its descriptive, qualitative research methods. Treder complements the quantitative research of Vredenburg et. al through his interviews with industry professionals who face the daily struggle of finding the most effective way to meet the needs of their teams, their clients, and their users. This article is quite obviously not academic, which is specifically why I included it in this literature review. All of the texts I've cited up to this point are from academic publications, but it's important to remember that the practice of user experience design—and the work practices that my dissertation research observed—takes place in spaces that are not academic. My goal is to paint an accurate and current picture of User Experience as a field (*in situ*), and excluding the voices of established and well-respected practitioners published in non-academic venues would be negligent on my part as a researcher. By balancing both the traditional academic, peer-reviewed texts with industry publications such as Treder's, I am able to create a more complete picture of user experience design than any one body of resources could do alone.

### ***User Experience and Technical Communication: A Brief History and Foundation***

User experience is a term that is a bit slippery and difficult to clearly explain because its meaning has evolved over the last two decades. Donald Norman, Jim Miller, and Austin Henderson first used the term “user experience” in a 1995 CHI presentation where they explained their work and research at Apple. In the context of their presentation, they describe user experience this way: “In this organizational overview, we cover some of the critical aspects of human interface and application at Apple or, as we prefer to call it, the ‘User Experience’” (155). They go on to explain that their User Experience Architect's Office is dedicated to “[harmonizing] the human interface and industrial design process” across Apple's departments (155). In their presentation, the term “user experience” only describes how people use and work with a computer interface; however, the term's definition continued to expand with the development of the World Wide Web, particularly Web 2.0.

The introduction of Web 2.0 after the dot-com crash at the turn of the century changed things for web usability practitioners and interface designers. Tim O'Reilly, who has long been associated with the development of Web 2.0, explains what it is and how it began in "What is Web 2.0? Design Patterns and Business Models for the Next Generation of Software." According to O'Reilly, Web 2.0 focuses on the user experience and encourages user participation, collective intelligence, open content contribution, and dynamic interface experiences (through richer development tools like JavaScript and XML). In this context, user experience no longer simply means how a person uses technology, but how a person interacts with technology. It adds a level of participation and contribution not mentioned by Norman, Miller, and Henderson in 1995.

Web 2.0 not only revolutionized the way information is created and distributed on the web, but it also drastically changed the way we view web interface usability, because Web 2.0 challenged designers to think about their users' emotions and their complete web experiences. Web 2.0 also opened the door for new ways of marketing to consumers. The expansion of the web over the past 20 years means people are given more options, more websites to choose from, and more services competing for their attention. Nielsen mentions the competitive nature of websites in the introduction to *Designing Web Usability* in 1999, but it's even truer now, 15 years later, than it was then. For Nielsen, user loyalty hinged on a website's ease of use. In contrast, Stephen Anderson, author of *Seductive Interaction Design: Creating Playful, Fun, and Effective User Experiences*, explains that user experience requires much more from designs than functionality and ease of use: "Usability clears the way for a good experience by eliminating troublesome interface distractions, but a great experience stems from something more—an awareness of why people could or do care. The danger is in confusing 'ease of use' with actually desiring to use something" (463). Usability is now the baseline standard for web design. Driven by an increasingly competitive market, designers are expected to create usable websites and web applications that also compel people to use them.

Designers and developers create this desire among their users by building products that not only allow users to accomplish things, but also provide them with a pleasurable experience. Anderson explains that creating a meaningful user experience means creating products that not only help users complete tasks and reach goals, but also provide a meaningful and enjoyable experience that draws users in and fosters loyalty. He notes, “We need to learn how to deliberately entice a person to engage in some sort of behavior” (371). Jesse James Garrett in *The Elements of User Experience: User-Centered Design for the Web and Beyond* describes user experience this way: “The user experience design process is all about ensuring that no aspect of the user’s experience with your product happens without your conscious, explicit intent” (391). Twenty-first century interface design relies on designers’ abilities edge out competitor’s sites by providing services that users want, as well as need.

### ***Technical Communication, Rhetorical Theory and User Experience Research***

User Experience pulls from many different disciplines, but because my focus for this dissertation is to understand how user research is communicated and shared, I’m approaching the topic from within Technical Communication specifically and the field of English Rhetoric in general. As a discipline, Technical Communication has played a distinct role in shaping the field of User Experience and has influenced it in several ways:

- Its holistic awareness of audience, context, and purpose
- Its influence on design practices and methods
- Its contribution to the underlying theory of User Experience Research and Design

I explain each of these in greater detail in the following sections.

#### *Technical Communication and Its Holistic Awareness of Audience, Context, and Purpose*

Coming from a long rhetorical tradition, technical communicators are trained to always consider audience, context, and purpose in their work. Their success in written and spoken communication

depends on their abilities to present a message in the most effective way possible to a particular audience, in a particular situation, using any means available to them. In fact, during my first conversation with the Director of User Experience at the EmailFactory, he asked me to explain what rhetoric was, and after I gave him the above definition, he chuckled and said, “Well, that’s exactly what I do in User Experience!” The idea of audience, context, and purpose from the field of Rhetoric easily translates to UX work as an understanding of how to create products that users need in order to meet particular goals in a given situation. Ginny Redish explains that “[t]echnical communicators are by training and necessity user-centered” (Redish and Barnum 92). Historically, the Technical Communication profession began by making documents and products more usable—at first, by writing documentation to help audiences use new and complex products, then by moving into the development process as user advocates who call for increased user-participation during design stages. As technology continues to develop and becomes more widespread, the skills of technical communicators—especially their focus on audience, context and purpose—become even more valuable within the field of User Experience.

The initial rise of the Technical Communication profession came about during World War II. The war prompted the manufacture of complex machines and weapons, and technical communicators were given the task of creating the documentation that helped people understand how to use them (Conners). As computer technology developed in the ‘60s and ‘70s and then continued to advance over the next forty years, the work of technical communicators likewise expanded to include creating documentation for software and hardware. Technical communicators were called upon to help “fix” poor designs by writing documentation that helped people work with technologies, such as software applications, that were not inherently usable on their own (Redish; Johnson, Salvo, and Zoteway). Redish explains that seeing users struggle with products, technical communicators took on the role of “user advocates” arguing that designers could create more usable products if they brought their target

audience—the people who would be using their products—into the design process to test products earlier and more often (194).

Computer programs and later web-based services made it even more challenging for designers to understand who uses their products, how, and why. The audience, context, and purpose of a design aren't always straightforward and easy to identify. Computer technologies have become ubiquitous in our culture, and we interact with them daily—from our smart phones and tablets, to the self-checkout register at grocery stores, to the control boxes on our sprinkler systems. As more people use technology to complete everyday tasks, audiences, or “user groups,” expand and diversify, making it difficult for designers to accurately pinpoint who uses their products, what those users really need, and what their technical abilities are.

Although technology challenges us to rethink our definitions of audience and purpose, it perhaps has an even greater impact on how we think about context. Web 2.0 is an excellent example of this. One of the defining characteristics of Web 2.0 is the way multiple sites interact together or are embedded within each other—such as a Twitter feed posted on the sidebar of CNN's homepage or a YouTube video embedded into a WordPress-hosted blog. Websites no longer function as isolated, self-contained spaces; they have dynamic relationships with one another that share and redistribute content. Traditional web usability has limits that do not consider this broader context of web design of Web 2.0. In addition, mobile devices, like smart phones and tablets, make it easier for people to access sites and services on-the-go—but they make it more challenging for designers, who now also have to be concerned with screen size, resolution, and software platforms. Researchers in Technical Communication have been among those responding to Web 2.0 and the resulting changes to usability. For example, William I. Wolff, Katherin Fitzpatrick, and Rene Youssef question how usability needs to evolve to evaluate Web 2.0 functions. Likewise, Heather McGovern explains that although web usability

testing helps designers understand whether or not users can complete tasks, it does not place sites within a rhetorical context that “examine[s] not only how site visitors perform particular actions on a site, but also how a site facilitates actions outside the site” (177).

### *Technical Communication and Its Influence on Design Practices and Methods*

As I just mentioned in the last section, when technical communicators first started working with software and hardware development, their jobs began at the very end of the design cycle. They were called upon to alleviate the pain of poor designs by providing customers with instructional documentation and help guides. To put it bluntly, their job was to put a Band-Aid over the problem of a poorly designed product by helping users muddle through with the help of a manual. This role placed technical communications in a position to call attention to the issues with the current design practice and usability methodology. They began to push specifically for two changes in the design process:

1. They urged design teams to allow technical communicators to take part in “build[ing] clearer communication into the interfaces, clarifying messages, choosing users’ words for menu items, ensuring consistency across screens and functions. . . .” (Redish 194).
2. They also asked to “move from testing usability at the end to building in usability through more pre-design research on users and their tasks” (Redish 194).

This moved technical communicators from the *end* of the production cycle to the *beginning*, where they had more direct interaction with products’ users before projects were actually complete.

Eventually, usability professionals began to express their support of technical communicators and acknowledge the valuable contributions they brought to design teams. Joe Dumas, a human factors psychologist, demonstrated his support of technical communicators’ contributions to the field of Usability by co-authoring *A Practical Guide to Usability Testing* with Ginny Redish in 1993. *A Practical Guide* was the first “how-to” of usability and Dumas cites this collaborative piece as “perhaps the most important event in [his] career” (Dumas 58). Several years later Donald Norman offered his support for

technical communicators in his 1998 book, *The Invisible Computer*, by praising them for their importance to the design process. Norman defines technical writers as “people whose goal should be to show the technologists how to build things that do not require manuals” (191). He argues against technical communicators being brought into development process at the very end and strongly encourages design teams to include them early on: “The technical writer should be a crucial part of the development team. Indeed, if the technical writer is completely successful, the device will be constructed so well, with such a clear conceptual model, that no instruction manual will be required” (191).

Technical communicators have also published a great deal about UX practice from within Technical Communications. Books such as *Designing Visual Language* (Kostelnick and Roberts), *Principles of Web Design* (Farkas and Farkas), and *Usability Testing and Research* (Barnum), *Usability Testing Essentials: Ready, Set . . . Test!* (Barnum), *Don't Make me Think* (Krug) are all published from within Technical Communication and provide guiding principles for creating more usable products and conducting usability tests. In addition to publishing textbooks and usability resource guides, technical communicators have also contributed to the field of UX through their critiques of testing practices. Carol Barnum, for example, has published and presented research on the optimal number of participants for usability testing (“What’s in a Number” and “The ‘Magic Number 5’”).

#### *Technical Communication and Its Development of Usability Theory and Research*

Ginny Redish explains that just as the people working in UX come from many different disciplines, so does its theory. Technical Communication is one discipline that has taken part in developing this theory. The underlying theories of rhetoric within Technical Communication provide a foundation for understanding the user (audience), their goals (purpose), and their situations (context). Erin Friess has explored the intersections of user-centered design, technical communication, and rhetorical theory. In “Designing from Data: Rhetorical Appeals in Support of Design Decisions,” Friess

looks at how technical communicators have used rhetorical appeals to inform their design decisions, and in “The Sword of Data: Does Human-Centered Design Fulfill Its Rhetorical Responsibility,” she explores how design practices driven by empirical data can be “arhetorical” because they tend to focus solely on data and analytics (the rhetorical appeal of *logos*) to the exclusion of designer expertise (*ethos*) and empathy for the user (*pathos*). Research such as Friess’s provides UX professionals with new ways to think about how they perform their work and how they can continue to develop and improve it.

In academic tradition, the discipline Technical Communication publishes and documents the research of its scholars. The reflective self-scrutiny of these publications allows us to examine what we are doing in practice and enables us to ask questions that can help us develop a foundational theory we can use to improve these practices. McGovern does this as she questions the multiple contexts of web interfaces, and Friess does this as she challenges the traditional values of human-centered design principles. Johnson, Salvo, and Zoteway argue for the importance of this kind of reflection as they consider the development of user-centered design over the past 20 years, claiming, “This historical rendering is beneficial for articulating difficulties that accompany the development of user-centered methodologies but may not specifically be seen as usability issues” (321). Redish points out, however, that the involvement and contributions of Technical Communication are often neglected in the history of UX, and her article “Technical Communication and Usability: Intertwined Strands and Mutual Influence” serves to remind us about that involvement.

This dissertation follows after the descriptive and exploratory research of Odell and Goswami by helping us, as a field, better understand what communication and writing looks like within the design process. In the following chapters, I describe what the EmailFactory does with their research and how they communicate it both inside and outside the company. I describe the verbal, written, and visual forms this research takes, and I define the specific audiences each form serves. All of these descriptions



and explanations are important to how we—the students, professors, and scholars of Technical Communication and English Rhetoric—understand what writing and communication looks like in a technology-driven world. Odell and Goswami’s edited collection was sparked by their own questioning of what writing and communication in the workplace looked like in the 1980s. Thirty years later, we need to ask ourselves the same question, and as time progresses we need to continue asking ourselves this question. The answer is imperative to our understanding of what it means to be students, professors, and scholars of Technical Communication and Rhetoric and what writing and communication means in a technology-drive world.

### **Chapter Overview**

The goal of this dissertation is to provide an initial understanding of what happens to UX research after it is gathered and how it is shared internally among those responsible for designing the user’s experience and externally among product users and the public. It provides a foundation and a starting point for future research and exploration that helps us, as a discipline, better understand how writing and communication take place in professional settings. I give a brief overview of each of the remaining chapters, below:

***Chapter 2 - Research Methodology and Methods*** Chapter 2 presents and discusses the methods I used throughout this study for data collection and analysis. The research for this dissertation relies on the ethnographic methods of interviewing, in-depth observation, and document analysis.

***Chapter 3 - An Introduction to The EmailFactory and its Culture of Research*** Chapter 3 is a narrative description of the EmailFactory, its history, culture, and office environment. This chapter highlights the role research plays in the company’s culture and introduces the reader to the User Experience Research team I worked with as a participant observer throughout this case study. The purpose of Chapter 3 is to

provide context and background information about the EmailFactory before moving into the specifics of Chapters 4 and 5.

***Chapter 4 - Giving Voice to Data and Legs to Research: Communicating Research and Influencing***

***Change Internally*** This chapter focuses on how research is communicated within the EmailFactory. It begins by presenting the problem the UX research team faced with making sure their research and data could reach the groups in the company who needed it, then describes what they are doing to address that problem. I discuss how they collect and maintain their research, who they communicate their research to, and the communication forms their research takes as it moves throughout the company.

***Chapter 5 - Giving Data Wings and Setting it Free: Communicating Research Externally*** While Chapter 4 looks at how research is communicated *inside* the EmailFactory, the fifth chapter looks at how research is communicated *outside* the company. I focus on mediums the EmailFactory uses to share information publicly and the benefits this has for them as company.

***Chapter 6: Conclusion*** I conclude the dissertation in Chapter 6 by providing a summary of my findings, reflecting back on the process, highlighting the contributions this work has to the field of discipline of Technical Communication, and outlining areas for future research.

## CHAPTER 2:

### RESEARCH METHODOLOGY AND METHODS

"You can observe a lot just by watching."

-Yogi Bera

#### Introduction

In the Introduction Chapter, I listed the questions that my research addresses:

1. What role does research have in the EmailFactory's design process?
2. How does the EmailFactory communicate and share user research? What forms (written, verbal, visual) does research take when it's being shared?
3. With whom is user research shared and how do people gain access to it?
4. How does user research inform and influence decisions about the EmailFactory's product?

To answer these questions, I began an in-depth study at a successful email marketing company, which, throughout this dissertation, I call the EmailFactory. I embedded myself as a participant observer at the EmailFactory, which means that for the eight months I collected my dissertation research I also worked inside the company as one of them. I joined the UX team and took on the role of a UX researcher, which gave me an in-depth, first-hand understanding of how user research fits within the company, how it is communicated to internal audiences within the company, and how it is communicated to public audiences.

To really understand the role that user research has in shaping the EmailFactory, I needed to study the company's culture, social processes, interactions, roles, relationships, and communication. Helen Schwartsman, in *Ethnography in Organizations*, wrote that ethnography "requires researchers to examine the taken for granted, but very important ideas and practices that influence the way lives are lived, and constructed, in organizational contexts" (4). To accomplish that, I had to do more than simply conduct a few interviews with the company's researchers, developers, and designers. Interviews would

have helped me construct one small part of the picture, but my understanding would have been filtered through the perceptions of my interview participants. To construct an accurate representation of how research fits within the overall company, I needed to use multiple research methods that would allow me to completely immerse myself in the company's culture and practices.

After gaining the necessary IRB approval for my research, I began working with the EmailFactory in July of 2013. Between thirty-two and forty hours a week, I worked as one of the user experience researchers, which gave me unlimited access to take part in and observe meetings, projects, usability tests, customer visits, instant messaging conversations, group emails, reports, and presentations. As a member of the UX team, I read (and wrote) company documents, took part in company meetings, and worked on UX projects and research. I brainstormed ideas, took coffee breaks, ate lunch, traveled on short business trips, attended conferences, took part in company parties, and went to office gatherings with them. I was there for challenges, setbacks, and victories. All the while, I watched as across the organization, user research and data was gathered, analyzed, shared, and applied to the EmailFactory and its software.

### **Anthropology, Ethnography, and Case Study Research**

Ethnography, a branch of Cultural Anthropology, is “the art and science of describing a group or culture” (Fetterman 11). In the book *Ethnography in Organizations*, Helen Schartzman explains that ethnography was first used outside the United States by researchers interested in understanding people and cultures in countries far different from their own. The beginnings of research in organizations and industry began in the 1930s and '40s and by the 1970s and '80s, the popularity of using workplaces as ethnographic research sites had increased. Schwartzman explains that “up until this time, the study of work in modern societies had received only sporadic attention from anthropologists.” (27). They were

more focused on studying the “other” in countries, environments, and cultures, far removed from their own.

The topic and interest in corporate culture, organizational structure, and workplace practices within the technology field has also found a place outside traditional academic research. The now classic *Mythical Man Month*, first published in 1975, tells the story of collaborative work and management in the software development industry through first-hand experiences of its author, Frederick Brooks. *The Soul of a New Machine*, by Tracy Kidder, won a Pulitzer Prize in 1982 for its descriptions of the company Data General on their race to build a new minicomputer. Tony Hsieh, the CEO of Zappos.com, published *Delivering Happiness: A Path to Profits, Passion, and Purpose* in 2010, which explores a company that places a priority on company culture and has made a fortune while still offering customers free shipping and returns. In 2013, the founders of Basecamp (formally known as 37Signals) Jason Fried and David Heinemeier Hansson wrote about the work-from-home culture they’ve created in their company, the challenges they’ve faced, and benefits they’ve seen in *Remote: Office Note Required*. Also in 2013, Scott Berkun published *The Year Without Pants: Wordpress.com and the Future of Work*, through which he describes the year he spent working for WordPress that “capture[s] the behind-the-scenes story of a good team at a fascinating company” (2).

My research falls somewhere between the more traditional academic ethnography and the mainstream workplace narratives. According to George E. Marcus and Michael M. J. Fischer in *Anthropology as a Cultural Critique*, one of the promises of anthropology—and, by extension, ethnographic research— “has been to serve as a form of cultural critique for ourselves. In using portraits of other cultural patterns to reflect self-critically on our own ways, anthropology disrupts common sense and makes us reexamine our taken-for-granted assumptions” (1). Through this ethnographic case study,

my goal is to reflect back on what, perhaps, we thought we knew about user experience research and communication.

## **Research Methods**

Much of the work and information I gathered during my time at the EmailFactory goes beyond the scope of my research for this dissertation (and beyond the research permission granted by IRB and the non-disclosure agreements I signed with the EmailFactory), but it provided me with context. Harry Walcott, author of *Writing up Qualitative Research*, writes,

“The critical task in qualitative research is not to accumulate all the data you can, but to ‘can’ (i.e. get rid of) most of the data you accumulate . . . . The trick is to discover essences and then to reveal those essences with sufficient context, yet not become mired trying to include everything that might possible be described (35).”

Only a small fraction of the data I gathered over the course of my time at the EmailFactory appears in the pages of this dissertation. However, everything I observed, read, and took part in at the EmailFactory helped me understand what research means to this organization and how research fits within the grand scheme of who the EmailFactory is, how they work with one another, and how they communicate with users.

The aim of my study was to understand how research is communicated within a company and how that research informs decisions. Up to this point, the fields of Rhetoric and Technical Communication haven’t looked very closely at this kind of work, so I went into this project knowing I was starting from scratch, and my work would have to be exploratory. As a result, much of my research process was emergent and dependent upon the findings that surfaced from the data I collected. As the weeks and months passed, I slowly began to see patterns in my research, and over time, my conclusions slowly came into focus. This type of research is distinctive of ethnographic case study, which rejects the

idea of a rigid research framework in favor of a more flexible model that will allowed me to modify and shift my questions after entering the field (Creswell). Case study research demands a fine balance between maintaining a strong and coherent research structure by not allowing a rigid framework to dictate final results.

Used to answer questions of "Why?" and "How?" case studies are characterized by a number of data collection methods, such as participant and non-participant observation, interviews, and the collection and analysis artifacts such as documents, images, or video (Yin). Often, researchers combine these methods to construct a more robust picture of their case site. Case studies are also characterized by an inductive research process, which gives researchers the flexibility to refine and adjust their focus as new findings emerge from the data. Instead than waiting until the end of a study to analyze data, case study researchers constantly cycle through the information they've collected. They identify emerging patterns that can be generalized and articulated into theories, which are later compared against current literature and theory (Eisenhardt and Graebner).

One of the criticisms of ethnographic case study research is that it often lacks the methodological rigor of quantitative research. Quantitative methods help researchers break down or analyze findings systematically into numbers or percentages. For example, I could have counted the number of reports the UX team at the EmailFactory writes in a given year, or the percentage of employees at the company who read those reports. Or, I might have tallied the number of changes made to the EmailFactory's software as a direct result from the data the UX team gathered over the course of my study. All of these facts would have been interesting, and they would have answered the "What?" questions, such as "What kind of format does the research team use to share user information?" or "What EmailFactory features has research informed?" But these types of conclusions

wouldn't have answered such as "How are these things accomplished?" or "Why are they done this way?" Qualitative research aims to address these questions of "How?" and "Why?"

Another common argument against case study research is that it's not possible to offer generalizable data based on just one person, group, or situation. And this is true. Case studies are not meant to be representative of larger populations. Creswell explains, "The idea behind qualitative research is to purposefully select participants or sites (or documents or visual material) that will best help the researcher understand the problem and the research question" (178). I intentionally studied the EmailFactory because it's an outlier that stands apart from others in its industry. It's a unique organization that provides me with an interesting perspective on how user research is gathered, communicated, used. I did not select the EmailFactory as my research site because they can represent *all* tech companies. I selected them because they are a company that relies heavily on research to inform their decisions, and I knew they would provide me with rich observations. They are a company widely acclaimed and respected within the tech and web circles for having a strong grounding in research and a desire to use data to inform their design and company practice.

## **Data Collection and Triangulation**

### ***Interviews***

I conducted structured interviews with the entire User Experience team and several of the UX developers and designers. Although gathering, interpreting, and communicating data is the sole job of the UX researchers, *research* is a distinct part of almost everyone's position at the EmailFactory. Gathering information and user data is a collaborative effort across the company, so I also interviewed several other people in the organization who collaborated with the researchers on several projects. In addition to the UX team, I also spoke with two back-end developers, the company's content strategist, and the company's CEO. My interviews with these participants served me in two important ways:



1. The interviews gave me a chance to dig more deeply into the behaviors and events I observed all around me. I had a chance to ask for explanations about why things were done a certain way, the history behind them, and their significance.
2. They also alerted me to things I needed to watch for and confirm (or refute) during my daily observations.

I made a point of interviewing the people I worked most closely with first: the UX researchers. Although they each had a consent form that explained my work, meeting with them for interviews early in the study gave me a chance to explain my work to them individually. These early interviews helped me break the ice with the research team. It gave me a chance to answer any of the questions they had about my work, which set them at ease and made my transition into the group a bit smoother.

I conducted my interviews formally in a private setting, taped them, and then later transcribed them. During each interview, I followed an IRB-approved list of interview questions (included in the Appendix) that focused on the following themes:

- The participants academic/professional backgrounds
- The paths that led them to their current work at the EmailFactory
- Their current position at the company
- Their job description, expectations, and daily routines
- The role research has in their work and for the company

I included a full copy of my interview questions in the appendix to this dissertation. All of my questions were open-ended and as often as I could, I encouraged my participants to use specific examples of events or projects in their answers. Examples helped my participants turn their answers into stories, which helped me construct a more detailed picture.

It was important to me that my questions encouraged interview participants answer through the telling of stories. Stories have long played an important part in ethnographic research (Fetterman

*Ethnography*; Emerson, Frtez and Shaw) and workplace studies (Schwartzman). Stories help us make sense of the world. They provide details that help us place events into context. As a researcher, stories are particularly valuable. If you're fortunate, your participant might just wander off topic slightly and uncover a new area for exploration that you hadn't thought of before.

Early research from the 1980s on organizational dynamics and workplace culture points to storytelling as a very important part of an organization (Orr). Schwartzman condenses the significance of storytelling in workplace culture into six points (44):

- reflecting on past events and contextualizing it in present experiences
- comparing organizations
- integrating new members into the company community
- recounting work successes or failures and making meaning from these experiences
- sharing information about situations that might be sensitive and can't be talked about freely
- shaping the company's image in the minds of individuals

I used these points as guidelines to help me analyze what I heard from the employees at the EmailFactory. Focusing on each of these elements of storytelling was key to developing my understanding of the EmailFactory culture, and, more importantly, how research fits into that overall picture. I explain each of these points in a more detail below:

### **1. Reflecting on past events and contextualizing them in present experiences**

At just seven years old, the EmailFactory is established but still relatively young. There are a few people there who have been there from the beginning, and I was fortunate to work with one such person on the UX research team. This young woman was the company's first hire, and she carries a wealth of knowledge about the company's history. She, and others who have been with the EmailFactory for five or six years often told me stories of how the company used to do things and

how it has changed and grown over time. This helped me immensely as I pieced together the role research played in the EmailFactory at different times throughout its history and how it's changed to become an integral part of the company.

## **2. Comparing organizations**

Most of the people who work at the EmailFactory stay closely connected with the tech and design communities. They write articles for industry publications, speak and attend conferences, and keep in contact with people at other organizations. Knowing how regularly they interact with other professionals outside of the EmailFactory, I often asked my participants to compare the EmailFactory to other organizations. I asked them what they thought sets the EmailFactory apart, or how their team differs from similar teams in other organizations. Asking participants to compare themselves to other teams and organizations encouraged them to be much more detailed and articulate with their descriptions of the company. Comparative questions, such as these, helped me identify the points of company pride and strength—as well as weaknesses and areas where employees wished they could improve.

## **3. Integrating new members into the company community**

Stories are also a way to help newcomers assimilate into a company and its culture. They introduce new members of the organization to key people and events, and they help them understand how things are done. Stories become a foundation on which new members build their understanding of what a company is really like. Although my purpose for being at the EmailFactory was to collect dissertation research and not to begin a new job, the UX team accepted me as they would any other new employee. As the “newbie,” I was a direct beneficiary of this culture-building practice, the UX team regularly used stories to help catch me up to speed with their projects and practices. At the beginning of every new project, the UX director usually started by saying, “Let me

give you the back story on that. . .” and would begin explaining the events that led up to the project. Sometimes these events reached back years earlier to the very beginning of the EmailFactory, involving people who had moved on or had moved to other positions within the company. The information I gathered and questions I asked in my efforts to assimilate as a “new hire,” were very valuable as an outside researcher. They helped give me a sense of who to talk to for more information, what questions I needed to ask, and where I should begin my research.

#### **4. Recounting work successes or failures and making meaning from these experiences**

UX researchers are constantly trying new things and experimenting. They follow hunches and test hypotheses. The outcomes of research may not always lead to the results hoped for or expected, but they always teach the researcher *something*. A large chunk of my time during this study was working with the team as they tried to translate their research discoveries into something meaningful that others in the company could use to inform their work.

I learned a lot about the team and their process just by observing what did and did not work, but I took a much more direct approach during my interviews. I always asked participants to describe a project that they were particularly proud of and a project that had been challenging or frustrating. Through their descriptions I learned a lot about how the team defined success and failure. I’m hesitant to even use the word “failure,” because I don’t think I actually heard anyone ever describe something as a failure. Projects that didn’t work out as they had hoped served as learning moments that taught them something about themselves, the company, their app, or their users that they didn’t know before. Having my interview participants explain their successes helped me see what they valued, and having them explain a challenge or failure really demonstrated the positive perspective that has become a part of the company’s culture. A failure isn’t defeat. It’s merely an opportunity to gather more information to help you do something better the next time.

## **5. Indirectly sharing information about situations that might be sensitive and can't be talked about freely**

Stories give people an outlet to share their feelings without being confrontational. The stories can help people describe problems without addressing them directly, which can become very important for maintaining a peaceful working environment. My research for this dissertation doesn't focus on conflict or unpleasant company dynamics; however, paying attention to the stories my participant shared about conflicts with co-workers or sensitive company situations helped me as a researcher understand how to carefully approach (or avoid) certain people, topics, or situations.

## **6. Shaping the company's image in the minds of individuals**

Stories don't just assimilate new-comers into the company's culture; they also build and strengthen a collective unity among everyone in the company, bringing them together through shared experience. At company-wide meetings at the EmailFactory, the same stories were told again and again, eventually becoming a part of the company lore. They told stories of what it was like when there were only a handful of people working for the company, when they were able to feed everyone with just a few boxes of pizza, and when their main security precaution was to "unplug the internet" (in other words, the securest connection was no connection at all) every night before going home. Now that the company has grown to over 200 employees, only a small, inner-circle shares the memory of these things first-hand. Retelling them over and over again helps solidify relationships among older employees and also passes on this collective history to newcomers.

### ***Everyday Conversations and Observations***

Although I conducted a total of seventeen formal interviews with thirteen participants, I consider the everyday encounters to be the most valuable part of my research. Working next to the employees of the EmailFactory each day gave me the opportunity to pick up on things that wouldn't

have come up in formal interview. I was able to notice things that the others weren't aware of or didn't think of as important. And as those events occurred, I had the opportunity to ask questions *in situ* and respond to things as I saw observed them.

The really unique thing about this research experience is how easy it was to gather information. I can't think of a better group to study than a group of researchers. As researchers, they're very reflective and are used to analyzing and trying to understand everything. And they've had a lot of practice communicating their ideas and observations to other people. I benefited greatly from this because it meant they were able to really reflect on their own practices and communicate that share that with me through very precise and well-thought-out descriptions. My observations also led me to interviews with people that I hadn't anticipated at the beginning of the study. Without these observations, I wouldn't have known to interview these people.

I also worked very closely and gained first-hand experience with the EmailFactory's product. In order to be successful in my job as a "participant" I had to gain an intimate understanding of the EmailFactory app. I went through several intensive EmailFactory training sessions, learned how to use it, sent out my own campaigns, experimented with it, and experienced first-hand some of the difficulties users face while working with it.

### ***Document Analysis***

Since my research looks at how user research is communicated within a company and used to inform decisions about company and product design, I spent a lot of time going through the videos, documents, and images the company uses to communicate their research findings. The EmailFactory is constantly sharing their research both inside the company—through emails, instant messaging conversations, informal research memos, reports, presentations, and videos—and outside the company—through blog posts, reports, newsletters, and articles. These communication artifacts helped

me, as an outsider, construct a clearer picture of not just the UX research team but also the company as a whole: they showed me what kind of information the company values, with whom information is regularly shared, and how the researchers choose to share that information with different audiences.

Although I amassed a large collection of documents, videos, and images over the course of my eight-month study, this dissertation isn't an in-depth analysis of each of these media artifacts. Rather than study and analyze the minute details and components that make up each individual report, video, or presentation, my goal is to understand how they collectively fit and function within the context of the company. My research questions focus broadly on the role research has within the EmailFactory, how research is shared inside and outside the company, and what effects that research has on the company and the app. Looking at communication practices more broadly also helps me stay within the boundaries of privacy regulations, IRB protocols, the EmailFactory's non-disclosure agreement.

### ***Pseudonym Chart***

I let everyone select their own pseudonym for the study, which most of my participants enjoyed doing. There were a few, however, who had no preference and asked me to choose for them. Since this is a case study of an organization, there are quite a few "characters" involved in this story. I introduce each new person as they come up in the text and try to my best to restate who they are if they come up again in a later part. However, for the sake of convenience, I am providing a chart (Table 2.1) with each person's pseudonym, his or her job title, the team he or she is a part of, and a few clarifying notes, as needed.

**Table 2.1 Pseudonym Chart**

<b>Name</b>	<b>Title</b>	<b>Team</b>	<b>Notes</b>
Frank	Co-Founder and Chief Executive Officer		
Marcellus	Director of User Experience	User Experience	Marcellus is over the User Experience Design, Development, and Research teams.
Stryker	UX Designer	UX (Research)	When first hired, Stryker was a User Experience Designer. He now exclusively does research but his title has never changed.
Mandy	UX Design Researcher	UX (Research)	
Grace	UX Design Researcher	UX (Research)	Grace is a contracted employee working out of the UK and has been with the team for several years. I spoke with her regularly online and conducted interviews with her over Skype, but only met with her once in person.
Devon	UX Research Analyst	UX (Research)	Although Devon's title is UX Research Analyst, she does the same work as the other researchers.
Geoff	UX Design Researcher	UX (Research)	
Jack	Lead UX Developer	UX (Development)	
Matt	UX Designer	UX (Design)	
Ron	Senior UX Developer	UX (Development)	
Reese	Senior Engineer	Development	
Ada	Engineer	Development	
Emma	Content Strategist	Marketing	
Cody	Lead Developer	Engineering	I did not interview or directly work with Cody, but I mention him in the history of the company. Cody now works for another project within the company, but in his original position, he was the first (and, at the time, only) engineer at the company.



### ***Triangulation***

All of these different types of data I collected—the interviews with multiple people, the observations, the documents—strengthened my understanding of the EmailFactory by helping me achieve triangulation among data sources. Triangulation, according to Fetterman, is the “testing of one source of information against another to strip away alternative explanations and prove a hypothesis” (93). Although I’m not testing and proving a hypothesis through this research, triangulation helped me validate findings and confirm conclusions I drew from one data source by comparing it to another. For example, if I want to learn about someone’s process for gathering and sharing research, I could sit down with them during an interview and ask them. My participant might be extremely descriptive and willing to share with me as much as they can about how and why they conduct and share research in a particular way. My understanding, however, is limited to only what the participant thinks to (or wants to) share with me about how she does research. I’m not guaranteed an accurate description of her behavior. By observing her as she conducts her research and shares her findings, I’m able to pick up on subtle nuances about her behavior that probably wouldn’t have come up during our interview. However, during my observations, I’m only able to watch her actions—I’m not able to understand what’s going on inside her head, and I’m not privy to her decision-making process. These are things an interview can help uncover. Relying on just one source of information (in this example, interviews or observations) might skew my perception. Combining both information sources together help construct a more complete picture and deeper understanding.

### **Making Meaning of It All: Data Analysis**

During ethnographic research, data collection and analysis happen simultaneously. Unlike more quantitative methods that require all data to be collected before analysis can begin, ethnographic researchers constantly analyze their data—from the first day on the research site and first interview to long after they’ve left the site when they are wrapping up their final report. Throughout the entire

process of analysis and research, the most important tool is the researcher. According to Fetterman, in *The SAGE Handbook of Applied Social Research Methods*, “An ethnographer is human instrument and must discriminate among different types of data and analyzing the relative worth of one path over another at every turn in fieldwork, well before any formalized analysis takes place” (544).

Because ethnographic research is so dependent upon the researcher and whatever project he or she is working on, texts on ethnographic and qualitative research are careful not to establish strict guidelines for how researchers should collect and analyze data. In *Ethnography Step by Step*, Fetterman explains that analysis is “as much a test of the ethnographer as it is a test of the data” (88). The very nature of ethnographic research requires researchers to be flexible and to adjust their methods in response to what they find during frequent analysis. In a way, analyzing ethnographic research is like a “choose your own adventure” novel, where the reader (in this case, the researcher) is presented with options that lead to even more options, which determine the course and ultimate conclusion of the story. As Fetterman aptly puts it, “Throughout the analytical trek, the fieldworker must make choices—between logical and enticing paths, between valid and invalid but fascinating data, and between genuine patterns of behavior and series of apparently similar but distinct reactions” (88). As I combed through my interviews and notes, new questions formed in my mind about the EmailFactory and how they use research. Some of those questions led to dead ends, but others opened up new areas for me to explore and new insights to gather.

The freedom and flexibility to make adjustments course-corrections doesn’t mean being disorganized and thoughtless, though. If anything, ethnographic researchers have to be even more conscious about how their decisions will affect the ultimate outcome. Admittedly, I got off to a rocky start with my data collection and analysis process. I initially began using Nvivo, qualitative analysis software, as my data management system. Nvivo allows users to store all types of data—such as audio,

video, images, and text—and it seemed like the perfect tool to keep everything organized and together. Nvivo also provides options to help users transcribe interviews and prepare them for coding and analysis—or at least, that’s what it’s supposed to do. But several weeks into the project, I lost four hours worth of interview transcripts and abandoned Nvivo. I replaced it with a combination of Evernote and GoogleDocs, which gave me peace of mind that all my data would be backed up and stored in the cloud and accessible across both my work and personal devices. I also relied on good old-fashioned notebooks to jot down observations throughout the day, when taking notes on a laptop wasn’t possible or appropriate (lugging a laptop to lunch *is* a bit conspicuous and distracting). Moving between three different organizational systems isn’t exactly ideal—but it’s preferable to losing valuable work and time.

I eventually worked out a system of gathering and regularly reviewing my notes. The recorded interviews, of course, required the most work. The analysis of those began with transcription. Listening to the interviews again as I typed them out often brought out things I had missed during the actual interview, and I regularly starred or highlighted sections to come back to later. I printed each transcribed interview out, organized them in a notebook and read through each again carefully, highlighting and taking marginal notes whenever I came across something interesting. I returned to that notebook again and again, as I began writing the pages of this dissertation—still analyzing, still questioning, still identifying themes, and still trying to pull all of the pieces together.

I went into my research with an open mind, because I honestly had no other option. I knew little about the organization I was working with (beyond the background research I did to help me make my case to the UX director when I asked if they’d allow me to conduct research there), absolutely nothing about their research team and what they did. I knew the company was very focused on providing an excellent user experience for the customer, and they relied on research to help them accomplish this. As a researcher, I saw this lack of familiarity with the EmailFactory as a huge benefit. I had no preconceived

ideas and was able to view the data without any expectations or hopes. I wasn't trying to prove a hypothesis, so I was instead able to organically sort through whatever information and research came to me during my study.

Several months into the research, I started to see clear patterns emerging in my notes, the focus for my dissertation began to form, and my methods for coding started to develop based on those patterns. "Patterns," Fetterman explains,

. . . are a form of ethnographic reliability. Ethnographers see patterns of thought and action repeat in various situations and with various players. Looking for patterns is a form of analysis. The ethnographer begins with a mass of undifferentiated ideas and behavior, and then collects pieces of information, comparing, contrasting, and sorting gross categories and minutiae until a discernible thought or behavior becomes identifiable. (*Ethnography* 93)

For this project, the patterns I was interested in finding had to do with identifying the different channels of communicating user research. I didn't analyze individual sentences, look at language structure, or compare word choices or language markers, so my coding system was relatively simple. Once I identified a communication channel in an interview— the company blog, for example—I highlighted the section, and wrote "blog" in the margin next to it. This made it easy for me to come back to when I reached a point in my writing that dealt with the company blog.

Once it came time to start writing the dissertation, I gathered all of the themes and patterns I had identified together and tried to organize them in a meaningful and coherent way. I decided to focus on describing how research is shared and communicated both inside and outside the company and began sketching a rough outline of what the chapters and sections of that kind of dissertation might look like. After the organization fell into place, I sifted through my research notes again for notable events

and examples that would help me describe how research is shared, who shares it, what form it takes, who its intended audience is, and the purpose behind sharing it. I also looked for narrative pieces that would help me tie everything together and place each example within context of the company and its employees. According to Fetterman, “Key or focal events that the fieldworker can use to analyze an entire culture occur in every social group. . . [They] are extraordinarily useful for analysis. Not only do they help the fieldworker understand a social group, but the fieldworker in turn can use them to explain the culture to others” (*Ethnography* 93). The classic example of this from Anthropology is Geertz’s story of the Balinese cockfight, which Geertz presents as a commentary on the social dynamics of the Balinese people. Key events can be special, one time occurrences—like an emergency where everyone pulls together to resolve an important issue or when leadership roles change. They can also be regular routines, like a weekly team meeting or other company lunch. By weaving narrative descriptions of key events throughout my presentation of communication patterns, I’ve tried to explain how research and communication fits within the EmailFactory’s organizational culture and practices.

### **The Challenges of a Researcher Researching Research**

The irony of this study is not lost on me. I am a researcher who took the position of a UX researcher so that I could conduct research about research. I’ve made jokes to friends about how “meta” my dissertation work is, but the relationships between my role, my study’s focus, and my participants is actually an important part of this project. My role, situation, and topic of study all actively shaped this work. On one hand, this interesting situation greatly benefited me, and I feel that it enhanced my study; on the other hand, it challenged the integrity of my work and motivated me to not become too comfortable in my surroundings.

The EmailFactory is focused on gathering and using research, which meant I didn’t need to explain the importance of research to them. And as serendipity would have it, I didn’t struggle to

convince them of the value of working and talking with them daily for eight months rather than relying on isolated interviews. Several months before my arrival, the research team had begun experimenting with ethnographic methods of observation. They visited several of their customers at work, “shadowed” them throughout the day, held formal interviews, chatted with them informally, observed their workspace and environment, and took photographs and videos. They saw the value of ethnographic methods in their own work and research, which helped justify my reasons for being there.

The first few days and weeks of the study were, of course, an adjustment for everyone. The presence of an outside researcher must always be a little bit unusual at a research site, but my role as a participant in the UX team quickly made my presence a little easier to get used to. As a participant, I became one of them. I learned about their tasks, their workflows, their challenges, and triumphs. I didn’t just observe them or ask them about them. For eight months, I experienced all these things, in the moment, with them.

Because of this deep immersion into my role as participant, it didn’t take long for the lines between observer and participant to blur. I found myself saying “we” instead of “they” while discussing the company with my dissertation committee. As a researcher, this caused me to feel a little uncomfortable. It made me consider how much distance a researcher can actually keep between herself and her participants while conducting participatory research. This internal struggle and the time I spent trying to sort it out in my mind made me realize something very important about the group of people I had been working with. I realized that by saying “we,” I had taken on a habit that is shared by many of the people working at the EmailFactory. The entire company is characterized by an understanding that almost all work is collaborative. In the eight months that I worked at the EmailFactory, I didn’t observe a single project where an individual worked completely alone. By saying “we” instead of “they,” I had taken on an attribute that defined the company as a whole.

This collaborative and collective attitude is seen not just within groups but also across groups. Members from different teams often work on projects together. The UX research team especially works closely across departments. Their information is valuable, in some form or fashion, to every department within the company. They often meet and work with other departments during projects, and I was able to either take part or sit in on many of these meetings, which helped me get a better idea of how other departments view the team and their research. Without the company's narrow focus on collaboration, I wouldn't have easily had access to different parts of the company in the ways that I did.

I eventually learned to navigate my two separate personas—the researcher and the participant—and so did the rest of the team. The research team accepted me as “one of them,” but my role as the researcher wasn't entirely forgotten. Occasionally, for example, some of my fellow team members would come to me before they went to a meeting or presentation that they thought would be interesting or useful for me to sit in on. Being a researcher also meant that I could “invite” myself to sit in and observe some meetings that I wouldn't have otherwise included in. I was fortunate to be working predominantly with a group of researchers who had an understanding of ethnographic research methods and didn't mind me hanging around and asking questions.

Reflecting back, being a researcher from the outsider actually made me much better at my role as the participant. I felt as though I had a free pass to be more inquisitive and probing than I ordinarily would have been. I was granted “permission” to ask questions I probably, for whatever reason, wouldn't have felt comfortable asking. And it gave me an open door to talk to people I didn't work closely with and wouldn't have had the courage to approach on my own. As a self-proclaimed introvert, I avoid conversation with new people, but the “researcher persona” empowered me to approach these people with a purpose other than superficial chitchat. As a result, I met people and established relationships much more quickly than I usually do and was able to gather more information.

## CHAPTER 3:

### AN INTRODUCTION TO THE EMAILFACTORY AND ITS CULTURE OF RESEARCH

#### Introduction

This is a dissertation about communication and research, so why a chapter dedicated to company culture? Without this chapter on the EmailFactory's culture, I wouldn't be able to accurately explain how the company's employees work with one another, how they conduct research, how they pass research back and forth, and how they use that research to influence their work. I could have skipped past this chapter and focused immediately narrowly on the research and communication elements of the company—the tools they use to conduct research, the types of research they gather, how that research is communicated, and what kind of effect research has on the EmailFactory app and brand. But that would have been a very superficial description of the impact research and communication has on the company. By focusing first on the EmailFactory and its culture, I'm able to provide the context necessary to understand the roles of communication and research in the EmailFactory.

A culture isn't created by one decision—or even one person. It's a collective understanding and identity that is nurtured and developed across an entire group, whether that be in a company, country, or home. To understand the impact a particular practice has on a group of people and the role it plays in their culture, we first need to get to know that group of people. In the case of the EmailFactory, I was interested in understanding their research practices, and I began my study by working with and getting to know the EmailFactory employees. I put my energies into trying to understand who these people are not just as individuals, but also collectively as a unit. What do they value? What is important to them? What really doesn't matter all that? How do they spend their money? How do they spend their time? How does the company treat its employees and what effect does this have? How do they talk about



themselves and among themselves? Over the company's lifetime, what has changed and what has stayed the same? Where does research fit within the scope of the company?

Through this chapter, I weave the answers of these questions together into a narrative description of the EmailFactory's history and development, as well as its current state and company culture. It is impossible to explain everything there is to know about the EmailFactory in just one chapter, so instead my goal is to create a clear enough picture of the company that will provide context for the two following chapters. This chapter first begins by introducing readers to the company as a whole, then moves to focus on the research team and their work.

### **The EmailFactory: A "Counter"-Corporate Culture**

The EmailFactory began in 2001 as a side project at a web development agency. It was a way for some of the agency's clients to easily send bulk email. Within a few years, the agency noticed their small email program was quickly growing and actually becoming more profitable for them than their web development work. In 2007 they closed the agency and focused all their energies on the EmailFactory. Seven years, 200 employees, and over 5 million customers later, this email platform has helped shape the field of email marketing—particularly for small and medium-size businesses.

For those who are used to the very-structured, no-nonsense, buttoned-up professionalism of the business world, the EmailFactory office environment takes some getting used to. I had the chance to visit the office several times before my first day of research, so I was slightly familiar with how laid-back and casual things were. Other new employees aren't quite so fortunate. About a month after I arrived, I met one of the interns who worked downstairs with legal department. As he introduced himself, I noticed his ID badge and was amused to see his picture had been taken in a suit, collared shirt, and tie. Glancing down at the shorts and t-shirt he was wearing at the moment, I asked him what was with the suit in the picture. He chuckled and explained that he had wanted to make a good impression, and

following the traditional business norms in legal departments at any other organization, he dressed up on his first day. Sometime during the day, he ran into the company's CEO, Frank, in the hall, and politely nodded a greeting. Frank is a very congenial guy. He's friendly, casual, and enjoys getting to know his employees, but on this particular day he briskly turned on his heel and walked away. On a day not long after, (when the intern had traded his suit and tie for more relaxed attire) the two ran into one another again at a company gathering. Frank laughed and said, "Oh! I didn't realize you worked here. I thought you were an auditor."

This one little story is a mere glimpse at the "counter"-corporate culture that defines the EmailFactory. Most of the company lives in jeans and t-shirts, and while sleeve tattoos, multiple piercings, and blue hair don't receive so much as a second glance, anyone dressed in a suit can expect curious or confused looks. The company is a far cry from the traditional office and their daily schedules are about as casual as their attire. Traditional "office hours" are almost non-existent. Other than customer support, which obviously has to adhere to a stricter routine, employees seem to just come and go as they please. Some arrive before sun-up and leave a couple hours after lunch, others roll in around 10:30 or later and stay into the evening. A few work even work remotely, from home, a couple days each week.

The phones never ring—because there aren't any. I'm told the company has an official telephone number that goes to a phone somewhere in the office, but all calls are sent immediately to voicemail—and I'm not even sure if anyone listens to them. Even the company's support team does without phones, handling customer support over chat and email rather than through calls. Doing support over chat and email means their support staff can address the needs of multiple customers at once, bouncing among several chat windows and email messages simultaneously.

Phones are not the only outdated form of office communication at the EmailFactory. During my first couple of weeks of research, I needed some sort of official documentation stating that I would be working there. I asked the front office manager where I could find letterhead. Looking rather perplexed, she responded with brow furrowed and head cocked to the side, “Uh. . . I don’t think we have that sort of thing. We’re an email company.” I ended up grabbing the company logo and making my own version of letterhead—which is what everyone else does when it’s needed.

### ***Office Layout and Design***

Many years ago, the building that is now the headquarters for a powerful email platform, responsible for sending out millions of emails per day, once supported industrial pursuits of a different sort. The EmailFactory office space dates back to the early 1900s. Throughout the building’s history, it served as a spring bed manufacturing company, a warehouse, a candy factory, and a textile salvage factory. The building’s past life is difficult to ignore. Built next to the railroad tracks, where goods could be conveniently shipped out, the building often feels the rumble of daily trains and hears the cheerful blast of freight horns, which at times can be rather alarming (not to mention disruptive during Skype calls and remote meetings).

The interior of the building still retains a rugged industrial feel, with its brick walls, large windows, and high ceilings. Rough exposed beams that run across the building’s ceiling, and stand as supports throughout the building’s large open spaces, are a stark contrast to the shiny, sleek computers and office equipment. The building also kept the large, metal doors that could be sealed shut to section off the factory in the event of a fire. Old, rusty, and always open, they stand as a reminder of a time when technology wasn’t quite so advanced.

The EmailFactory has truly made the space they own. They’ve embraced the industrial feel of the building and added to it the contemporary touches you’d expect from a technology company, with

the sleek artistic flair of a design agency. Large colorful posters decorate some walls while others are murals painted by local artists. Blank spaces are often plastered with notes, sketches, mood boards, mock-ups, and wireframes. In several of the offices and open workspaces, entire walls are elegant-looking floor-to-ceiling white boards. These empty canvases are regular spots for meetings and brainstorming—or silly messages, sketches, and scoreboards for a pool game.

Other than the corporate executives, human resources personnel, and department leads—who have private offices—the rest of the organization is made up of open office spaces with teams melded together at desks next to each other. In some cases, several departments might share the same large open space, with their desks clustered closely together. The UX research group, for example shares space with the creative group and marketing team.

At the very beginning, the company and its small handful of employees occupied a small portion of one floor of the converted factory building. Now they take up three entire floors of that building and have moved the entire support staff to a building next door. The company has quickly grown over the past couple of years, and at the company Christmas party this year, several people remarked that there were so many new faces, they couldn't tell the employees from the significant others and dates. This expansion has caused necessary shuffling and reorganization of the company's physical space. The constant shuffling and moving has turned into somewhat of company joke, with employees claiming boasting rights over being moved the most times in a given year.

Everyday working arrangements also tend to change, and for many of the company's employees, working arrangements are flexible. Other than the large body of support staff, most other employees at the company are free move around throughout the day. Although everyone has a desk where they most regularly work, there are many other working spaces throughout the office. Couches,

standing desks, several walking desks, and tables give people opportunities to move around, stretch their legs, and clear their heads with a change of scenery.

### ***Organizational Structure and Dynamics***

The EmailFactory is made up of two very different “worlds,” divided into two office buildings across the street from one another. The employees working in each of these worlds serve very different purposes inside the company, develop unique subcultures, and adhere to a very different organizational structure and hierarchy. EmailFactory employees refer to the buildings by their street addresses numbers—the 280 and 218 buildings. The 280 building houses the customer support staff that work one-on-one with customers, and the 218 building houses the people who create and maintain the company brand and the app itself.

As I mentioned before, the entire company used to fit into one building, the 218 building. But as the company grew out of that space, they moved their support staff next door into the neighboring 280 building. The support team works with customers directly and handles customer requests that come in through chat and email. It is also the home of the Knowledge Base team (who creates the online help documents and videos), Compliance (which monitors and deals with email abuse), and Billing. The employees working in this building operate under a much more “traditional” organizational hierarchy, with tiers of management. In Support, for example, new hires begin at entry-level positions and they are structured according to experience levels with “mentors” who manage groups of support staff.

Although just a narrow strip of blacktop and a few parking spaces separate the two buildings, walking from 218 to 280 is like stepping into another world. The 218 building is where I spent most of my time during the case study. While the staff in 280 are focused on customer support, the folks in 218 are the ones who create and run the company, the brand, and the app itself. They are the engineers who build the site infrastructure, the developers who code the backend, designers who create the user

interface, the researchers who help inform the entire process, and the marketers and writers, who help create the company's brand and image. In contrast to the tiered management and organization of 280, the 218 building is kept relatively flat and doesn't enforce a strict management hierarchy. The building is divided into departments, but beyond the "directors" who lead each department there is very little hierarchy within them. The primary reason for this is to keep productivity high and collaboration strong by eliminating the bottleneck of middle management. Tiers of hierarchy tend to slow progress as employees have to climb through layers of approval to get answers and work done. Without all of that, employees are enabled to work across departments and get fast results.

The flat structure of the EmailFactory is particularly important for managing creative types who, as described by co-founder and CEO, Frank, "don't really like structure." Among the Creatives, climbing the corporate ladder isn't really a career goal. For Creatives, this would mean eventually being promoted out of a position of creating and into a position of managing others who create. Speaking from his own experience working as a designer who moved into a management position at a major telecommunications company, Frank shared that "I just thought that it was a really weird thing when you have somebody very talented at what they do and you force them to stop that and become something they potentially suck at. That hurts everyone under them, too. It just doesn't make sense." So while employees at the EmailFactory are rewarded by increases in pay, they aren't necessarily promoted to higher positions. Instead, they're given the opportunity to dive deeper into their fields and become specialists. The EmailFactory also encourages them to start making themselves known within the industry through writing and speaking. Frank explained to me that this helps keep the organization flat while serving as a "release valve" for the Creatives that eases some of the pressures of corporate advancement.

The struggle now, as the company grows, is to maintain a balance between a system that encourages creative autonomy and one that supports consistent progress. At one time, when the company was smaller, everyone answered directly to the two co-founders (who now serve as the CEO and CCO). But as departments-of-one expanded to handle the growing workload, some natural hierarchy started to form. Titles of “team lead,” and “senior” have been passed out within several groups. But, in the words of one of the UX researchers, “These titles are benign. They just give you the first person to talk to understand a problem or talk through a solution.” Leads and managers are there to point employees in the right direction; they are there for answers—not approval.

The most obvious benefits of having a relatively flat organizational structure are innovation and the quick execution of ideas—which, for a technology company, is essential. Communication flows more freely among groups and departments when people aren’t required to go through bureaucratic channels for answers or information. Ideas don’t get stuck waiting on chains of approval and employees can freely work across departments, rather than being isolated and sectioned off into disparate units. Originally, this meant that anyone who had an idea (and the technical know-how) could change or adjust something in the app, without going through any kind of formal approval. This open workflow led to a lot of fun and unique touches, like quirky “Easter eggs” (hidden messages, games, or prizes) in the app or company website. When the EmailFactory was still young, this put them on the map as a cheeky email marketing company that knew how to have fun, yet get work done. But, as the company matures, they’re finding themselves in a situation where they are learning to balance their company’s culture of creative freedom with their responsibility to a growing customer base of over 5 million people.

Still, employees are encouraged (and expected) to voice their opinions. And their opinions are heard. For this reason, employees go through a rigorous hiring process. It’s not enough to have excellent skills. The EmailFactory hires have to fit with the personality of the company and the working dynamics

of fellow co-workers. Marcellus explained to me that that “We look for independent thinkers and people who are self-motivated, people who are intrinsically motivated and want to do things because they find some kind of value in it.” The goal is to find people who are experts in their fields who can be trusted to make decisions for EmailFactory, without needing extensive supervision or handholding. Then department leads step out of the way and let them work.

Creative people need space to think and room to experiment. Ideas are free flowing at the EmailFactory and innovation is often an organic process that develops from the “bottom up” (if I can say that about a relatively flat structure), rather than exclusively from the directors and management. The life cycle of ideas function within a meritocracy, with some flourishing and others fading away based on the amount of support and traction they gain. Marcellus explained that often, there’s a natural selection process that occurs with ideas at the EmailFactory. People have ideas and share those ideas with others in the company. If their peers take interest in it and contribute to it, the project gains momentum and moves forward. For example, one of the EmailFactory developers, Jack, had an idea for an app called Collabs that would integrate with the EmailFactory and make it easier for multiple people to collaborate while creating an email campaign. Jack brought his idea to someone on another team and the two of them began building on it. They pitched it to the company’s co-founders, who didn’t show much interest in it, but Jack and Marcellus continued to work on their own and eventually released it. Collabs took off and became very popular among the EmailFactory’s “power users,” and this past year, many its features were folded into EmailFactory proper.

Of course, the company’s leaders have a vision for the EmailFactory’s direction. But instead of dictating the direction of the company through authoritative directives about goals to achieve or abstract numbers to hit, they simply share their vision with the rest of the company. Each year, they determine several broad themes they’d like the company to focus its energies on. It’s up to the



employees to define their own goals within those themes. Simply put, the executives share their desired destination for the EmailFactory each year, and the employees are given the authority to pick the route and mode of transportation.

By giving the company a problem to solve or a challenge to overcome instead of a mandate to fulfill, the EmailFactory leaders encourage creative thinking rather than robotic compliance. The EmailFactory takes great care to hire smart, capable people and the freedom and autonomy they grant employees gives them the room they need to perform optimally. When you have a group intelligent, creative people in a shared space, and give them the freedom and autonomy to work fresh ideas have room to flourish. Autonomy empowers people to push the limits of convention and start making unique and competitive products. True autonomy also gives people license to make mistakes, which encourages risks and experimentation. They can try things out and experiment. The word “failure” isn’t often used to describe things at the EmailFactory, because when things don’t work out as planned, they move on and try something else. This kind of open creativity isn’t perfect, and it does have its own set of challenges. Having a large number of people independently working on a single product increases the risk of “feature bloat.” When teams work on things independently without communicating often enough, too many ideas and changes get pushed out to the app at once, overwhelming and confusing customers.

The company Automattic is an example of a company that faces the challenge of feature bloat. Automattic is most well-known for the blogging platform WordPress, but the organization is responsible for a number of other products, such as JetPack, Akismet, Polldaddy, and Gravatar. Automattic is a distributed company, with over 200 employees who live and work remotely from all over the world. One of the company’s programmers, Beau Leben, writes on his personal blog that the company is divided into teams, which “operates like a small company of its own (with design/development etc). . .(n. pag.)”

These teams each work on their own independent projects to build new features or refine old ones. Since they don't operate on a scheduled release cycle, they commit code and make updates whenever something is ready.

Multiple teams working on different projects without any kind of strict coordination does have its advantages. WordPress is a wildly successful platform that boasts over 75 *million* sites worldwide. The flexibility and autonomy Automattic grants its teams keeps development moving quickly and prevents the inevitable bottlenecks that traditional, tiered organizations have. Unfortunately, it also creates a "too-many-cooks-in-the-kitchen" kind of scenario; however, in this case the cooks are working in different kitchens, creating dishes that are supposed to combine into one meal. Sure, with chefs working independently in different spaces a dinner can be pulled together quickly. But will the meal come together as an elegant, unified experience or a buffet of dishes from a variety of cuisines? In a similar way, when different product teams work on independent features, the teams often don't come together to think holistically about the overall product. Scott Berkun, who writes about his experience working for WordPress as team lead in *The Year Without Pants: WordPress.com and the Future of Work* questions this approach to product development at Automattic: "There were lists of ideas everywhere, not including the thousands of plug-ins and themes WordPress had, each with inspirations for new possibilities for how to make WordPress.com better. The problem was coherence. We certainly launched many things, but did they add up to make a better product?"

The EmailFactory's response to this kind of dilemma is simple (Note: I said *simple*, not *easy*), and it can be summed up into two points:

1. The EmailFactory app doesn't have "product development teams" that work on separate features. It is not sliced and diced into pieces that are farmed out to isolated groups of designers and developers, each responsible for one feature or isolated product. The entire EmailFactory

app *is* the product, which forces designers and developers to work together and think holistically about their work.

2. Research takes a front-and-center role in the EmailFactory's design and development process.

They are tasked with guiding changes and updates to the app by helping the company make decisions before they commit to projects.

The first point, which deals with a structured, team-approach to app development, could be the focus of a dissertation all on its own. The second point, however, is the focus of this particular project, and what I continue to discuss throughout the rest of this chapter and the two chapters following.

### **Creating a Culture of Research**

The EmailFactory has been around as a service since 2000, but at that time, it was just a part of a larger web consultancy business. In 2007, its co-founders closed their consulting agency and focused all their energies on the EmailFactory. In its the company's early days, all feature requests and changes to the app were funneled through the two co-founders and the Chief Operations Officer, then built out by their sole lead engineer, who pushed code as soon as it was ready to go. Early in 2008, they brought on Marcellus as their lead designer, and he began working with Cody, the lead—and only—engineer, to completely redesign the EmailFactory app, shifting it away from its “start-upy” feel to something that communicated it meant real business. When it was first created, the EmailFactory was never intended to be a standalone product. Marcellus and Cody worked together, rewriting backend code and logic, rethinking the design aesthetic, and addressing usability issues with its interface.

Marcellus became involved in collecting and analyzing the feedback customers were sending in through email and chats and everyone at the company worked with their users' needs in mind. At first changes to the app were released whenever they were ready, but eventually their product release cycles took on a bit more structure. Every three months the corporate execs would meet with Marcellus

and Cody for what they ended up calling “Quarterly Horse Trading.” The company’s CEO, Frank, told me that they brought feature ideas to the table and had discussions like, “This feature would put us on the map and get us a lot of press . . . but this feature would actually be really useful.” Between the five of them, they negotiated and prioritized, trying to find a balance between the function and flair—with Marcellus and Cody interjecting with what would be feasible or not.

The Quarterly Horse Trading eventually took its toll on the group. With three months to plan and work, they inevitably over-estimated what they could accomplish and took on the challenge of “feature creep,” which added more and more projects to their plates. Early in 2011, they switched to a four-week (and, more recently, a five-week) release cycle, which forces them to prioritize and make smarter choices about things they can implement quickly. According to Frank, the goal is to limit themselves to five features for each release cycle, but when I asked one of the UX developers, Jack, about this, he laughed and told me that he hadn’t heard of any such limit. Jack explained that they tend to “eye-ball” their workload, and they’ve gotten pretty good at figuring out how much they can accomplish for each release.

While they company was working to figure out a manageable schedule and workflow they could maintain, their customer base continued to steadily grow. And in several years time, they went from just over 8,000 customers in 2007 to over one million customers in 2011. Along with the growing customer base came an increasing volume of customer emails and feedback. In addition to the questions and problems that the email support receives, in 2011 the EmailFactory put up a feedback form on their website where people can submit feature requests and complaints (and sometimes praise). Each piece of feedback goes straight into Marcellus’s email inbox, and within three months the volume of feedback was overwhelming. At the time, Marcellus was coding, designing, and trying to keep tabs on all the feedback he received, which quickly became more than one person could feasibly handle. It would be

another year before Marcellus would be able to begin building an actual “team” of researchers that could help drive and manage the research efforts.

***Data Doesn't Drive Design. People Do.***

At one point during my time at the EmailFactory, I asked Marcellus what he thought has changed the most about the company in the six years he had been there. He responded that “a lot of what we had at the beginning is still here . . . but it’s just so much smarter. . . We just don’t guess like we used to.” At the beginning, almost all decisions were made on gut-feeling or curiosity. They didn’t have research—or the capacity to get it.

Now, even though they have enormous amounts of user data, analytics, and research they constantly pull and analyze, data does not drive design—the people do. That bears repeating, because this one characteristic is at the core of what they do at the EmailFactory: *Data does not drive design; people do.* People are responsible for gathering the data or putting the analytics in place to pull numbers automatically. They’re also responsible for making sense of it and determining what to do with it. In addition, research might heavily inform and influence decisions at the EmailFactory, but it doesn’t automatically trump the intuitive feeling of “eh, this just doesn’t feel right.” For the EmailFactory, intuition and data aren’t things that can really be separated within the creative process. They are interdependent.

As the director of UX, Marcellus works with both the predominantly data-influenced engineers, the intuition-influenced designers, and the researchers who probably fall somewhere in between. He explained to me that for him, “Intuition is the background judgment process relying on past experience to quickly evaluate a situation without very conscious reasoning.” Marcellus explained the relationship between intuition and data through an example of two very prominent leaders in technology who have extremely different approaches to design: Apple and Google. On the one hand, there’s Google, a

company criticized for relying so heavily on data to inform their design decisions that they drove one of their lead visual designers, Douglas Bowman, to quit. In a 2009 *New York Times* article titled “Data, Not Design, Is King in the Age of Google” Bowman describes why he left Google and shares that “in Google’s engineering-driven culture, data trumps everything else” (Helft n. pag.). On the other hand, there’s Apple, known for designs that have more of an emotion-driven rather than logic-driven appeal. At the 1997 World Wide Developers Conference, Apple’s founder Steve Jobs described their design practice by saying “You’ve got to start with the customer experience and work back toward the technology—not the other way around” (n. pag.). While Google has been criticized with starting with data and design elements first, Apple designs products by first understanding the people who use them. The EmailFactory likes to see itself as somewhere in the middle of this spectrum—between Google and Apple. Marcellus describes the company as being:

. . . passionate about design and making things feel unique and special and personal. But we’re smart about infrastructure and stability and careful consideration of the decisions that really matter, where things could really be messed up We are inquisitive and use a lot of logic and math to better understand and create models about how the business operates.

While their gut served them well, research helps guide their research and anticipate what’s coming next, and this, according to the CEO is where the UX research team fits within the organization:

Fortunately, we kind of had a little UX research team forming, and that’s what I’ve been learning on to guide us. Basically, instead of making so many quick punches, [we’re] stopping and thinking, “Where’s the Achilles heel? Where do I punch? Where’s the kill switch?” [We’re] making more informed decisions before we commit.

### ***User Experience Research Team***

Over the past six years, Marcellus has carefully and patiently cultivated his UX team. Late in 2009, his first hire was a young woman named Mandy, who had already been working for the EmailFactory for a couple of years. With no formal training, Mandy began teaching herself about running usability tests and interviewing customers. Two years later Marcellus hired a part-time consultant named Grace who works out of the UK. For little over a year, the three of them worked together. Mandy conducted user interviews and feature testing, Grace helped manage their growing international presence, and Marcellus continued to split his time between coding, doing user interface design, filtering through user feedback, and talking to customers.

The EmailFactory continued to grow, and the customer feedback kept flooding in. The CEO shared with me that although gaining momentum for the company was certainly a victory, the resulting “noise” of customer feedback was becoming too much for the three-person research team. He recalled a time during a presentation from a visiting speaker in the summer of 2012 when Marcellus raised his hand and asked, “How do you manage it when you’ve got like a thousand emails coming in a day?” As Marcellus asked the question, Frank thought, “Note to self: he needs more staff.” The UX research team started to grow.

In 2012, Marcellus read an article in *Fast Company* that highlighted the work of a graphic design student named Stryker who proposed a more human-focused redesign of Apple’s Terms of Service as part of his Master’s thesis project in Graphic Design. Stryker’s project caught Marcellus’s attention, and the two of them met for coffee. Marcellus ended up offering Stryker a job working for the EmailFactory, but at the time Marcellus wasn’t quite sure what Stryker’s role would be. Stryker had skills as a designer, which he used for a while, but he also had a talent for researching, talking, and writing about design, and eventually he settled into the role of Design Researcher.

With the addition of Stryker, the research team started gaining more momentum with their work, but they still had more data than they knew what to do with and needed more hands to manage and make sense of it all. Their next hire was an intern in January of 2013, a young man named Geoff, who was a few months away from graduating with a bachelor's degree in Marketing. After working several months as an intern, Geoff was hired full time. Next, I was brought on as an intern, offering my skills as a researcher and writer in return for the opportunity to conduct my own research for this dissertation. And finally, Devon was hired internally from the EmailFactory's Compliance team in the fall of 2013.

The EmailFactory thrives on diversity, believing it fosters creative thinking, innovation, and ultimately, a stronger organization and product. The UX research team is a very clear example of this, made up of an unlikely group of individuals, each with unique backgrounds and very unlikely paths that led them to the field of UX. Collectively the team is made up of folks with backgrounds in painting, graphic design, advertising, music, jewelry-making, computer programming, and (if I count myself in as a participant for the duration of the study) technical communication and rhetoric. Marcellus looks for people who can be independent and self-starters, with diverse skill sets that can add variety and perspective to the team.

None of the research team came to their jobs in a conventional manner. By that, I mean none of them answered a job posting for "UX Researcher" and ran the gauntlet of applying and going through a long and exhausting interview process. Marcellus wants to handpick and cultivate his research team, and he takes a very deliberate and patient approach to hiring. In some instances he sought them out, approaching people he thought would be a good fit and would bring a unique skill set to his team. Others were hired because they showed interest, sought Marcellus out, and proved their value to the team. Though each researcher's hiring story is different, the defining characteristics that they all share



are insatiable curiosity, the overwhelming desire to understand “Why?” and the follow-through to answer that question.

### ***The Work of the UX Research Team***

I mentioned in a previous section that titles at the EmailFactory don’t hold a significant amount of weight. They are more symbolic than anything. Most people I talked to weren’t even sure what their exact title was, or they often commented that their role shifted away from what they originally hired to do, so their title doesn't really fit anymore. Although a couple of the researchers on the UX team have different titles listed in the HR database, the title Marcellus prefers for everyone is that of “UX Design Researcher.” The word “design” might lead some people to think the research team is only devoted to understanding the visual appearance or visual design of the app, but in reality their research covers so much more. Design, according to Marcellus is “creating within constraints,” and by my observations the research team applies this definition to several areas of the EmailFactory’s design:

- User Interface Design
- System Design
- Product Design
- Company/Business Design

### ***User Interface Design***

As the EmailFactory builds products, tools, and feature to meet their users’ needs, it’s important for them to evaluate how well those needs are being met and to understand areas where the designs can be improved. Sometimes the app is *capable* of doing something, but the user interface is designed in such a way that the user can’t understand how to accomplish it. The user interface (UI) is the space where the user interacts with a computer system. It’s made up of “the screen menus and icons, keyboard shortcuts, mouse and gesture movements, command language and online help, as well as

physical buttons, dials and levers” (PCMag). The UX research team plays a part in understanding how customers interact with the EmailFactory app, often suggesting changes to word choices, font style and treatment, and the visual arrangement of elements to make the app easier for people to use. For example the UX team recommended a change in the navigation bar inside the EmailFactory app, which helped users shave off about 30 seconds from their total newsletter design time.

### *System Design*

While UI design can limit or enhance a user’s understanding of how the EmailFactory app works, system design deals with creating intuitive and memorable workflows for completing and accomplishing goals. The UX research team often uncovers some of the problems with the app’s features by identifying workflows that are complicated or misleading. If there’s a task that’s difficult for users to accomplish in the app, the researchers try to understand why it’s difficult and what can be done about it. For example, when initially setting up a contact list inside the app, users can identify fields they want each contact to have, such as first and last name, email, date of birth, zip code, and phone number. But once the list is set up, what if the user wants to add another an additional field where they can indicate t-shirt size? One would assume that the page with the contact list would have some sort of “edit fields” option that allows the user to add another field, but it doesn’t. To add a new field, the user has to navigate several clicks away to the “Sign Up Form” page and add the field there. While the EmailFactory app *allows* users to add another field to their contact list, the process for doing this is confusing and difficult for users.

### *Product Design*

While sometimes there’s a flaw in the app’s visual design or workflow that prevents users from doing something the app is actually capable of doing, other times users want to do something that goes beyond the app’s current limits and feature offerings. One of the projects I worked on while at the EmailFactory looked at how customers segment their email lists, so they can target emails to specific

audiences. This is an important feature to many EmailFactory customers because it lets them send tailored content to their subscribers, based on the subscribers' needs or interests. After digging through feedback emails, conducting interviews, reading support chat transcripts, and filtering through survey data, I catalogued the most common issues EmailFactory users have with segmentation. I found most of them had to do with the limits that the segmentation feature had. For example folks wanted to create very narrow and specific segments such as "all customers who are female AND are interested in winter hats OR scarves." The AND/OR scenario isn't currently possible within the EmailFactory app.

The EmailFactory had known their segmentation feature needed work for quite a while, but fixing it wasn't a project they had been able to take on. The problems with segmentation were logistically very complicated and in the past, the EmailFactory simply didn't have the time, resources, or person-power to take on that kind of project. At the time of my research, the development team was moving into a place where they could start tackling some of these issues, and my research was able to highlight some of the areas that needed to be addressed.

The research team can learn a lot about the EmailFactory's design and where it might be falling short in meeting user needs through survey responses and feedback form emails, but the best way they've found to gather this type of research is through in-depth interviews. Interviews are much more flexible than surveys or feedback forms, and they allow the researchers to dig a little deeper and ask follow up questions. When the researchers hear something interesting in an interview, they are able to probe a little deeper. Surveys and feedback forms are often great tools to learn about what customers can or cannot do or what features and actions are valuable to them. Interviews, however, give the researchers a chance to ask questions that help them understand *why* customers do things a certain way or *why* certain features and actions are important to them.

Often, the most fruitful interviews are the ones that take place over several hours at the customers' workplaces. Visiting customers in their offices gives researchers a first-hand understanding

of what customers' work lives are like, what kinds of challenges they face throughout the day, how their company organization is structured, and what kind of workflows they have. While some of the conversation focuses on the EmailFactory and how customers are using the app, much of it actually doesn't. Instead, the researchers ask questions about the other types of software the company uses, what their target customers or audience is like, what their communication patterns are like, how they manage their data, and how they collaborate with team members or other departments. Questions like these can uncover valuable information about problems, frustrations, or need these people face. Sometimes, this understanding can lead to new products or features that the EmailFactory can design to meet these needs and solve these problems.

### *Company/Organization Design*

Some of the UX research team's research has an effect on not just the EmailFactory app but on the company and organization structure. This kind of research sometimes deals with business models, such the pricing tiers that the company uses for its customers. The EmailFactory charges their customers based on contact list size. During the fall, the research team discovered that the jumps between pricing tiers was too large. For example, someone with a list size of 24,999 contacts paid \$75 each month. The next pay bracket up was \$150 for 25,000 contacts. This means that if the person with 24,999 contacts on their email list had *one single* person sign up, it would push them into the next pay bracket—an increase of \$75. This was a painful jump for customers, who felt as though they were paying considerably more for basically the same service they had the day before, with one fewer contact. The research team recommended that the company create more pricing tiers, so the incremental jumps between tiers would feel a bit more gradual and not quite so abrupt and painful to customers. With the new pricing scale, the value customers mentally assign to the email service they receive lines up a bit better with the price they are paying, and the EmailFactory has seen fewer customers close accounts in response to moving into a new pricing tier. Pricing tiers have nothing to do with the appearance or the structure of

the EmailFactory app itself, but it does directly affect the customers' overall experience with the app and the company.

The research team is also involved in defining the different customer types that come to the EmailFactory. This type of research touches every area of the company. Most obviously, it helps designers and developers know how to create products for users. But it also helps Support know how to better communicate with customer, it gives the Knowledge Base an idea of the kind of support documents to create, and it provides the Marketing team with the information they need to best communicate with potential and current customers on the website and blog.

### ***The UX Research Process***

The company's mantra is "Listen Hard, Change Fast," and the UX research team is responsible for not only listening, but also communicating the information they've gathered from customers to others in the company so that fast change is possible. The team has multiple projects going on at a time. Some of these projects, such as addressing issues with a new feature, are short term and last anywhere from one week to several months. Other projects, such as developing user personas, are long term, and last indefinitely.

Projects usually originate from questions within the company, something someone is curious about. Sometimes the questions are very narrow, focused specifically on a common problem that keeps coming up in user feedback. For example:

- We've heard a lot of negative feedback from our users about sign up forms. What user needs are not currently being met by our sign up forms? What are users trying to do with them but are unable to?
- How many of our customers are using our VIP features and what are they using it for?

- By looking at the site analytics, we've noticed that a large number of users don't get past this one page. Why is that? What's preventing them from moving forward?

Other times, the questions are broad and are concerned with understanding workflow or behavior patterns, such as:

- Why are new customers motivated to sign up for the EmailFactory, and what was their onboarding experience like? What can we do to make our onboarding process smoother, so people can sign up and start sending email quickly?
- A lot of customers are struggling with segmenting their lists into groups that they can send targeted messages to. How are people trying to segment their lists? Which types of customers are doing this the most? If they can't create the segments they want to, what kind of workarounds are they using? What are the issues we can address immediately, and which issues will take us longer to fix?
- How do customers manage their contacts? Do they keep them all in one place? Do they store them in many different places and systems? Are there ways we could make contact management easier for them?

These questions can come from anywhere within the company. Most often, they come directly from Frank or Marcellus, but people from other teams also regularly approach the UX team, seeking information they can use to inform for their own work. For example, when the marketing team was working on redesigning a landing page for a very specific customer type, they reached out to the research team for help. They wanted to make sure that whatever they put on that page would appeal directly to that audience. Based on customer interviews and survey data, the research team was able to share information about this customer type's characteristics and behaviors, which helped the marketing team highlight the parts of the app that would directly appeal to them.

A “typical” work-day for the UX team is non-existent. In fact, I’m not even sure I could describe a typical work-week for them. At any given time, multiple projects are going on at the same time, and individuals are often working on several big things at once. Sometimes a researcher works on a project alone, other times researchers team up to tackle a project together. The team experiments with different research methods, but there are a few they rely on heavily:

- remote usability testing (provided by a service called UserTesting.com)
- on site usability testing
- surveys
- phone/Skype interviews (which sometimes include screen-sharing)
- in-person interviews and customer site visits
- day-long ethnographic studies
- reviewing feedback from support, feedback forms, and account closing surveys

Most projects rely on a variety of these methods, which validates and strengthens the projects outcomes.

Although the UX team doesn’t adhere to any kind of dogmatic framework when it comes to conducting research, they have developed their own research methodology that they often use:

1. Define a problem to explore or question to answer. Problems might be areas within the app that need work, such as the customer onboarding process or segmentation feature. Questions might come from a researcher or other EmailFactory employee's curiosity about a particular behavior, workflow, feature, or customer type.
2. Search through existing data and customer feedback to determine what can be learned by the information the company already has.

3. Conduct a few interviews with customers to learn more about this problem. During these interviews, the researchers often realize how little they actually know about the topic, and they uncover more questions than answers.
4. Compile all of these questions, refine them, and then create a survey in SurveyMonkey.
5. Ask the data science team to pull a list of customers from the database to send the survey to. The research team never sends surveys out blindly. They identify customers related to the issue they are studying (and will therefore give the most relevant feedback) by asking the data team to search for customers who meet a specific list of criteria—such as list size, particular features used, paid vs. free, options enabled, etc. For example, during a study about how customers manage their email lists, the research team only sent the survey to customers who regularly imported lists of emails into their account, which suggested that they were actively managing and updating their lists.
6. Beta test the survey on a small percentage of the total participant list. This gives the team a chance to catch any mistakes in the survey and fix them before the survey goes out to the entire list.
7. Send out survey and keep it open for about two weeks.
8. Analyze survey results.
9. Reach out to customers from the survey for follow up interviews. During the survey analysis process, the researchers often flag respondents who provide compelling feedback. Follow-up interviews give them a chance to probe a little deeper
10. Review results. If the researchers feel their research was inconclusive, they continue talking to customers until they've gathered enough information to close the study. If they've collected enough data to come to some definite conclusions, they move to the final step. . .
11. Compile data and share it within the company.



The survey helps them construct an overall picture of a problem or issue, while interviews allow them to drill down to specific use cases that provide context for the survey numbers and feedback. While this process has been effective for the research team, it isn't a hard and fast set of rules they dogmatically adhere to. There is room for flexibility and experimentation, based on the project and the amount of time they have: Some projects might start off with site visits instead of Skype interviews. Other projects might not need a massive, in-depth survey; a series of in-depth customer interviews might suffice. In the case of feature testing, the team might use a survey as a way of screening participants, but the majority of their findings will come from observing someone using the app. Finally, if deadlines are tight and someone needs some information fast, the team might be able to provide valuable information by searching through recent feedback forms or account closing surveys.

## **Conclusion**

Once the research team answers the question or explored the problem that originally prompted a study, they're tasked with taking their findings and communicating them throughout the company in a way that is useful and actionable. As I mentioned in my introduction, user research and data is worthless unless it's acted upon and used in some way to influence positive change in a product or company. The next two chapters of this dissertation explain what happens to research at the EmailFactory once it's been gathered. In Chapter 4, I describe the ways UX research is communicated to others within the company. Chapter 5 takes a different look at company research, discussing the forms research takes when it leaves the company and is shared with the public.

## CHAPTER 4:

### GIVING VOICE TO DATA AND LEGS TO RESEARCH:

#### COMMUNICATING RESEARCH AND INFLUENCING CHANGE INTERNALLY

##### Introduction

I sat in Marcellus's office, sipping water from my aluminum water bottle. I inhaled deeply and tucked one ankle firmly behind the other to keep myself from fidgeting. I learned long ago that the trick to calming my nerves during meetings was to keep my hands occupied with *something*. So I slowly twisted the cap back on the bottle, set it down, and picked up my black Moleskine notepad. I had a list of questions scratched down on one of its pages in black ink. As Marcellus talked, I quickly glanced over them and scribbled a few notes in the margins. This wasn't a negative meeting and I really had no cause to feel anxious or worried. On the contrary, we were discussing the terms of my case study at the EmailFactory, but I wanted to make a good impression—in case he suddenly changed his mind about letting me conduct my dissertation research here. Marcellus is a tough read even for those who've worked with him for years, and I had just met him.

As with most user experience professionals, Marcellus took a roundabout path into the field. His undergraduate and graduate degrees are the fine arts—painting to be exact. But somewhere along the way he began teaching himself html and creative software like Photoshop, After Effects, and Director. After graduating with his MFA, he began teaching full-time—first a lot of digital art classes then eventually things like interactive design, usability, perceptual interfacing, and distributed communication media. He also worked for an ad agency for a year, taking on web design projects for clients like David Bowie and learning how to manage a creative business during the dot com boom, when the industry was still fresh and no one really knew what they were doing.

Marcellus created his first EmailFactory account in 2005, when the service was still just a part of the web development agency. A couple of years later, after the EmailFactory had become its own company, Marcellus used it in one of the classes he taught on findability, which explored how content is delivered on the web and how people discover it. In one section of the class, they discussed how email and newsletters are one way to help people discover content online, and he had all of his students sign up for an EmailFactory account. The EmailFactory was so young at this time that Marcellus's class caught the attention of the company's founders, and one of them, Frank, agreed to come in and speak to the class.

At the time, Marcellus was also working on a book about website findability, which included a section about the EmailFactory. He called up Frank and asked if he could pick his brain a bit about the company. Frank agreed and then offered Marcellus a job as a designer, making Marcellus the sixth employee at the company. Marcellus's first project was working with the lead engineer, Cody, to redesign the EmailFactory app, with Marcellus working on the frontend design and usability and Cody writing the backend code.

Almost seven and a half years later, here I was, sitting Marcellus's office, nodding and scribbling away as I listened to him describe the EmailFactory and their research process over the past five years and half years. "In the past six months, the way we do research and do UX has changed," he explained. They had been gathering information, conducting usability studies, and talking to customers on a regular basis—but they were missing something. He noticed several problems when it came to conducting and managing research in the company:

1. The company was growing and was divided up into eighteen key teams (including all support and administrative staff). The company was not massive by any means, but it was big enough that information became unintentionally, as he termed it, "siloes" within these key teams.

2. They were drowning in customer feedback, and it had gotten to the point where there was so much feedback that it just wasn't actionable or manageable. The information was valid and good, but there was no way to store it, no way to return to it and reference it, and no way to communicate it to the rest of the company effectively.
3. The rich data they collected through studies and usability tests provided them with clarity for a moment; then time would pass, and their insights would fade and disappear—like a car driving into a foggy distance.

I was stepping into the group at this unique point. Unlike many other UX groups, they didn't have to struggle over proving the validity of their work and its worth in the company; they had the full support of the company's founders and the respect of their peers. This meant that instead of spending their energy on arguing for their place in the company, they could turn their attention to actually conducting research and figuring out how to use it.

### **Drowning in Data**

One of the problems with research is that no matter how sound a person's methods are, how much data she gathers, or how rich that data is, none of it really matters if her findings aren't shared and used to inform design decisions. This was the problem that the UX team at the EmailFactory realized a couple of years ago. Research and information was scattered across the company, saved on individual hard drives and in personal memories. But memories fade, and forgotten hard drives serve as prisons for data. People at the EmailFactory were becoming individual silos of knowledge and information, unintentional gatekeepers, rather than conduits of research where information could flow freely to those in the company who could use it.

The research team toyed with several different methods. First, Google Drive, which works beautifully as a collaboration tool. The research team relies heavily on Google Drive, preferring it to

Microsoft Word. It lets the team share study protocols, interview questions, surveys questions, and in-progress drafts of reports with one another, without fear of duplicate copies or overrides. Quite often, especially at the end of projects, several researchers will work together on the final report. Early drafts often have a running commentary of questions and remarks that takes place in the right-hand margin of window. As Marcellus playfully refers to it, though, Google Drive is “the place where good ideas go to die.” It’s great for collaboration and creation, but once a project is over, and documents for a new project are added, older documents become buried and forgotten.

For a while, the research team also tried using email exchanges and wikis to manage and share research, but neither really met the team’s needs. The wiki was clunky, it was difficult to use, and the search feature wasn’t very accurate. It was also blocked behind a firewall, which limited access to office-use only, which made doing work in the field difficult. Email was a quick and easy way to share information, but email inboxes aren’t a very good way to manage or maintain data. Information pops up in the form of a recent email, but as hours, days, and weeks pass, it gets pushed further and further down into the inbox’s history—“out of sight and out of mind.”

As time past, the research team forgot the things they had studied and findings they had uncovered. Research studies conducted by one person were unintentionally repeated by another person, and important findings weren’t passed on quickly enough and then were forgotten as the next project picked up speed. A central system, whether it’s GoogleDrive, a wiki, or email inbox, is only as useful as it is usable and accessible. Without people actively contributing and interacting with the data in a database or management tool, the tool only magnifies the problem of the individual hard drive, becoming a mass graveyard of data that’s never accessed.

The problem reached critical mass the summer of 2012, when Marcellus asked a visiting speaker what to do with the thousand feedback emails flooding into his inbox daily. The speaker advised him to

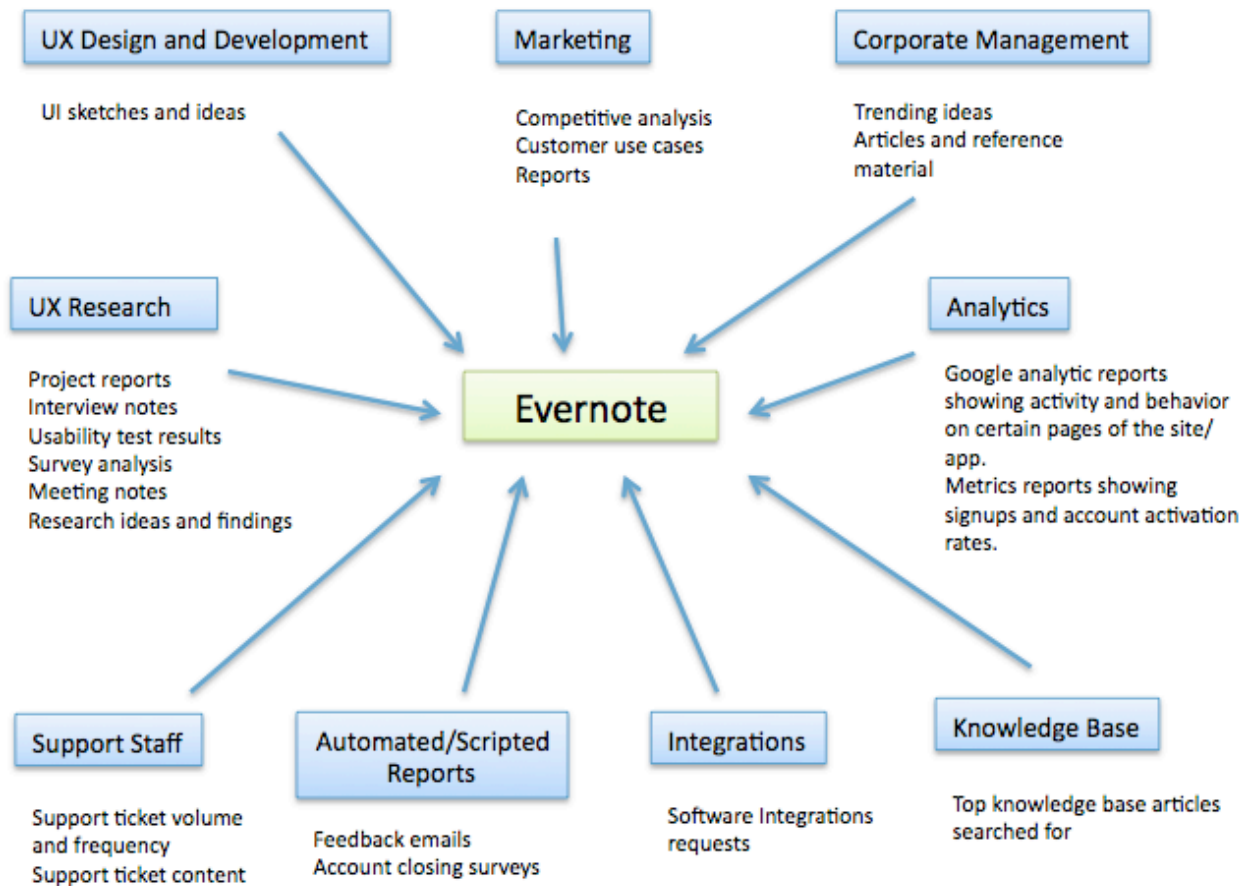
just get rid of the feedback form and delete all of the emails. If they weren't being read or acted upon, why bother cluttering up his inbox with them? But Marcellus had another idea. He felt the feedback had value—if he could just figure out a more effective way to capture it, manage it, and filter through it. He wrote a Gmail script that automatically tagged each customer feedback message and sent them directly into a shared Evernote account. The short-term benefit of this was that it cleared his inbox, but the long-term benefit of funneling everything into Evernote was something that no one at the EmailFactory ever expected.

### **The Evernote Project**

Several months after Marcellus setup the script in Gmail that sent customer feedback emails automatically into Evernote, Frank approached him with a question about how customers were using RSS-to-email, a feature that let customers automatically email blog content to subscribers. The clock was ticking on a project they were working on, and Marcellus didn't have much time to start a prolonged study, so he turned to his Evernote database of customer feedback, hoping for answers. Within seconds, a search for "RSS-to-Email" gave Marcellus forty-five pieces of feedback, each with a customer email address attached to it that Marcellus could use for follow-up questions and interviews. What would have taken weeks for a formal study was accomplished in hours.

Inspired by this quick win, Marcellus wondered what else they could learn if they had more data in Evernote to pull from. He shared his idea with Stryker, Mandy, and Grace, the three other researchers on the team at the time, and they all began putting their notes and research data into Evernote, organizing information into folders and tagging notes with common identifiers—such as "autoresponders," "segmentation," "interviews," and "templates." They threw everything into Evernote they could, inviting other departments to join them. Soon, their Evernote account was filled with Google analytics reports, support staff findings, competitive analysis reports, survey results, customer interview

transcripts, usability testing reports, and release cycle notes. Engineers, data scientists, support personal, marketers, and ops team members all began funneling information into Evernote, creating a pool of data that spanned across the organization (Figure 4.1). All of it was searchable, tag-able, and—most importantly—accessible.



**Figure 4.1 Many EmailFactory groups send information into Evernote**

Many departments within the EmailFactory regularly send information to Evernote, where it’s accessible to the entire company.

Now information is not quite so siloed off by person or by department. It is saved in a centralized database that is searchable and doesn’t require complicated data queries. When the research team is asked a question, they start in Evernote, searching key words and learning the kinds of information they already have on topic as a starting point. This also helps them to avoid what Marcellus

calls the “Groundhog Day<sup>3</sup> research feedback loop,” where people re-research things that, unbeknownst to them, someone else has already explored.

The problem with database tools, however, is that they can sometimes become like buried treasure. Sure, a chest of jewels and gold coins is extremely valuable, but if it’s buried at the bottom of the ocean, where it can’t be easily reached, its value becomes irrelevant. As useful as Evernote has been for the EmailFactory, it can also face this same challenge. At the time of this writing, the EmailFactory’s Evernote account has 64 contributors (over half the company) and over 9,515 individual notes. Information is pumped into it daily—both by automatic scripts and by people. But then what?

Evernote is a topic-driven tool. In other words, it’s most powerful when you know what you’re looking for. For example, let’s say I want to learn more about how the company can do a better job at connecting the EmailFactory app to EventBrite, an app that lets users coordinate and manage events. I could enter “EventBrite” in the search field, and Evernote would filter through its contents—account closing surveys, support notes, feedback emails, survey data, and interview news—and display all notes that have “EventBrite” in their titles, tags, or body text. If I have enough data, I can begin to quickly piece together a picture of how EmailFactory customers are using EventBrite and where EmailFactory can improve this connection to make a better experience for its customers.

Although Evernote is a wealth of information, and although it’s solving a lot of problems for the EmailFactory, by breaking down some of the walls between departments, it’s not a silver bullet. As with any system, it comes with its own particular set of challenges:

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<sup>3</sup> *Groundhog Day* is a 1993 comedy that stars Bill Murray and Andie MacDonal. The plot is focused around a TV anchor named Phil Connors who is forced to relive in the same February 2 (Groundhog Day) over and over again, though he is the only person in the film who is aware of it.



**1. The amount of information housed in Evernote is overwhelming and intimidating:**

The first barriers to using Evernote—especially for users first using the EmailFactory Evernote account—is the system’s sheer size and the volume of information it holds. Data is pumped into Evernote from multiple sources, multiple times a day, both automatically (via programmed scripts) and manually (via EmailFactory employees with insights to share). Initially, it’s not clear where information comes from or what format the information will be in.

The EmailFactory’s Content Strategist, Emma, who manages all the writing and editing for the company, finds the large collection of information in Evernote overwhelming, rather than informative. Emma shared with me that although she’s had access to Evernote for a long time and always keeps it open and running on her computer, but she’s never actually used it:

I keep telling myself, “When I have time this week, I am going to do this.” But it’s a lot of information, and it’s an overwhelming amount of information. Different people share [information] differently, so I don’t really know what I am going to get. It’s hard for me to tell by reading the topic or subject—or whatever it is called—what it is going to be. What exactly I am getting? Survey results? Am I getting Q&A? And it feels like I’m observing, peeking in on an internal user experience team project . . . So it’s just a lot of information, and going into it I don’t know how it’s organized. How I am going to be able to use it, or what I am going to be able to do with it?

Emma, along with all of the other employees at the EmailFactory, has a job she’s focused on—and trying to make sense of the enormous amounts of information in Evernote isn’t a part of it.

**2. Evernote is a topic-driven tool and most helpful when you know what you're looking for:**

One of the reasons Evernote is so overwhelming (other than the fact that at the time of this writing, there are over 9,515 notes in Evernote), is that it is a topic-driven tool. I've mentioned this previously, but it's worth mentioning again here. Evernote is most useful if you already have an idea of what you're looking for—like a specific feature or person's name. It's not something you casually browse or wander through aimlessly, picking up useful information while you go. Yes, there is a lot of useful information in Evernote, but it has to be pieced together and given context before the information can be really useful. Evernote serves a starting point for projects, a place to get an "information dump" about what the company already knows about a topic or issue. This might work well for a designer, developer, or knowledge base author, who can search Evernote when they're working on a particular features or action. However, since Evernote notes lack context, they aren't as useful to a marketer, content writer, or a designer/developer who is working on the EmailFactory website rather than the app and needs a broader picture than what Evernote can provide.

**3. Evernote provides information, not interpretation or understanding:**

The strength of Evernote lies in its ability to filter through data quickly. Users can easily add, organize, and categorize information without having to learn complicated querying languages. It brings pieces of information together, but it can't bring meaning to the information. Evernote can't think critically about information it stores or the collections of data it brings together. It doesn't question data, challenge it, put it into context, compare it to external data, or apply it to current situations. According to one of the company's developers, Ada, this is one of the reasons why she doesn't use Evernote:

I find it overwhelming. There's a lot in there. I really like context, and sometimes Evernote is a bunch of disembodied statistics. I'd rather see the data in context with all the rest of the data. It takes longer. But otherwise I don't really know what I'm looking at a lot of times. It's easy like if you're just looking for "how many people use mobile." Fine. I can easily accept that. But if I'm looking for like anything else, I'll probably get overwhelmed and need to understand it, so I'll go off and do my own looking [in the app's backend database]. But actually I haven't been in Evernote in a long time. It might be completely different.

[laughs].

It is interesting to me that Ada would prefer to dig into the app's backend database, and she finds *that* space less overwhelming and intimidating than Evernote. For Ada, who is used to working with large amounts of numbers and data, extreme amount of information isn't overwhelming, but lack of proper context that helps her understand the information is. The absence of context leads to the fourth challenge of Evernote: misapplying or misinterpreting research.

**The lack of context in Evernote makes it easy to misapply or misinterpret research:**

The old saying goes that "With great amounts of information comes great responsibility." Okay, perhaps that's not how it *originally* went, but please allow me a bit of creative interpretation for a moment. The CEO, Frank, shared with me that although research is starting to make its rounds throughout the company and Evernote is making this easier, one of the things he worries about is how people apply that research. He gave, as an example of this, a project the Knowledge Base team was currently working on: Several months ago, the EmailFactory began building a framework that categorizes customers based on their

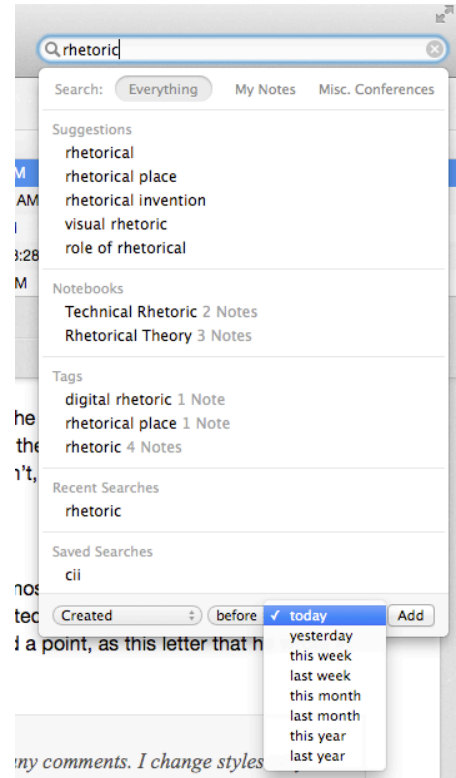
organizational life cycle. Many departments conducted research to understand the defining characteristics and parameters for each of these categories and some of that research was put into Evernote. The company is working very hard to understand the needs of the customers in each of these categories so they can better serve them. One way the company envisions doing this is making a master system that can understand, based on customers' actions inside the app, when they will need particular kinds of help or information. The goal is to offer relevant information to customers at just the right time, the moment they need it.

Frank shared that the Knowledge Base (KB) team, which writes the help documents and creates video tutorials for the EmailFactory application, was trying to bucket their KB articles based on the customer lifecycle categories. They had been reading up on some of the research about the life cycle project in Evernote and felt the burden was on them to organize their articles to fit each stage of the customer lifecycle, when in reality, Frank was envisioning a system that would suggest to customers, based on their company's lifecycle, the articles in the KB that pertained to them. In the words of Frank, "[This] is a case where the content is just sitting there [in Evernote], waiting to be consumed by every department." And, in the case of the Knowledge Base, the research they gathered was sound, but from Frank's perspective it wasn't necessarily applied correctly.

## **5. Evernote isn't easily curated or updated**

One reason why a situation like the one above can easily occur is the fact no one curates or purges Evernote of outdated information. With over 9,000 individual notes in Evernote (at the time of writing), there isn't a realistic way to make sure *every* note contains current information.

Evernote becomes a collective memory that stores and recalls everything that was ever put into it. Notes with information, such as stats from a report ran on the EmailFactory app, survey results, or interview transcripts, are like little snapshots in time that are preserved indefinitely in that collective memory. From what I observed, content isn't systematically updated and older notes are rarely updated or deleted. It's more likely that updates are made by the creation of a new note, and Evernote doesn't have a way for tying old and new notes together. When someone searches Evernote for key topics, tags, or words, all of those "snapshots in time" are conjured up, regardless of how recent or outdated they might be. The app does give a few options for searching based on creation, but the options are not very flexible or specific (see Figure 4.2).



**Figure 3.2** Evernote's limited search field options

## 6. Evernote has serious flaws with its UI and User Experience

Despite the EmailFactory's reliance on Evernote as a tool, they readily admit it's not perfect, and they've often struggled against the flaws to its user interface. Notes disappear, randomly get deleted or overwritten, and lengthy audio files erase their content for no apparent reason. Security also became an issue, because links to individual files can only be shared if the files are made public—accessible to anyone online. Sharing notebooks (Evernote's main filing system, analogous to folders on a desktop) is a confusing process and more than once a researcher thought the rest of the team had access to his or her project notebook when they didn't.

The entire app is littered with little quirks and bugs that make it tiresome to use at times and clearly demonstrates that Evernote doesn't routinely use their own product. Evernote has grown to over 75 million users since its first beta-test release in 2008 (King). Yet they haven't managed to work out some of the fundamental kinks in its system. It became a running joke among the UX group at the EmailFactory that Evernote was too concerned with selling socks (priced at \$85 for five pairs) on their newly released Evernote Market than they were about creating good design.

Despite its flaws, Evernote has helped the UX team pull together related information from multiple sources. What it's not good at, however, is helping them piece all of that information into a meaningful story that can be used and acted upon. It's also not very good at helping them uncover important trends or topics that they *aren't* specifically looking for. Finally, even if they *do* know what they're looking for and they actually have the capabilities of making meaning from it all, what if they don't have the time?

### **Communicating Research Internally**

One UX designer, Ron, described his feeling of working with the amount of data at the EmailFactory like "trying to drink from a fire hydrant." At times, the volume of information is so great that it is difficult to use constructively, and it becomes paralyzing rather than inspiring. Here is where the research team's role switches from data gatherers to information distributors. Once a research project is complete, the UX team condenses their findings, pulls out the most valuable pieces, and passes it along to the people in the company who need it.

Communicating research effectively is a difficult job. Good teachers understand that a classroom full of students represents a wide range of learning styles. Some students learn best on their own, with time to dive into the material, coming up for air only occasionally for clarification or questions. Other students need to hear someone explain a concept to them and can absorb information best by listening. Still other students can only learn by doing, and they have to interact with someone or something in

order to fully grasp concepts. Good teachers try to adapt their teaching styles to the needs of their students and communicate the course material in ways that make it possible for all (willing) students to succeed. The job of a UX researcher should be very similar. The UX researcher gives voice to the data, communicating it in ways that other people can understand, learn from, and use to improve upon a design.

Like a good teacher, a good UX researcher understands that all of their colleagues don't absorb information in the same ways. Though they might not be consciously aware of it, this particular part of their job is extremely dependent upon the rhetorical principles of audience, context, and purpose. They are tasked with presenting research in the best way possible for their audience (colleagues), using whatever means available to them. They also have to work within the constraints of their current situation, such as time and resources (context). Finally, they must do all this with the focused goal of creating some kind of positive change in the app, as a result of the research they present (purpose).

### ***Understanding the Researchers' Primary Audience***

In-house User Experience research is a tricky business. To be good at it—really good at it, a person has to not only understand the product's users, he or she has to understand the product's creators, the people who give life to the service and its design. What is important to them? What other projects are they working on? It takes an understanding of audience to communicate a message clearly, but how often do researchers take the time to get to know their colleagues? How often do they have (or take) the opportunity to move throughout the office and work with them? How regularly do they sit and have coffee with the designers and ask what they're working on? How common is it to see researchers and developers grabbing lunch together and talking about the project their teams are working on? You can't force relationships to develop, but you *can* create environments that encourage people to talk and

connect, which is what the EmailFactory does. The company-wide lunches, the centrally located coffee machines and kitchens, and the open office spaces all invite these connections and interaction.

As a researcher, it's easy to cloister yourself, furiously researching and learning about customers and the product. In Susan Cain's book, she describes the quiet, introspective "introverted" types as those "drawn to the inner world of thought and feeling" who "focus on the meaning they make of the events swirling around them" (Kindle loc. 295). Deep-thinking and reflective people often gravitate to research jobs, but unchecked, their introversion can isolate them from their colleagues around them. I admit that, as a researcher, I can struggle with this at times, preferring my work to people, but since my time at the EmailFactory was so short, I wanted to make as many connections as I could. A company, though it functions as a cohesive unit (ideally anyway), is made up of individuals. As an academic researcher I knew that to really understand the company for purpose of my dissertation, I needed to meet as many of the people in it as I could. In my role as a participant observer, who took part in the actions of the company, I needed to meet this people in order to perform my job.

The research team at the EmailFactory stays very socially connected to other departments: As UX lead, Marcellus sees it as part of his job to make sure "other people are informed of what another person is doing or what another team in the organization is doing." Mandy and Devon came to the UX team from other departments and their histories working with people elsewhere in the company facilitate these connections for them. The two other researchers, Geoff and Stryker, weren't hired internally and didn't have ties to any of the other people or groups in the company. I watched as they all regularly spent their lunch breaks with colleagues from other departments and had long chats with folks by the espresso machines. I was interested to know why Geoff and Stryker made such efforts to meet people they wouldn't ordinarily work with, so I asked them. Independently from one another they



shared that they felt like there was so much they could learn from the people they work with. They want to understand what their jobs are like and what they do.

While the primary audience for the company is the user, the primary audience for the research team is the rest of the company. They serve as advocates of the users, communicating data to the developers, the designers, the stakeholders, the marketers, the technical writers—anyone who is involved in creating the experience for the user. For the UX researchers, getting to know their colleagues is getting to know their audience. It gives them a chance to understand how they work, what is important to them, and what their needs are. One day, I told Stryker that I had noticed how he seemed to consciously make and maintain strong connections with people in other departments. I asked him why. He told me,

If I can build a relationship with Carter (one of the Data Scientists), then he's going to know data is important to me. Then he will come to me when he has something he knows will help me do my job better. Same with Devon when she was in Compliance. Same with Collin in Support. The personal relationship shows that I'm a real person who values the exchange of ideas.

For Stryker, making friendships and developing relationships with people in different departments created a two-way channel for the exchange of ideas.

Asking questions and learning about a colleague's job helps the researchers know the kinds of information their colleague needs to be successful in their work. And while communicating good, relevant information is important, the relationships the researchers build also helps make their audience more receptive and willing to listen. It establishes a relationship and builds trust so that when the researchers challenge something or suggest a new way of doing things, tensions aren't quite so high and people don't feel quite so territorial. One of the backend developers, Reese told me that the engineers and

researchers keep each other honest. “There are times when I look at data and come to conclusions that are completely wrong based on talking to users, and vice versa for the UI/UX [team]. . .” They challenge each other’s data, helping each other think critically about it and approach problems from different perspectives. This is very, very valuable to a company, but these kinds of exchanges wouldn’t be possible without the relationships that both teams have worked to establish and cultivate and establish.

### ***Forms of Communication***

A significant part of understanding audience is understanding the best medium to communicate information to them and the UX team has been experimenting quite a bit with different forms of delivery for their research. During my study, I saw research written up as reports, incorporated in to a poster, turned into videos, delivered in oral presentations, sent out in newsletter-type emails, and talked about in everyday conversation. The following section is a breakdown of each of these formats, where I’ll describe them, the purpose they serve, and the effects they have on the company.

#### ***Reports***

“Report” is often a dreaded word, bringing up thoughts of long, stuffy documents that go unread before being banished to a tall metal filing cabinet. Reports at the EmailFactory actually have a different fate. To my amazement, they are read. Well, maybe not read all the way through and not by everyone . . . but they *were* read and their lives usually didn’t come to an end in a tall metal coffin, filled with dividers, tabs, and folders.

At the conclusion of every major project, the research team writes a formal report. These reports have the standard formalities, like a title, author, figures, and references, and the standard sections, like executive summary, methods, and recommendations. Like most reports, they are rich with information, but they are casually written, with clear language and, at times, humor. They are short, usually under 20 pages long, with tables, images, and charts. And although all reports are not the same,

the researchers work hard to infuse them with narrative elements. Quotes and customer stories are essential elements that pull all of the details together and put a human “face” to the facts.

Reports are collaborative efforts in the UX research team. The one or two people responsible for the project will begin writing the report in Google Docs. After working to make sure the necessary information about the study, the study’s outcomes, and the researchers’ analysis and recommendations are included, they share it with a few others in the team for outside opinions and perspective. The outside readers go over it, using the comments feature to point out areas that are unclear, suggest changes to sections that might need more information, and question areas they may not agree with. This back and forth exchange continues between the authors and their fellow researchers until they feel it’s clear and comprehensive enough to be sent to Marcellus. He, in turn, goes over it, asks additional questions, tweaks language, and gives input. This entire process can take place over several days or, in some cases, just a long afternoon.

Once everyone agrees that the report clearly explains the problem they set out to explore and describes the findings they gathered from the study, the research team invites their first audience to the doc. Usually this audience is the corporate executives and possibly the team leads—people who need to know details and will distill the information to their teams. Often, new conversations will start through the comments features, with questions and requests for follow-up research. Then, the report often lays quiet, while people decide how to act on the information.

Reports’ secondary audiences are actually what interested me the most, though. As new projects come up, older reports roll back around as starting points, providing snapshots of what the team knew about that subject at that particular time. For example, the UX design and development team has been working on redesigning signup forms (the forms customers place on their website or Facebook page where people can subscribe to their emails). The current forms are plain-looking, not

easily customizable, and users aren't able to create multiple sign up forms that send contacts to the same list. Matt, one of our UX designers, has been working on this project and shared with me that at the start, he was sent a report about sign up forms that one of the researchers had written as a starting point to familiarize himself with the work that needed to be done.

Matt actually likes to work with a formally written report, because it lets him dive more deeply into a topic. Rather than reading it from a computer screen, he prints it out, skims through it to catch the highlights, then reads it slowly from the beginning. Then he sets the report aside and starts working. The report remains on his desk throughout the entire project so he can occasionally browse through it. Matt prefers face-to-face conversation over reports, but he told me that he knows the research team is busy. A report doesn't mind being returned to for follow up questions.

But despite the fact that the UX team takes great care to make their reports clear, easy to read, and interesting, they aren't the best way to distribute information to a large group of people in different departments. Pages of text can be dense and daunting. Though there might be the odd, curious soul who picks up a report simply because they like information, most people won't take the time unless it's immediately relevant to something they're working on. And at a company like the EmailFactory, even the "odd, curious soul" is likely too busy to just leisurely browse through documents. With this in mind, the UX team has been experimenting with new ways of communicating information, such as posters, videos, company-wide "Insights" email reports, coffee hour talks, and visual reports.

### *Posters*

The first time I walked into the common area of the EmailFactory offices, five beautiful, framed posters immediately caught my attention (Figure 4.3). They were bright, and colorful, with vibrant backgrounds. Each featured a larger than life image of a person—three men and two women. Under each of the images was a name: In order, Mario, Eliza, Fred, Ada, and Andre. I stared at the posters,

mesmerized, and noticed that each person was framed by descriptive nouns and adjectives in funky fonts:

- Andre is educated, mobile, a techie, and savvy.
- Eliza is social, inefficient, busy, and smart.
- Mario is a problem solver, an expert, creative, and advanced.
- Fred is a control freak, cool, resourceful, and a power user.
- Ada is self-reliant, busy, and smart.



**Figure 4.3 EmailFactory persona posters**

The UX research team conducted a large-scale customer study that helped them develop persons for the people who use the EmailFactory app. They had posters made for each of these personas and hung them in the office common area

I puzzled over these eye-catching posters, wondering where they came from and what they meant. As I studied them more closely, I saw pieces of paper tacked beneath each of them. Each paper had snippets of customer feedback, taken from feedback forms, emails, support chat transcripts, and tweets. These posters weren't just artistic images used to decorate blank wall space. They were the customer personas of the EmailFactory, the archetypes that helped represent the different customers the company served. The EmailFactory had just released a complete app redesign a few weeks prior to my arrival, and the comments on the papers beneath the posters were real pieces of feedback (both negative and positive) about the redesign. As employees filtered through the common area to make coffee, grab a snack, eat lunch, or shoot some pool, curiosity would strike them—just as it did me—and they would pause in front of the posters, reading feedback on their work from the perspective of each of their five major user groups.

The goal of these posters is to prompt curiosity, provoke thoughts, inspire conversations, and invite questions. As Marcellus explained to me, “These posters are not even the tip of the iceberg of the information we have. But it makes the core concepts accessible to people where you can get it at a glance, and it can enable a conversation about these different types of customers.” As a poster, valuable customer information comes alive, free from the constraints of a hard drive, filing cabinet, or black and white text on an 8x11 page. A poster can't provide the detailed information of a report, but it can give an overview, a surface-level understanding that will hopefully prompt people to dig deeper and learn more by asking questions, talking to the UX team, reading the full reports, or digging into Evernote.

I've said several times that research is embedded within the DNA of the company, and posters like these are one example of this. To an outsider, at first glance these posters appear to just be unique artwork, created by a company known for its quirky style. They are a part of the walls and the structure of the building, just as research is a part of the internal structure of the company.

## *Videos*

Last year the team began doing customer ethnography studies to get a better idea of what their customers are actually like and how they work. In pairs of two or three, the UX researchers travel to visit customers all across the United States (and Europe) and spend a day with them. They snap photos, take video, conduct formal interviews, take them to lunch, and just hang out with them for a day. They share the stories of these customers to the rest with the rest of the EmailFactory through videos, giving the company a glimpse into the lives, environments, and habits, and workflows of the people they design for.

A lot of time goes into making these videos. The researchers spend countless hours creating what they hope will be a compelling narrative for the rest of the company, pulling out important things the customers say and matching them up with vivid footage of the customers' equipment and working space. Often the UX research team works with professional videographers, while also learning some of the skills themselves. After the videos have been edited down into elegant 15- or 20-minute mini-documentaries, they're uploaded onto Vimeo and shared across the company.

A second—and less glamorous—type of video the UX team uses is recorded remote usability tests. The UX team uses a service called UserTesting.com to conduct their remote usability tests. Through UserTesting.com researchers can run tests similar to ones they would in a usability lab—but with a pool of participants from around the world. The researcher comes up with the tasks she want her users to complete, defines the participant parameters (such as people who have never done email marketing before, people within a given demographic segment, people who have never used the EmailFactory before, etc.). UserTesting.com does the rest. It locates the participants and sends them the test, which participants can take from anywhere in the world—provided they have an Internet connection and a microphone. Participants take the test, expressing their thoughts and opinions aloud

as they go along. UserTesting records the actions on their screen and their audio, packages it up, and sends it back to the researchers for review and analysis.

Remote usability tests at the EmailFactory usually only last about 15 or 20 minutes and focus on a particular feature or task—like going through the signup process, sending an email for the first time, or importing an email list. After the researcher runs several tests, he or she will review the videos, take notes, then communicate the findings back to the design and development teams. Every few months, the research team sets up a “lunch and learn” and invites the UX designers and developers to join them to view some of the videos. If the videos are short enough, the team will watch several. At other times, the research team will edit them down to highlight some of the consistent issues he or she has seen.

The experience of sitting in on these meetings is unique. The UX team enjoys being together, and the first few minutes is usually filled with chatting, jokes, and laughter as folks grab something to eat and find a chair. There’s always an underlying sense of anxiety and anticipation in the air, though, similar to the one actors must experience the morning after opening night, if they dare to look at the critics’ reviews of the performance. It’s painful for everyone in the room to watch users struggle with something they thought was so intuitive and natural. Sometimes the group doesn’t even make it through one entire video before discussion breaks out, with folks throwing out ideas for how they could adjust something, and verbally analyzing what they just saw on screen. Videos like these help put faces to the 5 million people who use the EmailFactory. It creates a personal connection to the men and women who use the company’s products and struggle to complete actions that were meant to be simple and straightforward.

The power of a video is its visual and aural elements. It makes customers come alive to the designers, developers, writers, and support staff who serve them. It places them in the context of their real-lives, which has a lot more power than a name and request on a support ticket or a complaint on a



feedback form. Grace, the UK-based EmailFactory researcher shared with me that one of the reasons she thinks the videos are so important is their ability to put faces to customers and to transport employees to a place they may never get to travel to. She hopes the videos will help the company see that it has a global user base and although they may design and create from the United States, their users aren't all English-speaking Americans. Nothing drives home the realization that your user base is not homogenous than seeing different cultures and listening to different accents.

Despite the powerful impact videos can have on the company, the medium does have it challenges. Videos take hours upon hours to shoot and edit. Yet the longest ethnography video the UX created just twelve minutes and thirty seven seconds long. That's a lot of effort for such a comparatively small product. The effort would certainly be worth it if the end product brought about some measurable change, but something like that is very difficult to measure. Although the EmailFactory doesn't focus on metrics to evaluate performance, it's sometimes hard for the UX group to see how effective this communication form is. The video has been viewed a total of 27 times since it was created seven months ago. Not surprisingly, the majority of those views took place during the first month. Assuming that no one watches the videos more than once (though I myself am responsible for several of those views), and a group of people didn't watch the video together, this means that only about 14% of the company's 200+ employees has ever seen it. Videos are powerful tools to build empathy and understanding, but it's a struggle to make sure they get put in front of the people who need to see them.

Another challenge with communicating through videos is that it isn't a very easy medium to review or skim through. Without extreme preparation and tagging, videos aren't searchable, and you can't really highlight or mark important parts like you can a document. Videos also seem to require a greater mental commitment of people. Reports can be skimmed for highlights and relevant sections,

they can be marked up, highlighted, stopped and returned to at a later time. Videos don't really work this way. In order to get everything you need out of a video, you have to stop what you're doing to only focus on the video. As a result, they're at risk for being set aside "for later, when I have the time." They get forgotten and lost in the deluge of other videos, articles, studies, and blog posts that get passed throughout the company through emails, chats, feed-readers, and social media outlets.

### *Coffee Hour*

One of the ways to combat the flaws of videos is through regular company Coffee Hours. Coffee Hours are similar to the "Lunch and Learns" that the UX team hosts for designers and developers, but on a much larger scale. They're usually held on Fridays in a large open space that can seat about 80 people comfortably. Coffee Hours are something like mini "TED Talks" for the EmailFactory, with invited guests from outside the company who share interesting, creative, quirky, and smart things. Over the past year, the EmailFactory has hosted Coffee Hours with great thinkers like Kevin Mitnick (a world-renowned hacker, who served time in prison and now offers businesses security consulting), Jeanette Lee (a.k.a. "The Black Widow," professional pool player), and Seth Godin (entrepreneur and author).

The UX research team is sometimes scheduled within this regular mix of guests and given the opportunity to share their customer insights with a large segment of the organization all at once. One of the Coffee Hours that the UX team took part in during my eight months at the EmailFactory focused on the ethnography project they worked on earlier in the year. Over the course of an hour, the team shared details about the customers they visited, the pain points they have, and the ways the EmailFactory fits into their overall workflow.

They also showed clips from some of the mini-documentaries they had created. One particular video clip caught everyone's attention. It was a short clip from an interview held at a publishing company. The image closely framed the speaker's face, which was a good thing, because the audio was

so poorly edited that you had to study the speaker's lips closely to catch everything he was saying. The background noise all but drowned out his words. Almost everyone in the Coffee Hour simultaneously leaned in, scooted to the edge of their seats and furrowed their brows, as they strained to understand him over ringing phones, loud voices, and slamming doors. Once the clip was over, Stryker paused for a moment, then chuckled:

Was that little difficult to hear? We left it that way intentionally. The struggle you just had to hear him was actually the same struggle we had sitting right in front of him. The space that company works in is small, with walls so paper thin that you can hear everything going on in the office next to you. This is the environment these people work in. They don't have quiet, ambient spaces to work in like we do. It's noisy, cluttered hectic, and kind of stressful. They use our product amidst all of this chaos and distraction.

Moments like these are eye-opening experiences for the rest of the EmailFactory. The EmailFactory employees are a privileged bunch. Everyone I spoke with expressed with great enthusiasm how much they love their jobs and the people they work with. Many of them told me this is the best job they've ever had. The EmailFactory has a unique company culture, and it's leadership feels strongly about creating an environment where employees would actually *want* to come to work. They are never short on resources and opportunities to help employees perform optimally—whether it's a faster machine, training materials, new software, or a personal stapler. They even take it several steps further by providing things that aren't necessary for "work," like healthy snacks, fancy coffee, and regularly catered lunches. When you're to working in such positive environments, it can become easy to forget the world they work in may be extremely different from the world of your customers.

### *Internal “Highlights” Reports*

*Highlights*, a bi-weekly internal newsletter, is an attempt to break down some of the research silos that can crop up in a growing company. Every department—from Delivery, Data Science, and Integrations to Support, Compliance, Marketing—has information, insights, and perspectives related to how the app works and how users interact with it. The idea began with Stryker, who wanted a way to share this information across the company. He is the one responsible for maintaining *Highlights* and making sure it goes out on schedule, but he recruits other departments outside of UX to provide content.

Although some of the newsletter issues include qualitative research, they are predominantly quantitative and data-focused. The newsletter provides readers with insights about customers, app analytics, or usage, and in the past, *Highlights* newsletters have focused on information such as:

- Preliminary customer survey results
- Statistics about sign-up and growth rate
- Stats about new user behavior, interests, and motivations for signing up for the EmailFactory
- Analytics and usage data on features used in the EmailFactory app
- Video clips from usability tests
- Information about support chat volume, activity, and content

The goal is to present high-level ideas and findings rather than provide a lengthy, in-depth analysis. And as a result the newsletters use only as much copy as needed to provide context to the numbers, statistics, and charts.

*Highlights* is built and sent using the EmailFactory app, giving the UX team a good reason to regularly use their own product. Each newsletter is a very simple, clean, HTML email that can be read quickly without any fuss or extra steps beyond clicking it open. Subscribers can easily read it in their

inbox, without having to navigate to another page or having to download anything that needs to be read in another application. The content is short and tight, usually spanning two screen lengths, at most—which is much less intimidating than a lengthy, text heavy report. For the curious and interested, though, the end of the newsletter points readers to resources, such as a full report or a notebook in Evernote, where they can get more information about the topic.

The visual and number-driven format, the brief and focus content, and the email delivery of the *Highlights* newsletters were chosen to intentionally lower the barriers for consuming the information. The focus on high-level findings and visual data makes each issue easy to skim and gather information quickly. Because of its length, the time investment is very low, but there’s always the option to dig a bit deeper, if they reader chooses.

### *Everyday Conversations*

During my interviews, I asked each of the UX team members to list the ways they communicate research to the rest of the company. “Eavesdropping and jumping into conversations” wasn’t mentioned by anyone. Though no one in the group thought to mention it among the more “formal” modes of communicating research, everyday conversations are a very real and important way information is shared.

In a conversation I had with Frank, I asked him what the research team could do to better communicate research findings to the rest of the company. He responded with a straight face, “Eavesdrop on *all* HipChat<sup>4</sup> conversations. . .” I had to laugh because the EmailFactory is far from the “big brother” type that looks over their employees’ shoulders and monitors what they do. But his point was clear: be present and available to talk and share whatever insights you have if the opportunity arises. Good research can’t always be packaged neatly into a newsletter, report, or presentation.

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<sup>4</sup> HipChat is the company’s instant messaging client, which employees use as an internal communication channel.

Sometimes, the best decisions can be made when good research is interjected into a conversation at just the right moment.

## **Conclusion**

The time I spent with the EmailFactory taught me that an earmark of an excellent user experience researcher is the skill of being an outstanding and creative communicator. No one form of communication will be effective for all employees and all departments. It's not enough to produce a well-written report if only five people read it. It's not enough to have beautiful posters designed, if not everyone is inspired to dig a bit deeper into information.

I realized how important it is to communicate significant research findings in multiple layers and formats while speaking to one of our engineers, Reese, who pointed out last year's persona project. As I mentioned previously in the section that described the persona posters, the project had a long-form narrative component, in the form of a traditional nineteen-page report. It was rich with descriptions, details, and information—but the trade off for such detail is length, which can be intimidating and a little overwhelming. The posters were one way to present the information quickly, but the project also had another component, a matrix that simplified some of the details of each persona into a one-page document (see Table 4.1). Reese used the persona and its multiple tiers of information as example for how he likes to get information from the UX team:

What I really loved about the persona research was that it had a long-form narrative to it. So it gave me something to read through that was going to take a bit more time. But he also included a matrix style report of what he saw each type of user doing. I think multiple formats are the best format, because when I want to easily skim something, I'm going to go to the matrix style thing--like when I only have a couple minutes to think about this. And the long form is very valuable to me when I have a couple hours to really

sit down and brew on it and think about it. So I think the different tiers of data access gives me the opportunities as an engineer to fill that micro-time in my day, and be like “I’ve only got five minutes, I want to get through this report as quickly as possible, let me just go to this matrix.” I’m going to understand it better and then “Okay, that was really interesting. I want to read the whole report now, so let me chunk out three hours. . . So that allows me, as an engineer, to sort of get that high level summary and get the high level details quickly, but [it] also facilitate my dive deeper [into the information].

For Reese, the matrix served, for lack of a better term, as a “gateway drug” to the data. A little taste of information that piqued his interested and compelled him to dig deeper. And ultimately, that’s the goal of the UX researchers: to communicate user research in such a way that enables people to make good decisions about their work, while also appealing to their curious nature that drives them to always desire to learn more.

**Table 4.1 EmailFactory persona matrix**

At the end of their Persona project, the research team made several different deliverables for sharing the personal information. One of them was a matrix that broke down the key elements of each persona. The content of this matrix is, of course, internal company information and I’m not able to publish it; however, the categories suggest the kind information that the EmailFactory was interested in understanding about each of its personas

Persona type	Ideal/Start-up guy	Tech Savant	PR/ Communications Manager	Administrative Assistant/ Receptionist	Agency/ Studio + Consultant
<b>Name</b>	Fred	Andrei	Eliza	Ada	Mario
<b>Work environment</b>					
<b>Where they work</b>					
<b>Why they send</b>					
<b>How frequently do they send?</b>					

<b>Email marketing savvy-ness</b>					
<b>Technical savvy-ness</b>					
<b>Self-reliance</b>					
<b>Problems encountered</b>					
<b>Wish list</b>					
<b>Top features used</b>					
<b>Integrations</b>					
<b>Industry</b>					
<b>Company/organization type</b>					
<b>Tags</b>					



## CHAPTER 5: GIVING DATA WINGS AND SETTING IT FREE: COMMUNICATING RESEARCH EXTERNALLY

### Introduction

Geoff and I sat side by side, typing away furiously. The digital clock on the top of my computer screen read four o'clock on a Thursday afternoon, and my second cup of coffee was starting to wear off. Every two weeks, the UX team sends out an email newsletter with articles that give a “behind the scenes” look at the research, development, and design work that goes on within the UX team. The group was on Issue 10, “Survey Says,” and for the past few days, Geoff and I had been writing an article about the role surveys played in one of our recent projects to understand how customers manage their contact lists in the EmailFactory. We were trying to explain our motivations, our process, and our results—all condensed down to about three or four pages of text and screenshots.

Several days earlier, the two of us sat down together and came up with a rough sketch of how we thought the finished article should look. I suppose you could call it an outline, but it was really just a piece of paper that mapped out each of the section headings and the talking points we wanted to hit in each section. From there, we picked out the sections we each wanted to tackle, roughly dividing the writing task in half. Geoff started a Google Doc and sent me an invitation to join as a collaborator. I jumped into the document, listed out the subject headings in order, and we both got to work on our assigned sections.

After a day or so, our respective sections were complete. We decided I would go through the entire document, cleaning things up and bringing a cohesive “voice” throughout, so it didn't sound like a patchwork of authors in every other section. Once that was finished, we shared the document with the rest of the research team for feedback and edits. They jumped right in, at times using the comment feature to ask questions and make suggestions, and at other times, making changes directly to the document.

I'd never written this way before. Writing, for me, has always been a very solitary activity. Up to this point, the most "collaborative" part of my writing experience was the peer review process in school. In undergrad classes, this meant people fixed punctuation and (if I was lucky) grammar errors. During grad school, peer review hardly ever happened—though it was certainly the time when it would have been the most beneficial. We were all too busy and rushing to finish our work the night (or morning) before an assignment was due. None of us really had the time. And on those rare occasions when we did, the feedback was often about ideas and not about the actual quality and delivery of the writing. Very few people ever had the time to help me re-write individual sentences or painstakingly dissect meaning. And—heaven forbid—no one had ever actually *fixed* entire paragraphs for me. As an academic who has been rigorously trained (and in turn trained my own English 1101 and 1102 students) to not "disempower" anyone by changing and adjusting writing that is not my own, this was a bit uncomfortable at first. In the end, though, it wouldn't matter. This article would be as much mine as it was Geoff's; we would share the byline equally—and equally represent the organization for whom we were writing.

By the time we hit "Send" and the article was on its way to the inboxes of the newsletter's subscribers, we had probably put in about two and a half days of work on something that wasn't exactly part of our "job descriptions" as UX researchers. Their job is to do whatever it takes, within reason, to gather information about the app and the company's customers and communicate that back to the rest of the company so the app can be improved. But even so, spending three days writing about a project we did rather than beginning a new project seemed. . . odd. Time is money, as the saying goes, and the company spent two and a half days paying an employee and an intern to write an article. Why go to so much trouble and prioritize something like this? The answer to this question isn't obvious, but it is important to understanding the culture of the UX team and the EmailFactory, as a whole. I'll tackle this answer in four different parts:

1. “Eating your own dog food”
2. Sharing Knowledge and Contributing to the Technology Community
3. Mastery Through Communication
4. Indirect Marketing Techniques

### ***“Eating your own dog food”***

When the UX newsletter began in the beginning of 2013, one of its primary goals was to give the UX team an excuse to use their own product. The team knew the app intimately, because of their involvement creating and testing it. They had, of course used it, feature by feature, and made sure each piece was working, but they had little real-life experience using the EmailFactory as one of their customers would. Testing features out one by one doesn’t give a person a very accurate picture of how things work together in context of other features and real-life circumstances. The UX team wanted to take part in the entire experience and process of creating and sending out a campaign. The UX developer who pitched the idea of the newsletter shared with me that he had always been jealous of other designers and developers who worked on project management applications, like Pivotal and Basecamp. “It’s easy,” he said. “They use their tool to build their tool. They have no excuse for not using it. . . . Actually being able to apply what you do to this thing that you’re building as you’re using it. It’s great.”

Once the newsletter started, the group quickly realized that sending out a regular newsletter involved a lot more than just understanding the technical features of building and sending an email. They had to figure out how to grow an audience, determine a publication schedule, come up with interesting things to say, deal with writer’s block, coordinate with each other for graphics and copy, struggle to meet deadlines. And, most significantly, figure out a way to work on the newsletter amidst all their other responsibilities.

In the tech industry, this kind of work is known as “eating your own dog food.” It’s the practice of using your own product, feeling what a user feels, and understanding how something works through first-hand experience. The UX newsletter goes out every two weeks, and during that time, the UX team immerses themselves in workflows that are similar to their customers’. For the UX team, this builds a shared sense of empathy for customers and there have been several times, after a newsletter has been sent, that the team looks around at each other and says, “Man, that was painful. We can make this better. It shouldn’t be so hard!” This first-hand experience does as much or more than any usability test ever could and as a result of the UX newsletter, the team has made improvements to the app, like some of the collaborative features that help multiple people work together on the same newsletter.

### ***Sharing Knowledge and Contributing to the Technology Community***

A second reason for the UX newsletter is to provide the UX group an outlet for talking about the work they are doing at the EmailFactory. A newsletter lets them reach out and connect to the rest of the tech community by sharing and talking about their work and process. The UX team didn’t really expect the newsletter to take off like it did, though. Jack chuckled when he told me that it was “just kind of a happy accident that it turned out to be something that people want to read.” It’s seen steady growth over the past year, and, at the time of this writing, the newsletter has over twelve thousand subscribers.

I’m not sure I’d call the growing success of the UX Newsletter an accident, though. The content the UX team publishes is relevant, high quality, and engaging. Of course, they are writing about what they know and what they are working on—the EmailFactory app. But the principles each author shares can be applied to other projects at other companies and in different scenarios. Over the past year, the newsletter has featured topics, such as:

- Redesigning web page layouts to optimize readability
- Adjusting terms of service language to make it less intimidating, and easier to understand

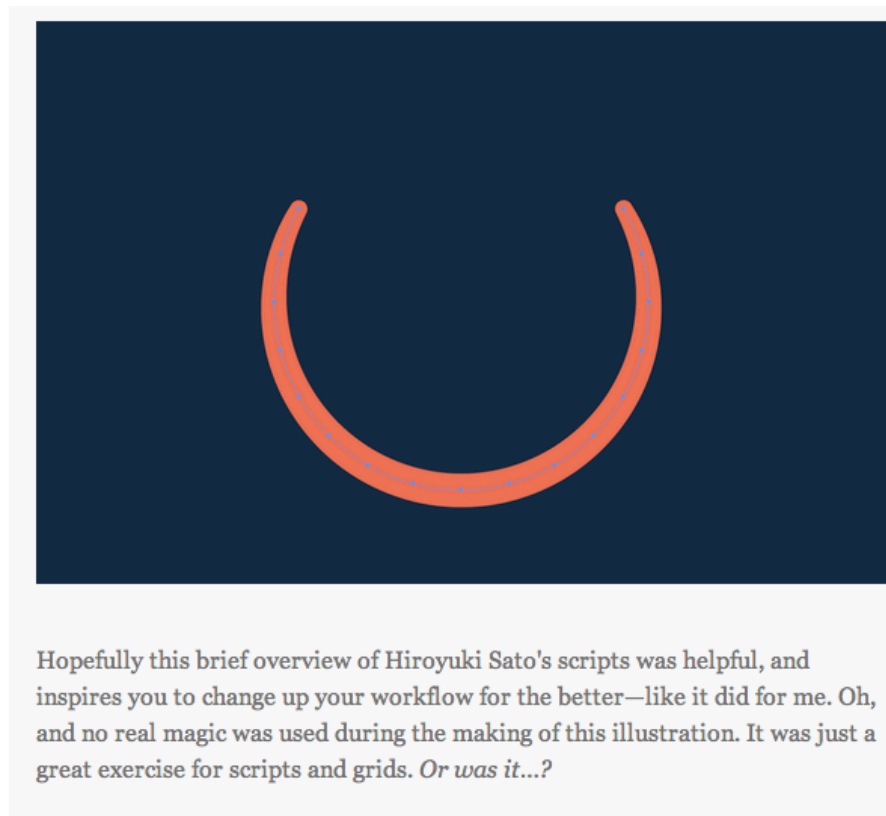
- Building and using the EmailFactory pattern library, which helps designers and developers keep the design and feel of the app consistent throughout all its parts
- Designing collaborative work spaces that facilitate creativity and productivity
- Analyzing surveys and using surveys to identify people for in-depth interviews

These are just a few examples, but all of the UX Newsletter topics center on problems or issues that designers, developers, and researchers commonly encounter. The EmailFactory UX group would be the first to admit that they don't have all the answers, and they certainly don't see their way as the "right" way to approach problems, but by talking about the challenges they come up against and how they overcome them, the UX team provides other people with principles they can use and adjust (or even improve) to fit their unique needs.

The newsletter articles are short, well written, and focused on providing readers with takeaways that are useful and actionable. Because the newsletter's audience is made up of designers, developers, and researchers, its content is typically a bit technical. But unlike a textbook, with descriptions that are often stiff and cold, the writing in the UX newsletter takes on a very conversational tone—like a person would use when describing something to a friend (Figure 5.1).

Just as the EmailFactory hopes to create opportunities for conversations among employees in different departments, the UX group hopes to spark conversations within the UX community that can help everyone grow and develop. During one of our conversations about the newsletter, Mandy told me, "I get paid to make the Internet a better place. That's a pretty cool job. I get to take this thing I love and make it better!" By talking and writing about what they do to make the EmailFactory better, the UX group joins in an important conversation about how to make web applications, and the internet in general, a better place to design, work with, and use. According to Marcellus, the newsletter holds value

because “it invites conversation, feedback, reflection on the work we are doing, and how we can improve. Instead of keeping it in our own private echo-chamber.”



**Figure 5.1 Excerpt from a UX Newsletter article**

This is an excerpt from an article in one of the UX newsletters. In this article, one of the EmailFactory designers describes how he used an Adobe Illustrator script to create the header image for that issues’ newsletter. The language he uses is casual, down-to-earth, and hints at the quirky sense of humor he’s known for among the UX team.

The tech community, as a whole, is pretty transparent about processes. There are lots of personal and company-run blogs that share the things they’re doing. *Smashing Magazine*, *UX Booth*, and *UX Mag* are online publications that regularly publish articles from many different contributors on UX design, development, and research. Companies like Basecamp and Mozilla, are very transparent about their company practices on their blogs (Signal vs. Noise and Mozilla UX, respectively. And there are individuals like Jared Spool, Leisa Reichelt, and Dana Chisnell who regularly blog about UX practice. To my knowledge, there aren’t any other companies out there that have anything quite like this. I haven’t

been able to find any in-house UX teams that, on a regular, scheduled basis, share the kind of content that this group does, while also using the tool they are writing about.

### ***Mastery Through Communication***

The first time I met Marcellus, he said something that kept coming back to me throughout my entire study at the EmailFactory. He told me that *doing* and *communicating* help him understand how to do things better. Once you learn how to do something, you gain mastery in it by explaining it to other people. The UX newsletter is an active practice of this.

Every person in the UX team writes for the newsletter. No matter their backgrounds or their areas of specialty, they're all expected to take on the responsibility of communicating what they're doing to an audience of fellow designers, researchers, and developers. Writing isn't a favorite activity for some on the UX team, and that's okay; the others are there to help flesh out ideas and smooth out bumpy sections. The important thing is that the ideas are thought about, articulated, and then shared.

At its highest level, the newsletter is about working out answers to tough questions about design work. I asked Marcellus to explain to me how he defines "design," and he answered by providing a comparison between design and art. Art, he told me, is creating without constraints. It has no parameters that dictate for whom you create, what you will create, or what purpose your creation will serve. Design, on the other hand, is creating *with* constraints. Design is the process of understanding what kind of problem your final product will solve and who will use it. It asks questions like: Who will use this final product? What are their needs like? At what level are their technical abilities? How much screen space will we have? Is this idea feasible to create within our budget, time constraints, and technical abilities? What's the best way to test the effectiveness of our product? Through their writing, the UX team explains how they come to answer these questions.

Sometimes these questions involve figuring out how to put certain systems in place to make design cleaner and more efficient. One such system the UX team works with is their design pattern library, which is basically a reference tool all the designers and developers at the EmailFactory can use to keep designs consistent and work moving. The pattern library is a collection of all the common elements or “patterns” used in the EmailFactory app and website. Designers and developers can piece together the patterns, like buildings blocks, to create new pages and interfaces. Systems (like the pattern library) can empower or disempower; they can encourage creativity and or they can stifle it. But when systems work as they should, when they are consciously developed and maintained by the people who use them, they give those people a level of control that enables them to work more effectively and efficiently.

Marcellus describes them this way:

Systems are constraints, healthy constraints. . . . [T]hey enable you to do things you couldn't do otherwise . . . They can be limiting, but when systems are doing what they are supposed to be doing, they're the rocket fuel to move way beyond where you could have been.

The key to a good system is to dictate and shape the system, rather than letting the system dictate you, and the UX Newsletter has become an important part of this process for the EmailFactory UX team.

Writing about the work systems they use, like the pattern library, helps them reflect back on them and think about them more critically.

Taking the time to write about a process makes you analyze it, question it, and critique it in a way that goes beyond what you're able to do by just thinking. The article I referenced at the opening of this chapter gave both Geoff and I the opportunity to reflect back on and scrutinize the methods we used during our study of how people manage their email lists in the EmailFactory. In order to write the article, we were forced to sit down and map out our entire process—from start to finish. We began by



going through what we already knew about how customers managed their lists, based on feedback we already had from them. We held a few customer interviews but didn't see any clear patterns from that group, so we decided to broaden our scope. We sent out a survey, reviewed the 761 responses, saw a few patterns emerge, and selected a small group of the survey respondents for more in-depth interviews. In writing that article, we realized that the process of reviewing feedback, holding initial interviews, surveying, then following up with interviews was something that worked so well that the UX team continued to use that process again and again.

We also had a chance to sit down and think about the language we used while setting up and sending out the email with the survey. Using the EmailFactory app's A/B testing feature, we took two small segments of our list and tested out two different subject headings on them:

- Test Group A: [First Name], we noticed you're doing a lot of list importing from the EmailFactory.
- Test Group B: How can we make list importing in the EmailFactory easier?

We found that Test Group A—the group greeted by first name in the subject line—was 8% more likely to open the email than Group B and 8% more likely to actually take the survey. We shared these findings in the UX newsletter and used it to start a conversation about word choice and tailoring content specifically for your survey audience for better responses.

Although these reflections were significant and helped us understand how to become better researchers, they wouldn't have fit very well in a formal report. The readers of research reports at the EmailFactory (mostly corporate-level execs, managers, and the odd designer or developer) don't pay particular care about the minute details of how we get our results—so long as our methods were sound and our data was solid. But these kinds of reflections are very important to an audience that is also

working to develop stronger researcher skills, and the newsletter became a venue where we could share those insights.

### ***Indirect Marketing Techniques***

A by-product of the UX Newsletter is the visibility it creates for the team and the EmailFactory product. The people at the EmailFactory aren't keen on bragging about themselves (they prefer let their users do that for them). They don't talk about the return on investment that a new feature has and they don't make a habit of comparing themselves to any of their competitors. Following this practice, the UX Newsletter isn't a channel for advertising or announcing new features. Yes, it talks about features and the company, but the focus is more about what the team learned while working on these features. It's an opportunity for them to reach out to others in the UX community, share what they're working on, and hopefully start conversations with people who can they can, in turn, learn from. They're promoting *knowledge* rather than a product.

The marketing benefits UX Newsletter are more of a long-term investment in the reputation and identity of the company. According to Marcellus, "We are doing great things here, and it's important that people realize that. Part of the creation process is communicating what you've done. . . It helps people recognize the brand, and we attract other like-minded people, other people who are curious [like we are]." The UX newsletter doesn't really drive new users to the EmailFactory app (and if it does, the company isn't tracking it). It's never presented a call to action to readers, suggesting they sign up for an account or upgrade to a higher pricing tier. The writers of the newsletter aren't marketers. They are designers, developers, and researchers who love what they do and want to share it.

This kind of marketing isn't something that can be easily measured or evaluated—but that's consistent with the overall EmailFactory marketing "strategy." All of their marketing is very indirect. They don't publish ads or run TV commercials. Instead, they focus on building a good reputation and

lasting impression among its customers. While other companies might spend time and money designing advertising campaigns, the EmailFactory delegates their resources differently. They design t-shirts, toys, coloring books, comic books—which are all sent or given out to customers for free. They surprise customers by sending them funny gifts that inevitably end up online, talked about on blogs, tweeted, re-tweeted, put on Facebook, or posted on Instagram. They sponsor events all over the world, making their face and brand known just by being there and showing their support. They even have a series of billboards that feature nothing but the company’s mascot—no company name, URL, or even a description of what the company does. Their “advertising,” if you can call it that, is predominantly for people who are already customers. The people the company serves become the company’s greatest advertising, spreading the word about the EmailFactory product and brand.

This kind of marketing isn’t something you can track. You can’t measure the return on investment (ROI) off of a t-shirt, toy, or billboard that doesn’t even have a company name or URL. But tracking ROI isn’t the goal and measuring metrics isn’t the goal. Instead of a marketing strategy that focuses on a “call to action” that drives people to use their product, the EmailFactory plays a different kind of game—one that looks much further down the line. Their goal is to make an impression on people, to make their brand stick into a person’s mind—so if a time comes when that person needs product for sending out email, the EmailFactory will come to mind first.

This kind of marketing is like a seed. It’s planted and then perhaps forgotten. After time has passed and conditions are right, it starts to grow and flourish. Through the UX newsletter, the team plants ideas about the EmailFactory into the minds of its readers. They share knowledge, lessons learned, mistakes made, tricks, and techniques. This demonstration of knowledge in their field assures readers that they know how to design and they care enough to take the time to test and validate their designs. As a result, the team cultivates a level of trust with their readers—fellow designers, developers,

researchers, and EmailFactory users. And, by extension, they help foster a sense of trust in the EmailFactory brand itself as one that hires individuals at the top of their field. By making their process so transparent, the UX team builds trust in their methods and, in turn, a trust in their product. By showing people how we do research, how we iterate on designs, and how we improve from one iteration to the next, the team helps their audience build a sense of trust in them and the EmailFactory product.

The UX newsletter is the external communication channel that I had a direct hand in during my time at the EmailFactory, but it is just one of several channels the EmailFactory uses to communicate to the world beyond its office walls. The Marketing/Creative team is responsible for maintaining the website copy and marketing, and they actually play a very big part sharing company research to the public.

#### *The EmailFactory Blog*

The EmailFactory emails their customers sparingly, choosing instead to pass along information through their blog, which is updated about once a week. Its posts range from the practical (like feature updates, important company news, holiday email marketing tips, and insights into subscriber behavior) to the sometimes humorous and entertaining (like the life of an EmailFactory billboard, unique customer profiles, and behind-the-scene looks at the EmailFactory). Ultimately, though, blog is used to help customers use the EmailFactory to its full potential by showing them how to apply principles of good email marketing to their work in the app.

Although the EmailFactory blog is managed and edited by Emma, she tries to do as little writing herself as possible. In her words, she prefers to have the “experts” write the blog posts. So, rather than having one person writing for the blog all the time, the blog has become a company-wide effort, with contributions from the data scientists, designers, developers, marketers, and the UX team.

Frank, the company's CEO, is also very involved with the blog's production. He was originally the person responsible for writing and maintaining the blog before Emma came along, and has stayed very involved since then—writing posts, suggesting topics, and reviewing and editing posts before they are published. His responsibilities of CEO have become more and more time-consuming as the company continues to grow, so he has been delegating more and writing less. His current posts focus on important things that benefit from having the weight of the CEO behind them, such as company updates, important releases, partnerships with other companies or apps, and company evolution.

The audience for the EmailFactory blog is varied. The primary audience is loyal fans, who closely follow the blog, read every post, regularly comment, and share on Twitter. Other audience members are passive consumers of content, and find their way to the blog from a post they saw shared on Twitter. Because the blog's primary audience is customers, the posts are written directly to them and they share information that they can immediately act upon in their accounts. Kate told me that as she works with writers for the blog, she tells them to think of their audience as friends: "I always tell people writing the blog that you can treat the people reading the blog as friends, like you're sitting around the table with them. It's a casual place. In general, the people reading the blog posts are in a more laid back frame of mind. They're used to a more conversational tone."

Once posts are released, the blog serves as another feedback channel for the EmailFactory. They keep a close eye on what's being said in the comments for each piece and the conversations that take place there. It gives them an idea of what's popular and alerts them to problems or questions that people might be having with certain things. Emma told me that watching how blog posts are shared on Twitter can also be enlightening for them. When readers share the link to the blog post, they sometimes pull out a quote, statistic or other piece of information from the post that caught their eye. Keeping up

with these conversations clues them in to what their readers care about, which helps them write better content in the future.

### *Public Research Reports*

In the last chapter, I talked about the research reports the UX team writes at the end of major projects. Those reports are meant to share information internally about the company, competitors, features, or users; they are confidential and aren't shared outside the organization. Its audience is most often the chief executives and then designers and developers. The company has another kind of research report, however. This second type of research report isn't written for anyone inside the company. Instead, they are created as resource for customers and prospective customers.

These reports, which are freely available on the EmailFactory website focus on helping readers become more effective in their email marketing efforts and cover a range of topics, such as:

- Email on Mobile Devices
- Transactional Email
- Email Marketing Benchmarks
- Email Marketing Subject Line Comparison
- The Truth about Daily Deals
- Effects of List Segmentation on Email Marketing Stats

Other parts of the EmailFactory website—the support documents, help guides, and blog—are all clearly focused on readers who are interested in or are already using EmailFactory. They deal with how to use EmailFactory app: features explanations, benefit descriptions, and how-to instructions. Public reports, however, aren't really focused on the EmailFactory at all. Instead, they talk more generally about email marketing practice and offer insight into the industry, based on the company's expertise and reputation as a well-respected email platform.

Often, the research in these reports is first used elsewhere—in an internal report, the company blog, or in a knowledge base article. The research is collected by the UX team, the data science team, or elsewhere in the company, and the information is very EmailFactory-focused, meant for employees or customers. But in this secondary format, the information takes on a new life and a new audience. Like the blog, various people from within the company write reports, but Emma is responsible for getting them ready to publish online. According to Emma, reports are more of a “generic data analysis that anyone can use and learn from, whether or not they use the EmailFactory.” For example, a Knowledge Base article about segmentation would have walked readers, step by step, through setting up list segments, so they could send targeted emails to specific groups. The research report about segmentation, however, shows statistics about how segmentation improves email open rates and link click rates. The blog post about sending “daily deal” emails is short, very concise, and provides an overview about how EmailFactory customers can improve their daily deal emails. The research report on the same topic is much longer and includes several graphs and charts that delve deeply into the data and look at the broad trends surrounding daily deal emails.

Not only is the information packaged differently, it also takes on a different tone. The newsletters, blogs and knowledge base articles are written to customers, and the company speaks to them as if they were friends. They are casual, often addressing the reader informally as “you.” And they are usually a little bit playful, letting the EmailFactory personality shine through. In contrast, the research reports are, as Emma puts it, for a more “buttoned-up crowd.” She explained that nothing in their site is too formal, but they remove the jokes and playful tone and don’t address the reader directly.

While the blog averages about 30,000 unique visits each week, the reports receive only about 6,000. Clearly, the reports see a lot less activity, but these reports aren’t really for the average user. The average user doesn’t typically care about trends, charts, and data. They just want to send out an email

quickly. These reports, though they might have less traffic than the blog, are an authority-builder for the EmailFactory. The people who take the time to read them are likely the people who have more authority themselves. They are the ones at the forefront of their industry and understand the relevance of these reports, the ones who need to know that the services they use *mean* business before they are confident *giving* them business as a customer. By demonstrating that they have a handle on key email marketing strategies and have evidence to support it, the EmailFactory builds a strong reputation for themselves as an organization that knows what they are doing and one that is confident and secure enough in their abilities to share that information freely.

### *The Company Annual Report*

The Annual Report is a fun piece that the EmailFactory began in 2012. The idea originated from the marketing team, who thought it would be fun to share some of the things the company did that year. Annual reports are generally thought of as text-heavy documents, meant to impress a company's shareholders with facts about its financial status and progress over the past year, but the EmailFactory is a private company; it doesn't have shareholders or investors to impress. Instead, they take a different approach and write the annual report for their customers. With an audience of customers rather than high-powered business people focused on a bottom line, the EmailFactory can be a bit more creative. Their annual report is extremely visual, reading more like an infographic than a traditional text-based report.

Both the 2012 and 2013 annual reports read more like yearbooks or scrapbooks than an actual report, presenting bits of information that characterized the past year. They have some of the expected "businessy" information, like total number of emails sent, number of new customers, number of servers and data-centers, and number of support tickets created. Statistics like these give the EmailFactory a chance to flex its muscles just a little bit by sharing their growth, strength, and popularity, and global



presence. Emma, the company's content strategist told me that the numbers are "showing that we mean business, that we *do* a lot of business. We have a lot of users, our infrastructure is huge and solid." Although it's not directly stated in the annual report, the very fact the company has access to all of this data gives a nod to a very capable data science team, which only adds to the company's ethos and authority.

While the big numbers about infrastructure and company user base are interesting, the thing that makes the annual report unique are its more intimate and personal touches that showcase the company's quirky personality. For 2012, this was accomplished through breakdown of the number of pizza slices the company ate over the past year, the number of t-shirts and toys mailed out to customers, and the total number of @EmailFactory Twitter mentions. For 2013, it was information like the number of company softball games won (which was zero, by the way), the amount of coffee consumed, the number of campaign subject lines customers sent out containing curse words, and customer email campaigns about Beyoncé (there were 719).

The company's content strategist, Emma, told me that through these annual reports she wants to "make our customers feel special. . . I want to give them a feeling like, 'Wow, they made this for *me*.'" A project like this communicates to customers that they are a part of something that's competent, successful, and growing quickly. It gives a sense of ownership and pride that helps build customer loyalty. According to Emma, the annual report is "a great way to show our personality. We are obviously limited on our public websites and other places. We have these very specific marketing goals and we don't want to be *too* funny, we don't want to be *too* clever, we don't want to be *too* playful. [With the annual report] there aren't any rules, so we can just be the EmailFactory."

## **Conclusion**

When the EmailFactory shares research through these public outlets, they aren't just writing about email and marketing. The information and insights they share can be applied across many different industries and fields of work—from UX to Art and Design and from Business to Marketing and Communication. By delivering content that is relevant and useful to people in many different industries, the EmailFactory is positioning themselves as thought-leaders, whose opinions and ideas are valued. Sharing research helps them develop a reputation and ethos as a company that not only knows how to conduct good business and make good designs, but also has the resources to conduct research that will continue to improve their business and designs.

## CHAPTER 6: CONCLUSION

“It is in Apple’s DNA that technology alone is not enough—it’s technology married with liberal arts, married with the humanities, that yields us the results that make our heart sing.”  
—Steve Jobs, iPad 2 Release

### Introduction

This dissertation project was inspired by my own curiosity about where writing and communication fit in a technology-centered field and workplace. My goal was to understand the role research holds in the design process, how that research is communicated, and how it influences decisions—and I feel I have achieved that goal. However, I hope the results of this study spark questions about where we are as a field, what it means to have a communication-focused degree, and how we can best prepare the next generation of students to meet the demands of a world that highly values what our discipline has to offer.

The final chapter of the dissertation reflects back on this project, and presents what I, as the researcher, consider significant takeaways from my experience working with and learning from the EmailFactory. I also offer what I feel are this work’s contributions to the field of Technical Communication specifically, but also the discipline of English Rhetoric in general. Finally, I end by looking forward and sharing my ideas about how to extend the research I began through this project.

### Researcher Reflections and Lessons Learned

My own story and journey into UX work is not unlike many others who found their way into this field. I started my undergraduate studies as an Information Technology major, but it only took me several semesters and a painful experience with a C# programming course to realize that I didn’t enjoy that kind of work. I really liked working with computers and didn’t want to completely drop out of the IT program, so I decided to double as an English major. The look that the English department head gave me when I approached him with my idea of double-majoring was one of confusion and complete disbelief.

“I don’t think *anyone* has ever asked to do *that* before,” he mused. The IT department, on the other hand, didn’t seem to really care what I did. A semester later I ended up committing completely to English studies, where I hoped I would be a better fit.

In graduate school, I studied rhetoric and writing, but I still had a strong interest in technology and design. I took up jobs and projects that helped me develop skills that didn’t exactly fit within a traditional English degree program. I had a supportive body of English department faculty who allowed me to experiment, to take on digital products for class assignments, and to register for classes like Graphic Design and Human Computer Interaction. I became preoccupied with trying to connect the two seemingly disparate ideas of traditional rhetoric and current technology. The more I studied and worked, the more I realized that the humanities and technology aren’t two separate worlds, and I didn’t have to choose between the two, like I did as an undergrad.

I spent my years of graduate school seeking out and exploring the intersection between the humanities and technology; for me, the point at which the two intersect is “user experience.” Technical Communication is built upon the principles of rhetoric, which focuses on persuasively communicating messages to audiences in the best way possible, given current circumstances and situations. As a discipline, we’ve applied principles of rhetoric to documents and explored the arguments texts make to their readers; we’ve applied rhetoric to oral delivery and looked at how speech is delivered persuasively to listeners; we’ve applied rhetoric to visuals and studied how images communicates messages to their viewers. I would argue that user experience is what you’ll find when you apply rhetoric to product design and technology.

User experience is about understanding users, their needs, and their situations and then applying that understanding to the design of products. When we think about how products serve users, meet users’ needs, and provide meaningful interactions for them, designing products becomes a very

rhetorical act. Building a compelling and satisfying user experience demands an orchestrated effort among many different people, all working together toward the collective goal of creating something persuasive and compelling enough that people will want to use it.

Within the product design cycle, the work of user experience professionals is the ultimate rhetorical act. They argue and communicate to their colleagues and their companies the importance of making users the highest priority. They provide evidence and research about user needs, abilities, and situations that reinforce those arguments. This dissertation presents the ways the EmailFactory persuasively communicates user research through the written, oral, and visual forms that we, within the humanities, are already familiar with to create products that we are less familiar with. The arguments the UX researchers make with their data, however, ultimately serve the purpose of creating a product that makes an argument to the user—an argument for why the user should chose this particular product, instead of another one, to meet their needs.

### **Summary and Key Takeaways from the EmailFactory**

I've spent the last few chapters talking about how the EmailFactory communicates user research both inside the company and to the public. I describe the specific forms the company uses to communicate, explain the purpose each form serves, and define the audience of each form. In summary, however, I'd like to take a few steps back and look at the communication between the researchers and the rest of the company a bit more holistically. Each of the following points is significant to how the EmailFactory functions as a very successful and competitive company. Even more importantly, however, these points are significant to how the discipline of English views who we are and what we do in a world that has changed our definitions of writing and communication.

### ***The Success of the EmailFactory Depends upon Strong Communication Channels.***

The world of software development moves at a dizzying pace, and the EmailFactory's ability to exchange information and ideas so easily makes it possible for them to thrive and meet the needs of their user base. Even though over 5 million people use the EmailFactory service, only a small handful of very talented people are responsible for committing code to the site and to the app. In order to keep things moving quickly, the UX researchers make sure the design and development teams have access to the research they need to make informed decisions about their work.

Because design and development teams at the EmailFactory are so small, and because they are bound by tight, four-week release cycles, individual designers and developers don't have the time to filter through all the data and information the company has access to. One of the front-end developers, Ron, told me, "I feel like there's a fire hose of information and we are taking a cup and trying to fill up with things to do in the next release." Reese, a backend engineer, shared, "I suffer from being a tinkerer. I can get easily distracted and go off on vast paths that provide no value to this company." As both these quotes illustrate so perfectly, information can be overwhelming and paralyze progress. The company calls upon the research team to filter through all that information, gathering up the important nuggets and passing them along, so the designers and developers can focus on designing and building the app.

### ***Communicating Research Effectively Requires Far More than Just Writing.***

While I don't want to downplay the role writing has in the UX researchers' workflow, I do have to point out that sometimes writing *isn't* the best way to share information. In Chapter 4, I list and describe the ways the research team communicates user data to the rest of the company. I explain that while traditional, long-form reports have their place, they are read by a very narrow audience of chief executives and team leads. Occasionally, they're also read by the odd designer, developer, or marketer who might be working on a specific project that's directly related to the report's content. To reach a

broader audience and to make sure more people within the company have access to important information, the research team experiments with many different communication forms. They create posters, make videos, give presentations, have one-on-one meetings, and send out company newsletters. In other words, the team uses whatever means available to them, given the resources they have, to communicate their message throughout the company.

***Large-scale Projects That Affect the Whole Company are Communicated in Layers.***

For research that needs to reach the entire company, the UX researchers might use a collection of different forms to reiterate the same message. The EmailFactory's persona project is one example of this. The research team introduced the company to each persona in a Coffee Hour presentation, where they had the attention of majority of the company's employees all in one place. In addition, employees had access to the team's formal report, which was densely packed with valuable information, but for those without the time for the full report, there was a matrix that briefly summarized the high-level details of each persona. The research team also hung posters of each persona in a high-traffic area of the company, where they stood as visual reminders of the people the company serves through their product.

By retelling the persona research again and again in a variety of formats, the information circulated throughout the company in a way that it might not have otherwise. It gave people a chance to absorb information during whatever free time they had available. As I explained in Chapter 5, one of the backend engineers, Reese, appreciates different tiers of data, because it lets him get a high level summary of information quickly but also allows him to dive more deeply into a topic when he has more time. The sentiments that Reese expressed were echoed in a conversation I had with the UX director, Marcellus:

What I hope we can do is take a lot of deep insights and make them accessible.

Accessible in the way the content is presented. Those posters are not even the tip of the iceberg of the information we have. But it makes the core concepts accessible to people where you can get it at a glance, and it can enable a conversation about these different types of customers. Making the stuff accessible also so that it can move freely about the company is important. A poster is visible. It's not locked in a machine. You don't have to have a password to get to it. Someone doesn't have to give you instruction for how to get to it. You just walk in, and you see it. And you learn. And then hopefully ask questions.

***“Audience Awareness” Is Developed Through Relationship Building.***

Principles of classical rhetoric maintain that an important part of communicating effectively is knowing who your audience is: What appeals to them? What do they value? What needs do they have? What past experiences will influence how they receive my message? For the research team, these questions are answered very naturally—through good 'ol fashioned friendships and healthy workplace relationships. The researchers take the time to get to know their colleagues in other departments. They seek out opportunities to talk to them, grab lunch with, or sit down and have a cup of coffee with them. In Chapter 3, I describe the relaxed and friendly company culture the EmailFactory has established, which facilitates for these friendships. They talk about projects their teams are working on, challenges they've come up against, breakthroughs they're seeing, and ideas they've had. They talk about things other than work, too. They talk about the work a colleague is doing on their house, share pictures of their new baby, discuss best places in Atlanta to grab a vegan meal, or debate which superhero was the best.



Why is this important? To a casual observer, these conversations might be perceived as a waste of company time: they don't produce measurable results, and they don't have any visible markers that could be used to track a return on investment. These conversations are more of a long-term investment in creating strong channels through which information can flow between departments. It's during conversations like these that the UX research team gets to know the audience for their research. They have a chance to learn how their colleagues work, what's important to them, and what kind of information they need to be successful.

More importantly, though, these relationships break down the walls of territorialism. They help develop a mutual respect across teams for each other's work and specialties. Once teams are able to see each other as allies working toward a common goal, they can dissolve a lot of the underlying tension. At that point, sharing research becomes more about coming together to solve a shared problem instead of one team telling another that what they are doing is wrong.

***Writing Is an Important Skill, but It's Only One Part of Technical Communication.***

I was surprised to learn how many *excellent* writers the EmailFactory has. I explain in Chapter 3 that the company is divided into two camps—Support, who handles things on the client/customer side, and the Creatives, who actively create and manage the app and company brand. I spent almost all of my time working with and around the Creatives, and it seems as though every one of them writes—both for internal and external audiences. Several on the UX research team have written for prominent blogs and magazines, the UX director is a prolific writer and has published several books, one of the UX developers wrote a book on web design, one of the data scientists recently published a book, and the company's content strategist is currently working on a co-authored book about web writing. That isn't all, though. Many, many of the EmailFactory employees write for the company blog—even the developers and

engineers (who, it might surprise you to learn, happen to be extremely expressive and wonderful communicators).

I say all of that to emphasize how important writing is to the company. But writing is just a medium for messages to flow through; the value of the writing isn't the written words themselves but the ideas that those words convey. All of the people I mentioned above are excellent writers, but folks aren't buying their books, publishing their work online and in magazines, and asking them to guest post on blogs *just* because they are good writers. These people are able to do all of these things because they first have a specialty and developed area of expertise that compels people to listen to them. The fact that their writing is articulate and engaging is the reason why people *keep* listening.

### **Contributions to the Field of Technical Communication: Examining the Present and Looking to the Future**

In the introduction to this chapter I made the statement that my hope for this dissertation is that through its findings, it raises questions for us as a field. One aim of academic research is to explore new ideas and discover new things. A second aim, and one that is just as important, is to challenge previously discovered ideas and test foundational principles. Research in the humanities is often very reflective, and our Composition and Rhetoric and Technical Communication journals do this particularly well. We take great pride in our ability to “turn the mirror around” so that we might assess our practice and test it against the theories the discipline has established. That is my aim for this concluding section. I pose several questions that I've asked myself over the course of this project. I then dig in to each of these questions—not as an attempt to answer them, for each could be a dissertation on its own, but as a gentle nudge that might encourage new conversations and more questioning.

### ***Do We Know How People Really Communicate in Workplace Settings?***

In 1977, Lee Odell and Dixie Goswami realized that they had no clue what writing looked like in professional spaces: “[W]e had no idea how many people, apart from those specifically hired as writers, had to do much writing as a routine part of their day-to-day work” (vii). They began to explore the issue and in 1985 they published *Writing in Nonacademic Settings*, a collection of essays that focuses on professional and workplace writing practices. The essays in this collection not only closely observe writing in the workplace, but they also make calls for further research in this field. Workplace writing and communication practices have changed a great deal since 1985, but unfortunately, we know alarmingly little about the processes and techniques UX professionals use to communicate user research within their organizations.

I mention in my Introduction Chapter that in her doctoral dissertation, Erin Friess reviews textbooks and professional publications to point out that neither offer very much guidance in how to effectively communicate usability findings and incorporate them back into products. In Friess’s search, she only focused on the lack of published resources from Technical Communication on how to communicate results from *testing*—but user research goes far beyond just usability testing! At the EmailFactory, for example, the team relies on multiple methods, such as interviews, site visits, surveys, *and* usability testing, to holistically explore one problem. How are all those findings woven together and presented persuasively? And what form should they take—A written report? Video? Presentation? Poster? How can our discipline better understand this kind of work, so we might better prepare students who have futures in the UX field?

### ***Does Classroom Writing Reflect Workplace Communication?***

If, in fact, we don’t really know what writing in the workplace looks like, it would be difficult to emulate that in the classroom. During my first few weeks and months at the EmailFactory, I spent a lot

of time digging through and reading as many documents I could get my hands on. Since the UX research team was aware of my background in writing and editing, I knew I would be expected to do some writing for them. The kind of writing I was familiar with, however, was not the writing I was expected to produce while at the EmailFactory. The documents at the EmailFactory—even the “formal” ones, like reports, were written casually, in common, everyday language. My writing was stuffy by comparison.

Within our work at the university, we put a lot of emphasis on “learning to do college writing” and “joining the academic conversation.” And many of the “academic” things we teach students in our classes are valid and extremely useful. We teach them to do things like evaluate sources, show proper attribution, draft and revise, proofread and edit, and defend their claims. But in our desires to help them join the academic conversation, I wonder if we sometimes forget that once they graduate, unless they intend on making a career as an academic (which is becoming increasingly harder to do), they leave and join a very different kind of conversation. Although it’s a little embarrassing to admit it, I’m an example of this. Knowing that the kind of writing the researchers did at the EmailFactory was different from the writing I did in school, I tried to “code-switch” between more formal, academic language to the direct, conversational style of the EmailFactory. I worked very hard, editing my work over and over again in an attempt to emulate the kind of writing I saw archived in Evernote. Still, I was gently criticized by my direct supervisor, who told me that though I was a good writer, I still wrote “like an academic.”

The writing process at the EmailFactory is very different from the way I learned to write and very different from how I taught the students in my own classes to write. Writing at the EmailFactory was a bit chaotic and very, *very* fast. We had tight turnarounds and people who were dependent upon us meeting our deadlines so they could meet theirs. But, the greatest difference from the writing there and the traditional classroom writing is that we wrote collaboratively, jumping in to help each other finish projects—without ever once thinking that anyone would accuse us of submitting work that wasn’t

entirely our own. In fact, a greater offense for an EmailFactory researcher would have been *not* asking for help and direct input. There was no need to distinguish who did what or how much credit one person should receive over another. All writing was a collective product intended to ultimately improve the EmailFactory.

### ***Who is Our Audience and How is That Shifting?***

In Chapter 5, I discuss the different ways the EmailFactory shares research outside the company. They use the UX newsletter, the company blog, and public research reports, and the annual report to share information with customer and the rest of the technology community. All of these publications have played a very big role in the company's success. Through them, the EmailFactory has been able to demonstrate that it has the resources to conduct massive amounts of research and that it's committed to understanding customer needs. By publishing frequently on the blog and through other forms, the company has built up a level of transparency with its process that has developed a strong feeling of trust among users. However, publishing this information to a public audience isn't the company's primary objective. Their primary objective is to build a good, successful product, and as I pointed out in Chapter 5, the first and most important audience for this research is not the public, but the designers, developers, engineers, marketers, and content specialists who are responsible for creating the EmailFactory product.

Thirty-five years ago, when the job of technical communicators was to "fix" poorly designed products by writing help manuals, their audience was the user. Technical communicators of that time began advocating for these users, demanding a place at the beginning of the design cycle, so they could convey the users' needs to designers and developers before products were made. When this happened, the audience for the technical communicators shifted abruptly away from the users to the designers and developers. Now, the goal isn't to create a manual that enables users to successfully use a product. The

goal is to enable designers and developers to successfully create a product that no longer even requires a manual.

For UX researchers—and the technical communicators who fill this role—the part of their job that matters most is understanding how to best communicate with their colleagues. Without that understanding, the rest of their job becomes irrelevant. No matter how good a researcher is at conducting studies, uncovering valuable findings, or reaching out to customers, if she isn't able to turn that information into something that is actionable and persuasive, the research is of little or no value. The product will see no improvements, the users' experiences will suffer, and the company's image will weaken.

### **Study Limitations and Future Research**

One of the challenges of ethnographic research is that it's focused very narrowly on one case, situation, person, or group. While this kind of research can explore and describe unique cases, it can't make accurate generalizations that can be widely applied. The EmailFactory is indeed a unique case. They place a priority on research, and they dedicate a lot of resources and person-power to learning as much as they can about their users so they can create better products for them. Their company culture is one of experimentation and empowerment, which gives the research team opportunities to take risks and test out new methods for collecting and sharing research. Although I was able to deeply explore some of these methods for sharing research within the EmailFactory, in the future I'd like to broaden my study to include the perspectives of user experience researchers in other companies. I'd like to know what other organizations are doing with their research findings, how they are sharing them, and how they are using them to improve their products, services, and organizations.

A second limitation to the study has to do with the challenges placed on qualitative researchers conducting workplace studies. Qualitative research allowed me to explore motivation, reasoning, and

intent—human characteristics that quantitative research can't adequately measure. However, conducting this kind of research is a struggle. In addition to the usual challenges of dissertation work, I was in the unique situation of complying with both the Institutional Review Board (IRB) and the EmailFactory's non-disclosure agreement (NDA).

The IRB is responsible for protecting human research participants from physical or psychological harm. In addition to other regulations, they have strict guidelines for guarding participants' identities. After the IRB approved my study and the measures I promised to take to protect my participants, I had to go through another sort of approval process with my research site. Before beginning my research at the EmailFactory, I signed a non-disclosure agreement (NDA), stating that I wouldn't share any confidential information or trade secrets I became privy to during my time there. This protects the wellbeing of the company by ensuring I don't make public anything that might threaten their competitive advantage.

Though both the IRB's restrictions and the EmailFactory's NDA are in place to protect participants, they ironically worked in conflict with one another, severely limiting what I could use and discuss in this dissertation. The EmailFactory and my participants weren't concerned with concealing their identities—in fact they *wanted* me to use their real names. They also gave me permission to reprint in the dissertation and analyze anything they published publically on their blog, website, or app. Had I used real names or reprinted their online communication, I would have remained within the constraints of the NDA; however, by doing these things, I would have revealed my participants' identities, violating the standards set up by the IRB. Had I, on the other hand, re-printed and analyzed internal company communications—such as reports, internal newsletters, and research summaries—I would have complied with IRB by concealing my participants' identities, but I would have stepped outside of the bounds of the NDA.

I realize my case might be unique. Not every company or every participant is comfortable having their identities know, and as researchers, that's certainly something we respect. However, having both IRB and NDA restrictions make much-needed workplace research *very* difficult—especially when it comes time to write up research results. My method for working within these constraints was to use a narrative format for the write-up of the dissertation. I wasn't able to reprint many of the communication examples I collected during my study, so I had to rely on in-depth descriptions of the company's communication practices instead. While I feel the study is strong, examples of my participants' writing and other communication forms would have presented an even clearer pictures of what their research and communication practices actually look like.

As I pointed out in the Introduction chapter, the field of Technical Communication lacks a full understanding of how user research is communicated once it's been gathered. There is room to take a study like mine and expand it to include other organizations and product design teams in other tech industries. As a discipline, we have a wonderful opportunity to learn more about what writing and communication looks like within User Experience work and then apply that back to our teaching practices and academic research. While we continue to expand and dig deeper into workplace communication practices, we must also continue having discussions about how we can effectively share this much-needed research while working with both IRB and non-disclosure agreements and offering the necessary protection to organizations and individual participants.

### **Conclusion and Final Thoughts**

As writers, thinkers, and rhetors, we have the opportunity to shape our society and the technology in it. Many of us in rhetoric and technical communication are drawn to its practical nature. Yet we still prize our literary history because those who were a part of it challenged cultural norms, exposed injustice, and championed worthy causes by inspiring people to think differently. They



questioned power and checked authority. Thomas Paine scrutinized government involvement in human rights, Nathaniel Hawthorne challenged Puritanical hypocrisy, Mary Wollstonecraft sparked modern feminism movements, Ralph Waldo Emerson inspired individualism, Harper Lee provoked thoughts on discrimination and race, and George Orwell attacked political systems. Technical communications might lack the literary flair and entertaining narratives of these thinkers and writers, but they became advocates and in their own right by pushing for users to be brought into the software design process earlier.

The humanities often sees itself as far removed from technology, but what could be more “human” than challenging and questioning something that has become a more apart of our lives than any government or social system ever has in the past? The people who build things and create the technologies on which we depend hold great power and influence. Think of the EmailFactory, for instance: Excluding support personnel and administration staff, there are only about 100 people responsible for building a piece of software that over 5 million people used to send more than seventy *billion* emails last year. And this is just one very small example. Consider Apple, or Google, or WordPress and the number of people they employ versus the number of people whose lives they reach and affect every hour of every day.

As strong, persuasive, and effective communicators, we can be a part of developing the technology that we, and millions upon millions of other people, use. As academics, this means we answer the call from UX practitioners like Susan Dray for relevant and rigorous research that can support and strengthen usability practice. We have the opportunity to challenge the developing world of technology in which we live—not to criticize or tear it down, but to help shape it. Finally, this means we look for more ways to open lines of communication between the ivory tower and digital workplace so we can listen to current challenges and respond by preparing students who can fill the need. It means

bridging the gap between academia and industry—offering expertise on research methods and critical inquiry but also listening and responding to current challenges and needs.

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## APPENDIX

As I mentioned in the Study Limitations and Future Research section of the Conclusion chapter, working within the constraints of the Institutional Review Board (IRB) and the EmailFactory's non-disclosure agreement (NDA) limits the direct examples I am to reprint in this dissertation. While the company gave me permission to reprint any of the blog posts, reports, or other content from their website, doing so would have risked revealing the company and my participants' identities, thus violating my agreement with the IRB. The IRB would have allowed me to reprint internal company documents (with names redacted, of course), but this would have breached the NDA agreement I signed with the EmailFactory. That being said, the materials in this Appendix are limited to the IRB-approved interview questions I used for the dissertation.

### **Interview Number 1: Getting to know the participant and the company**

#### **Background information:**

1. Everyone I've encountered who is involved in UX took a very unique path to this type of work. Can you explain your academic/professional background and how it led you to UX work?
2. What is your educational background? (Major, training, etc.)
3. Did you have any experience working in UX before coming to the EmailFactory? If so, how many different UX jobs did you hold before this one? (*If it is not clear from their answer, ask them to state how many years of experience they have in UX work.*)
4. What features of your educational background best prepared you for your work here at the EmailFactory?
5. How long have you worked at the EmailFactory?
6. What is your job title at the EmailFactory? Can you describe your role here?

7. Can you walk me through your tasks/responsibilities during a typical day here at EmailFactory? How do you fit/function with the rest of the group?
8. In detail, can you tell me about a project you've worked on that you particular enjoyed and why?
9. What about a project that was challenging or frustrating? What made it so?
10. Can you explain to me in detail the project you're working on right now? Begin with how/why the project got started and walk me through to where you currently are right now with it. Explain the overall project, as well as your role in it.

**Description of UX Team at the EmailFactory:**

1. In your opinion, what sets the UX team here at the EmailFactory apart from UX teams in other organizations?
2. Take a look at this "Designing the User Experience"<sup>5</sup> poster (*see the page 150 of this Appendix for a smaller version of the poster.*) Have you seen this before?

Can you walk me through the chart and tell me how the EmailFactory follows this path. Or, if it doesn't, tell me how it deviates from it? As you come to each method on the chart, could you give me an example of how the EmailFactory has used this research method? Could you tell me how frequently the EmailFactory uses this method? Feel free to X out any methods that the EmailFactory *doesn't* use.

3. *If the EmailFactory process is completely different from the chart, have them explain it to me—and even map it out on a sheet of paper, if they're willing to do so.*
4. What research methods do you currently use? Which do you tend to rely on the most? And why?
5. What do you think your group does especially well?

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<sup>5</sup> The bottom of the "Designing the User Experience" poster states that it can be reproduced for educational uses. I'm including a smaller version of it for this dissertation, just to give readers an idea of what the poster looks like. A full-size version can be found online at [http://www.mprove.de/script/00/upa/\\_media/upaposter\\_85x11.pdf](http://www.mprove.de/script/00/upa/_media/upaposter_85x11.pdf)

6. Where do you see room for improvement in your process? Are there any areas that the team has identified as areas that need strengthening? From your perspective, what areas would you like to see strengthened?
  
7. Can you explain to me how the UX groups work with the other groups in the EmailFactory? How do other groups fit into your workflow process? (Developers, graphic designers, content strategists, etc.)

# designing the user experience

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**Acknowledgements:**  
Wayne Koppitz  
John Nielsen - Nielsen Norman Group  
Steve Kieras - Nielsen Norman Group  
Chris Nielsen - Nielsen Norman Group  
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## **Interview Number 2: User Data at the EmailFactory:**

1. Would you say that your team adheres to a User Centered Design philosophy/process? Could you explain to me in your own words what that means?
2. Assume I know nothing about UX, usability tests, or product development. Explain to me what user data/user research is. What is the purpose of this information?
3. From your perspective, explain the role and significance user data plays in the design process here at the EmailFactory.
4. What types of user data does the EmailFactory gather from users? How does the EmailFactory gather data from and about their users?
5. How many people are actively engaged in gathering user data? Or is this more of a collective activity for the entire team?
6. In general, what does the EmailFactory do with the data you gather from you users? How do you manage it? How do you implement it into the production cycle?
7. If you could guess, what percentage of the user data that's gathered actually gets used?
8. We just talked a bit generally about what the EmailFactory does with user data, let's move to some specific examples. Tell me about the current project you're working on right now. Has the team gathered user data for this project?
9. Can you tell me what methods you used on this project?
10. Once you gathered that data, what did you do with it? How did you assess/analyze the data?
11. How did you make meaning or interpret the analyzed data?
12. How did you move from "Oh, that's interesting" to "Here are important finding we gathered from user testing, and this is how we need to act on it." In other words, how did you use the data you gathered to make recommendations about the project?

13. What is the biggest change you made in response to user data?
14. Are all your recommendations/design changes made in response to user data? Do you *have* to have a piece of user data that support a change in design? If you *don't* have to use data to support a change in design, could you give me an example of a time you didn't?
15. Does designer intuition play a role at all in your design process? What about designer's experience?
16. Can you give me an example of a time when you were very surprised about something (feature, process, design element) that your users just didn't "get?"
17. I notice you use *a lot* of social media to stay connected with your users—and to do a little PR for yourselves. And I've noticed that it's not just from official "the EmailFactory" accounts. For example, I see tweets from your personal accounts. Who initiated that? Was that something that was encouraged by upper management or did people just start picking it up on their own?
18. Other than PR, what kinds of connection does social media give you to your users? Is it

### **Maintaining Data**

1. You're doing some new things with collecting and aggregating user data from different channels within the EmailFactory. And you're working on a system that can manage all of that. Can you tell me a bit about that?
2. What is the goal behind that?
3. How is it currently being used?
4. How do you see that improving what you current do?
5. Can you give me an example of some benefits you're already seeing?

### Interview Number 3: User Data and the Decision Making Process

1. What factors affect which changes are made to designs based on user data? How do you rank the importance of changes and select which things you'll tackle first and which things aren't worth pursuing (or aren't worth pursuing right now).
2. Who makes the decisions about what changes are incorporated into the product design? Is there any one person or group of people that need convincing?
3. How is the data gathered from user research or user testing presented to the rest of the team? (Is it done face-to-face? In a formal written document? Via email? Some other way? Is there more than one way?)
4. After usability tests have been run, how does the UX team decide what changes should be incorporated into the product design?
5. One of the common challenges UX groups face is actually getting people to listen to them and getting buy-in from the organization. Is that the case here, as well? If so/not why is that?
6. Raw data doesn't speak for itself. How do you present that data in a way that actually can affect change in a project? (In other words, how do you transform raw usability data into a recommendation?)
7. What methods of presentation do you use? Written reports, oral presentations, videos, some other form of media?
8. What form of presentation do you find the most effective? Why do you think that is? Does this depend on *who* you are presenting information to? (For example, do you present things differently to the developers than you do to the CEO?)
9. Can you think of a time when you personally (or your team) had to argue very strongly for a change in product design? What did you do to get your point across?
10. From your perspective and experience, what role does persuasion play in your work?