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The Evolving Language of UX and CX: Why Terminology Matters

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Introduction

The scope and methods of our work have evolved over time, and so have the terms that describe our field. For some professionals, there is a clear distinction between each of the labels. For others, the boundaries are fuzzier. This can cause confusion in what we call ourselves, how we describe what we do, and how we fit into our organizations. In this time, when funding is often tight, it is critical for us to clearly define our role and value in organizations. In this essay, I explore the history of the terms and the challenges we face with all these terms, while giving some recommendations about what we can do**.**

How We Got Here

The idea of making products work better for people has been around for a very long time. Feng Shui, the Chinese art of bringing balance between humans and their environment, has been in practice since approximately 5000 B.C.E. In the fifth century B.C.E., the Greeks paid attention to the design of tools. For example, in *On the Surgery*, Hippocrates (ca. 400 B.C.E./1994) wrote about preparing tools for surgery, stating, "The instruments…should be prepared; so that they may not impede the work, and that there may be no difficulty in taking hold of them…"

In the early 1900s, Frederick Taylor (1911) developed the theory of scientific management, which focuses on workflow and productivity. This was an effort to include the human in the production process. Lillian and Frank Gilbreth, also in 1911, introduced time and motion studies to find the "one best way" to complete tasks.

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Our field became more established during World War II. As military systems became more complex, the military began studying recurring problems with a different perspective (Meister, 1999). For example, Alphonse Chapanis studied a situation in which B-17 bombers crashed on landings that had started out fine (Hall, 2023). Chapanis found that the controls for using the landing gear and the landing flaps were exactly the same and located near each other. Instead of controlling the wing flaps, pilots would accidentally retract the landing gear. Changing the shape of the knobs, using a wheel shape for the landing gear and a wedge shape for the landing flaps, nearly eliminated these accidents.

Psychologists then began designing for the human in the system to optimize system performance and reduce risk. In 1947, Paul Fitts and Richard Jones published *Analysis of Factors Contributing to 460 "Pilot Error" Experiences in Operating Aircraft Controls*, in which they blamed problems on design flaws rather than pilot error.

This new field was referred to as engineering psychology, human factors, and sometimes ergonomics. In the late 1940s and 1950s, psychologists such as Paul Fitts, who developed Fitts' law (1947), and George Miller (1956), who proposed the magical number seven plus or minus two, conducted some of the early classic research. In 1957, the Human Factors Society (now the Human Factors and Ergonomics Society) was established as the first professional organization for the field.

The term *usability* first appeared in a 1979 paper by John Bennett ("The Commercial Impact of Usability in Interactive Systems"). This term became popular throughout the 1980s and 1990s, with a proliferation of books on usability, usability testing, and usability engineering. The current ISO definition of usability is this:

> *The extent to which a system, product or service can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use. (International Organization for Standardization [ISO], 2018, 3.1.1)*

In other words, usability focuses on the usage of an individual item (a system, product, or service). The expansion of the term usability seems to correspond to the increased popularity of computers and the internet; however, the term *human factors* is still common in industries such as the design of medical products, vehicles, and military systems.

In the early 1990s, the term *user experience* gained traction. Don Norman is recognized for popularizing the term, but Norman also credited Tom Erickson and Harry Saddler, who together established The User Experience Architect's Office at Apple®. He further credited Brenda Laurel, who used the term in a chapter in a book that Norman himself edited in 1986 (Norman, 2023). In a 2008 interview, Don Norman provided the following explanation for coining the term:

> *I invented the term because I thought Human Interface and usability were too narrow; I wanted to cover* all aspects of the person's experience with a system *including industrial design, graphics, the interface, the physical interaction, and the manual. (Adaptive Path, 2009)*

The first mention of *customer experience* (CX) appeared in an article by Lewis Carbone and Stephen Haeckel (1994). They defined CX as "the 'takeaway' impression formed by people's encounters with products, services, and businesses." The term was intended to cover all of a person's experience with a company, not just an individual product, which is very similar to Norman's goal for UX.

Where We Are Now

Over time, the terms have evolved. When the term usability was popular, businesses were focused on the design of individual products. As organizations focused more on all touchpoints with their users, instead of expanding the definition of usability, the field shifted to UX. Later, CX evolved to be even broader than UX; CX was often more associated with marketing than design.

Today, the term usability is largely limited in scope to a characteristic of an individual product or system. However, there is an infinite number of definitions, Venn diagrams, and organizational structures differentiating UX and CX, which are currently the most commonly used terms. Both

UX and CX are intended to cover a scope wider than usability, including help desk support, customer service, and experiences across platforms.

Every author seems to have their own definitions and scopes. For the most part, all UX work is considered to be part of CX, but not all CX is UX. One example of this model comes from the U.S. General Services Administration (Lowden, 2014), but there are many other examples.

Alternatively, Bruckschwaiger and Lutsch (2022) argued that "every customer is a user, but not every user is a customer. So UX cannot be part of CX, but the other way around." As a result, they included CX fully within UX. Another model has UX working from the bottom up (product design) and CX working from the top down (marketing), with the user's journey meeting in the middle (Flaherty, 2024).

More recently, some authors have added brand experience (BX). BX is typically described as the physical and emotional response to a brand. Although this is used more often in marketing than product or service design, some authors consider BX to include both CX and UX (for example, Desai, 2019).

It is interesting how these terms have been introduced and evolved. UX was supposed to include "all aspects of a person's interaction with a product or system" (Adaptive Path, 2009); CX covered more, and now BX covers even more.

There are some additional terms to describe this field as well, such as:

- human-centered design
- user-centered design
- design thinking
- human-computer interaction
- human-machine systems

Furthermore, some organizations have started using different terms depending on their target audience. These terms include the following:

- employee experience
- patient experience
- veteran experience
- visitor experience

Some terms are intended to be more inclusive than customer or brand experience, including the following:

- service design
- human experience
- total experience
- experience management
- journey-centric design

The main differences among all these terms are the scope of the work and the target audience. The newer terms are intended to cover more and more of an individual's experience or reflect a specific target audience. However, the boundaries for each of these terms are fuzzy and vary widely, which can lead to several problems.

The Proliferation of Fuzzy Terms

Despite potential differences in scope, there are many similarities in the actual work. First and foremost, the goal of all this work is to provide the people who use our products, services, or systems with the best possible experience (while balancing that with business needs and available resources). The methods used and skills required are very similar, and often exactly the same. For example, although usability testing often evaluates a specific product, it can also be used to include support and customer service. Methods like focus groups, interviews, and observations can be used for any aspect of an individual's interaction with an organization.

There can be benefits to dividing up the work; some organizations separate design and evaluation work to ensure more objective and unbiased evaluations. Additionally, an

organization may want some experts focusing on individual products (UX), with others looking across products to ensure a consistent look and feel and a seamless workflow (CX).

However, using all these terms adds complexity that can lead to problems in how we accomplish our goals as individuals and as a field. Reilly et al. (2025) noted, "Weak construct specificity is among the leading causes of the replication crisis now facing psychology and related fields. Term ambiguity hinders cross-disciplinary communication, falsifiability, and incremental theory-building" (p. 245). It can make a field look immature and insecure. This ambiguity and confusion can ultimately impact the acceptance of our work. More specific to our field, Ashlock (2018) noted, "This debate [between customer experience and employee experience] strikes me as needlessly bifurcated."

Confusion Within Organizations

Within an organization, there are often separate, siloed groups for UX and CX work (Flaherty, 2024). Dividing work often limits communication and collaboration (Adobe for Business Team, 2026). This can lead to confusion about who does what. With separate groups, each must clearly define their roles and scope of work.

Without this clear distinction, misunderstandings (or different expectations) can easily arise about each group's role. This can lead to disagreements between groups, especially when resources are shared. Additionally, without sufficient communication, this confusion can also lead to inefficiencies, as multiple groups attempt to address the same issues with the same user groups, or to gaps, in which no group takes responsibility for an important task, and the task is forgotten. This could even lead to conflicting goals, with one group emphasizing speed and another group aiming for quality. It divides work that should be done collaboratively.

Another source of confusion is that some organizations use the term customer experience even though they do not have paying customers. Without a clear understanding of the term, staff may question how CX is relevant to their agency and be less inclined to incorporate CX into product or service design. This can limit how staff at these organizations believe these methods can be applied. For example, the U.S. federal government emphasizes the importance of customer experience (for example, Executive Orders 14338 (2025) and 14058 (2021)). However, federal agencies do not typically refer to the people who access federal information or services as customers, and most agencies provide their products and services for free. To clarify this, the U.S. Department of Homeland Security specifically explained how everyone using their products is a customer (DHS, 2025).

Confusion Within the Field

Within the field, there is confusion about the qualifications needed for jobs in one category or another. Employers have to decide how to label job postings. Job candidates are posting questions in social media like "I'm currently working in a UX [CX] role, but I am interested in a CX [UX] job. What do I need to do to become qualified?" Individuals may miss out on job opportunities, and employers may miss out on qualified candidates.

This uncertainty can also lead to unnecessary differentiation and division in professional activities such as publications, training, and professional organizations. Professionals may limit themselves to activities related only to the term they associate with. Differences in terminology can also make it difficult to synthesize knowledge across research findings (Golgolnia et al., 2024).

The confusion can also dilute the brand of our field. Dividing professionals into their own niche work creates many smaller fields, rather than one big one. One impact of this is that it makes it difficult to track employment and other data about the profession. The U.S. Bureau of Labor Statistics publishes data on occupations included in the Standard Occupational Classification (SOC). These data include employment levels (including worker demographics), wages, benefits, and projected job growth. To be included in the SOC, the occupation must be clearly defined, have enough people working in the field, and have a way to collect data on that field (Office of Management and Budget, 2018). Although others publish data on the number of employees in our field, we are not included in official statistics, which could provide more demographics and other details that would help legitimize our field.

Confusion Outside the Field

This discrepancy can also lead to challenges in how we communicate and work with colleagues outside of our field. It can make it difficult for us to make progress and gain prominence within our organizations and beyond. Leadership may be familiar with one term but not recognize the equally relevant contributions of those using a different label.

Where Can We Go From Here?

The differing terms and definitions can inhibit the progress and growth of our field. It can create confusion and ambiguity within our organizations and for our field as a whole. It can segregate the work we are doing, causing inefficiencies and missed opportunities. If we can move toward a more universal understanding of our field, we can work together to better support and promote our work. If we do not, we risk fracturing and weakening our field even further.

We cannot hold back the evolution of language. We are well beyond the time of having one term to clearly identify our field; that is, one term that everyone would use and understand. Furthermore, there can be benefits to distributing roles and responsibilities, but they should be clearly defined.

My goal is not to limit the wonderful diversity of our field, but to address the ambiguity we face with our terminology. There are steps we can take to better support and promote our work. It is likely that people are already doing many of these steps. My objective here is to bring these ideas together, thinking specifically about the language we use and our roles within our organizations.

Within Our Organizations

Within our organizations, there are several steps we can take to address the issues occurring when language for our work is inconsistent or confusing or when boundaries between roles are unclear. In general, we need to understand what is happening in our organizations and work with others who are doing similar work.

- **Understand the structure, language, motivators, and environment:** Do user research on your own organization. Like the research we do to understand our target audiences, this is a good place to start (for those who have not already). We should strive to understand the organization's vision, goals, and values. We can do this by talking with colleagues and by reviewing documents such as strategic plans. We can then tailor our work and language to best communicate with our colleagues. We are looking to understand our users; that is, UX'ing the UX work.
- **Define the roles and responsibilities of UX and CX staff:** Understand the organization's environment to gain insight into an effective division of labor. This will help ensure the work is done efficiently, with minimal gaps or overlaps. There are numerous paradigms, but Flaherty (2024) provides a useful model from the Nielsen Norman Group to structure UX and CX work. Their model considers the interaction level (generally considered UX work), the relationship level (generally considered CX work), and the journey level (the two groups working together). The interaction level influences the journey level, which influences the relationship level. Additionally, a RACI matrix (responsible, accountable, consulted, and informed) may be helpful in clarifying specific responsibilities and communication requirements.
- **Communicate across groups:** Ensure that groups doing similar work are communicating and sharing projects and research findings. It can be difficult to break down the barriers of siloed work, but it can uncover gaps in research or areas in which groups are overlapping and streamline the work process. This could be as simple and informal as a regular brown-bag lunch or shared research repository.
- **Ensure that groups are working toward the same goals:** Review the goals, priorities, and metrics UX and CX groups are using to ensure that they support each other and do not conflict.
- **Collaborate on common projects:** Cooperate on efforts that affect all designers and researchers regardless of their roles within your organization. Methods such as personas and journey mapping can help align the understandings of CX and UX team members.

Within Our Field

We should work to project a united field. Communicating and collaborating can help us learn and grow as a field. Professional organizations should collaborate on definitions of the terms and roles to minimize the proliferation of many new individual definitions, creating more consistency and stability that would allow researchers to focus on other issues. Standard definitions would also help those hiring and those looking for work, as everyone will have similar understandings of what is expected in each role.

Despite the multitude of terms, many organizations and publications tend to use the two terms user experience and customer experience most often, with a few industries sticking with human factors. They may use UX or CX alone to refer to all the work, or they may divide the work. UX typically refers to work on an individual product or service (often focusing on methods like expert reviews and usability tests). In contrast, CX covers work to unify a user's experience across products, platforms, and support (using methods like journey mapping and service design). If everyone in the field can embrace these definitions, our unified understanding will help the promotion of our field.

There are research opportunities to study how organizations are structuring UX and CX efforts and the advantages and disadvantages of different frameworks. This could help guide professionals as they build, expand, or restructure UX and CX programs within their organization.

Conclusion

As this history has shown, numerous terms and definitions have described our work. Professionals now come from more diverse backgrounds and are working on a wider range of products in a wider range of industries. This naturally leads to new and differing terminologies, and it is likely to continue evolving.

As a result, numerous authors have provided their own definitions, often focusing on UX and CX. This proliferation of definitions creates ambiguity within our organizations and our field about roles and responsibilities, which impacts the efficiency and effectiveness of our work. It can lead to overlapping efforts and missed opportunities within organizations, and it can inhibit the expansion of our work. By building a unified understanding of our work, we can better promote our value within our organizations, strengthen our professional identity, and grow our field.

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