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## ACCEPTANCE

This dissertation, COMPETENCIES FOR CUSTOMER EDUCATION PROFESSIONALS IN SOFTWARE-AS-A-SERVICE ORGANIZATIONS: A MULTI-PHASE ANALYSIS, by JULIA HUPRICH, was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree, Doctor of Philosophy, in the College of Education & Human Development, Georgia State University.

The Dissertation Advisory Committee and the student's Department Chairperson, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty.

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Cohen, J. D., Huprich, J., Jones, W. M., Smith, S. (2017). Educators' perceptions of a maker-based learning experience. *International Journal of Information and Learning Technology*, 34(5), pp. 428-438. <https://doi.org/10.1108/IJILT-06-2017-0050>

COMPETENCIES FOR CUSTOMER EDUCATION PROFESSIONALS IN  
SOFTWARE-AS-A-SERVICE ORGANIZATIONS:  
A MULTI-PHASE ANALYSIS

A DISSERTATION

by

JULIA HUPRICH

Under the Direction of Jonathan D. Cohen, Ph.D.

The competencies for instructional design and technology professionals have been well-defined by researchers and professional associations, and a multitude of competency models for training professionals exist. However, much of the research focuses on professionals who conduct employee training (Kang & Ritzhaupt, 2015; Kelly, 2016; Moallem, 1995; Ritzhaupt, Martin, & Daniels, 2010; Sugar et al., 2012), and very little research exists on the requirements for customer education professionals, who often conduct or coordinate external or client-facing training. The purpose of this two-phase qualitative study was to generate a systematic understanding of job requirements for customer education professionals and to provide a foundation for the development of core competencies related to customer education. A multi-phase research approach was used to develop the competencies which involved a content analysis of Software-as-a-Service (SaaS) customer education job announcements and a Delphi method for expert feedback. As a result, potential core competencies across three position levels were identified. This should be viewed as the first step in a larger effort to standardize the customer education profession and provides future research opportunities.

COMPETENCIES FOR CUSTOMER EDUCATION PROFESSIONALS IN  
SOFTWARE-AS-A-SERVICE ORGANIZATIONS:  
A MULTI-PHASE ANALYSIS

by

JULIA HUPRICH

A Dissertation

Presented in Partial Fulfillment of Requirements for the

Degree of

Doctor of Philosophy

in

Instructional Technology

in

the Learning Sciences Department

in

the College of Education and Human Development

Georgia State University

Atlanta, GA

2020

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## **DEDICATION**

This dissertation is dedicated to my boys: Robert, who has always believed in me; and Jack, who inspires me every day.

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I would like to extend my sincerest gratitude to all of the many people who have supported me while completing this project. Each member of my dissertation committee has provided invaluable feedback, advice, and professional guidance; many thanks go to Drs. Cohen, Jones, Kim, Law, and Margulieux for their willingness to serve on the committee and to endure this process with me (twice). I have enjoyed learning from each of them and this dissertation is a stronger project because of their expertise.

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## TABLE OF CONTENTS

<b>LIST OF TABLES.....</b>	<b>iv</b>
<b>LIST OF FIGURES.....</b>	<b>v</b>
<b>1 INTRODUCTION.....</b>	<b>1</b>
Customer Education Initiatives: An Overview.....	2
The Role of the Competency Model.....	5
Purpose of the Study.....	6
Research Questions.....	6
Significance of the Study.....	7
Overview of the Study.....	7
Assumptions and Limitations.....	7
<b>2 REVIEW OF THE LITERATURE.....</b>	<b>8</b>
Defining Customer Education.....	12
The Role of Customer Education in the Customer Journey.....	15
Customer Education and Technology Acceptance.....	17
<b>3 METHODOLOGY.....</b>	<b>18</b>
Theoretical Framework.....	19
Research Design.....	19
Research Procedures.....	20
Phase One: Job Announcement Analysis.....	20
Phase Two: Delphi Method.....	24
Trustworthiness.....	26
<b>4 RESULTS.....</b>	<b>28</b>
Question 1 Results.....	28
Domain-Level Results.....	31
Position-Level Results.....	33
Position Level: Director.....	34
Position Level: Manager.....	35
Position Level: Specialist.....	36
Question 2 Results.....	37
Delphi Method, Round 1.....	37
Delphi Method, Round 2.....	39
Delphi Method, Overall Results.....	44
Core Competencies.....	46
Position Level: Director.....	46



Position Level: Manager.....	49
Position Level: Specialist.....	51
Core Competencies for Customer Education Professionals: A Model.....	53
<b>5 DISCUSSION.....</b>	<b>54</b>
Summary & Conclusions.....	55
Implications.....	56
Practitioners.....	56
Employers.....	57
Students.....	57
Professional Associations.....	57
Academic Programs.....	58
Limitations & Opportunities for Future Research.....	58
<b>REFERENCES.....</b>	<b>60</b>
<b>APPENDICES.....</b>	<b>71</b>

**LIST OF TABLES**

Table 1. All Position Titles & Seniority Levels	29
Table 2. All Competencies Across Domains	30
Table 3. Competencies Required for All Seniority Levels	33
Table 4. All Competencies Required for Director-level Positions	34
Table 5. All Competencies Required for Manager-level Positions	35
Table 6. All Competencies Required for Specialist-level Positions	36
Table 7. Results from Delphi Method, Round 1	38
Table 8. Additional Competencies Suggested during Round 1	39
Table 9. Importance Ratings of Competencies Suggested during Round 1	40
Table 10. Round 2 Delphi Study Results, Specialist	41
Table 11. Round 2 Delphi Study Results, Managers	42
Table 12. Round 2 Delphi Study Results, Directors	43

## LIST OF FIGURES

Figure 1. Facebook Blueprint ( <a href="http://www.facebookblueprint.com">www.facebookblueprint.com</a> )	3
Figure 2. Salesforce Trailhead ( <a href="http://trailhead.salesforce.com">trailhead.salesforce.com</a> )	4
Figure 3. Association for Training Development Competency Model	12
Figure 4. A Customer Education Roadmap (adapted from Honebein & Cammarano, 2005)	15
Figure 5. Customer Behaviors during the Customer Journey (Lemon & Verhoef, 2016)	16
Figure 6. Education Services and the Customer Journey (Manning-Chapman, 2017)	17
Figure 7. Generic Building Blocks Competency Model (ETA, 2019)	23
Figure 8. Level of Detail in Competency Modeling (adapted from Campion et al., 2011)	24
Figure 9. Flowchart of the Steps of the Delphi process (adapted from Tognetto et al., 2019)	27
Figure 10. Competency Domain Distribution Across All Tasks	31
Figure 11. Frequency of Competency Domains in Tasks by Position Level	32
Figure 12. Delphi Results for Specialist-level Positions	41
Figure 13. Delphi Results for Manager-level Positions	42
Figure 14. Delphi Results for Director-level Positions	44
Figure 15. Overall Delphi Results	45
Figure 16. Combined Results, Director-level Positions	47
Figure 17. Core Competency Model, Customer Education Director	48
Figure 18. Combined Results, Manager-level Positions	49
Figure 19. Core Competency Model, Customer Education Manager	50
Figure 20. Combined Results, Specialist-level Positions	51
Figure 21. Core Competency Model, Customer Education Specialist	52
Figure 22. Core Competencies for All Customer Education Positions	53

## 1 INTRODUCTION

SaaS (Software-as-a-Service) companies, with their highly technical platforms, are recognizing the value of training customers to increase product adoption and reduce customer churn (Atkins, Gupta, & Roche, 2018). Global technology giants like Facebook, Twitter, and Amazon are investing heavily in training for their customers and partners; Globe Newswire reported in 2018 that the customer education market, driven largely by the SaaS industry, is worth an estimated \$12 billion.

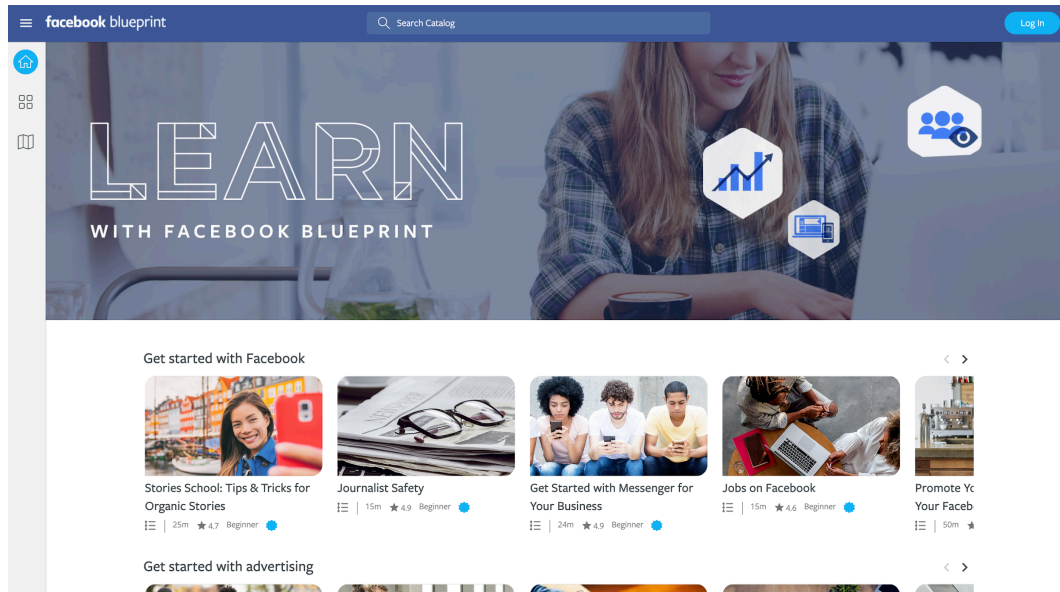
Marketing departments have primarily owned their organizations' customer education initiatives (Aubert, 2008; Hibbert, Winklhofer, & Temerak, 2012); these departments use the programs to influence potential and current customers' feelings about the product or service and generate revenue for the company (Steils, Crié, & Decrop, 2019). Trained customers spend more on services (Retana et al., 2018) and use products more readily (Steils, Crié, & Decrop, 2019). Customer education is considered a valuable part of the marketing process as it "leads to greater customer loyalty and more profitable relationships" (Suh, Greene, Israilov, & Rho, 2015, p. 262).

However, customer education's origins in the marketing world raise questions about the connections between training customers and training employees; it is unclear what role the training professional plays in the world of customer education. While the instructional design and technology (IDT) professional's role in employee learning is well-defined, the role of the customer education professional has not been well-researched or well-documented. It is also unclear what knowledge, skills, and abilities are needed by the professional who seeks success in this area, and whether the competencies identified for an employee learning professional are sufficient for one in customer education. This research aims to fully explore the competencies needed for customer education professionals.

## **Customer Education Initiatives: An Overview**

Customer education can take several forms. Several decades ago, researchers identified that usage instructions, manuals, and product warnings all constituted customer education (Cox, Wogalter, Stokes, & Tipton Murff, 1997; Hennig-Thurau, 2000; Honebein, 1997), despite their “questionable pedagogical quality” (Aubert and Ray, 2005, p. 105). More recently, seminars, workshops, classes, online courses, tutorials, and step-by-step product walkthroughs have all been identified as forms of customer education, with e-learning increasing in popularity as more customers adopt mobile devices (Aubert, 2007; Steils, Crié, & Decrop, 2019; Suh, Greene, Israilov, & Rho, 2015).

Some of the world’s largest technology companies have created their own online customer education programs. Facebook Blueprint ([www.facebookblueprint.com](http://www.facebookblueprint.com)), for example, is a customer education initiative that was launched by the social media giant in March 2015; the purpose of this program (shown in Figure 1) is to help educate advertising professionals on how to use the Facebook suite of tools to reach more customers (Abrams, 2016). While Facebook has yet to publicly comment on the success of the program, over 2 million users have enrolled in Blueprint, with over 100,000 new users consuming instructional content each month (Intellum, 2019).



*Figure 1.* Facebook Blueprint ([www.facebookblueprint.com](http://www.facebookblueprint.com))

Salesforce, the customer relationship management solution, launched a suite of customer education tools called Trailhead ([trailhead.salesforce.com](http://trailhead.salesforce.com)), which includes online and in-person classes (shown in Figure 2). In an interview in 2014, the then-head of Education at Salesforce.com, Wayne McCulloch, talked about the success of the Salesforce University initiative, which was their in-person training program (Cushard, 2014):

The data clearly shows that customers unlock much greater value out of their investment in Salesforce and adopt the platform more deeply when they engage with Salesforce University. In the latest analysis of customers we can see that customers who send students to Salesforce University training see much higher adoption (across the board in terms of maturity and size segment), increased productivity, increased service levels and better ROI. Interestingly, some of the highest impact is on small companies – a small investment in training has a HUGE impact on their ROI and adoption.

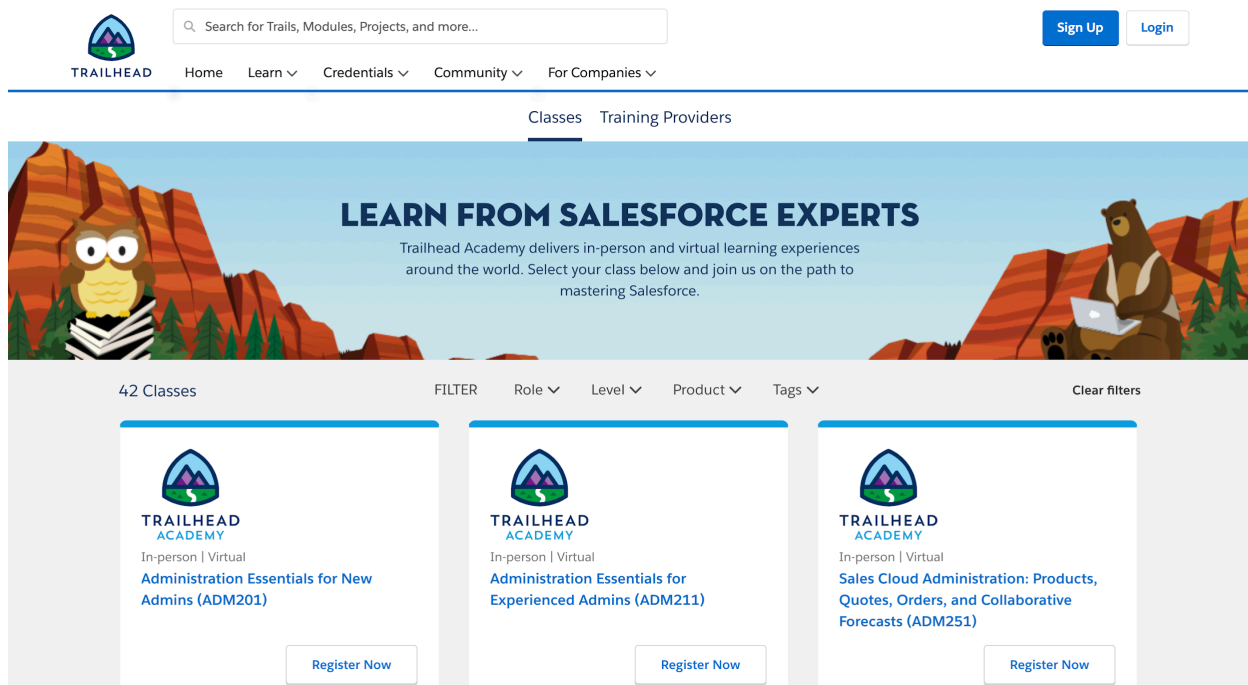


Figure 2. Salesforce Trailhead (trailhead.salesforce.com)

Other technology companies, including Twitter (Flight School, <https://flightschool.twitter.com/>), Amazon (Seller University, <https://services.amazon.com/tutorials-and-training.html>), MINDBODY (Learning Center, <https://mindbody.exceedlms.com>), Adobe (Digital Learning Services, <https://learning.adobe.com/>), and Hubspot (Academy, <https://academy.hubspot.com/>), offer similar customer education programs as well.

The purpose of these programs, on the surface, is to teach users how to use the platforms better. However, consumer research reports indicate that companies are also using these customer education programs as a profit center, with as much as 40% of the organizations surveyed generating revenue directly from programs that provide learning to customers at a cost (Wentworth, 2017). As an example, 2020 listings of Salesforce training offerings at <https://help.salesforce.com> indicate that a 4-day virtual course will cost an individual \$3600.

With this multitude of companies offering free and for-pay customer education programs, it is still unclear who is designing, developing, implementing, and delivering customer education. Considering customer education's long history in the marketing field, these could be training positions, marketing positions, or something else entirely. Given the wide range of tools available in the Customer Education Roadmap (shown in Figure 4), the skills customer education professionals need to be successful in the field may vary.

### **The Role of the Competency Model**

A competency model is the collection of knowledge, skills, and abilities (KSAs) required for effective performance in a specific position (Campion et al., 2011). The use of competency models has a long history in industrial/organizational psychology, and with their usage comes several benefits for an organization, including opportunities to:

- Align human resources practices, such as performance evaluations, with clearly outlined KSAs (Green, 1999; Lawler, 1994; Lucia & Lepsinger, 1999; Schippmann et al., 2000)
- Directly link business objectives with individual positions' contributions (Green, 1999; Martone, 2003; Rodriguez et al., 2002)
- Distinguish top performers from their merely average counterparts (Olesen, White, & Lemmer, 2007; Parry, 1996)
- Provide guidance for employees planning their career trajectories (Martone, 2003; Rodriguez et al., 2002)

Competency models are useful tools in the process of hiring, training, evaluating, and compensating employees (Campion et al., 2011), as they provide a documented record of the important characteristics of a "competent" employee.



## **Purpose of the Study**

Because the role of the customer education professional is not well-researched, little is known about the types of positions available to people in the field or the KSAs needed for those positions. One purpose of this study is to gain a deeper understanding of the roles available to the customer education professional with an opportunity to more fully understand the connection -- or lack thereof -- to the world of instructional design and technology, for which there are clear competency models and a multitude of studies that have defined them (e.g. Iqdami & Branch, 2016; Kang & Ritzhaupt, 2015; Kelly, 2016; Ritzhaupt, Martin, & Daniels, 2010; Ritzhaupt, Martin, Pastore, & Kang, 2018).

In addition, by identifying the current core knowledge, skills, and abilities of customer education professionals, this research will contribute to the training and preparation of future customer education professionals. The size of the customer education market represents a valuable opportunity for professionals interested in the field of customer education, but without understanding the KSAs needed to be successful at those jobs, the potential candidate lacks a clear roadmap for skill development.

## **Research Questions**

This study will be guided by the following research questions:

RQ1: What competencies are most frequently sought for positions in SaaS organizations with customer education functions?

RQ2: What are considered to be the most important competencies that make customer education professionals in SaaS organizations effective?

### **Significance of the Study**

This study carries significance for two reasons. Primarily, it contributes to the limited research on customer education in general. While extensive research has been done on employee learning and organizational development, the field of customer education has been largely unexplored (Field, Xue, & Hitt, 2012). Second, this study also further illuminates the emerging role of the customer education professional. Some studies (see Chapter 2 for a literature review) have examined the impact of customer education in terms of sales impact, feature adoption, and product usage, but there have been only a limited number of studies related to the profession or to the instructional development of customer education programs. Having a greater understanding of the competencies professionals need to be successful is an important step in bringing legitimacy to a field (Ritzhaupt, Martin, & Daniels, 2010).

### **Overview of the Study**

This study has two phases, both qualitative: a content analysis of job announcements related to customer education and a modified Delphi survey of managers, directors, and executives responsible for hiring customer education professionals. More detail about the methodology for this study can be found in Chapter 3.

### **Assumptions and Limitations**

Assumptions are, according to Leedy and Ormrod (2010), the foundation of any research; these are the facts that the researcher believes must be true in order for the study to be conducted. Several assumptions were made during the course of this study. The first assumption made is that the job announcements gathered during the first phase will be representative of the needs of the employers. The second assumption is that the experts participating in phase two are well-informed about the needs of the customer education profession.

This study has several limitations as well; limitations are uncontrollable problems identified by the researcher that pose a threat to the internal validity of the study (Creswell, 2012). One limitation is that collection of the job announcements gathered was restricted by the jobs available at that particular moment. If fewer customer education jobs were available, then the analysis conducted would not be fully representative of the field as a whole; it would merely reflect the field during this snapshot in time. To mitigate this limitation, the collection of job announcements lasted several weeks, with the collection process occurring on a daily basis. In addition, a series of alerts relating to customer education positions were set up on sites like Google Alerts ([www.google.com/alerts](http://www.google.com/alerts)), LinkedIn ([www.linkedin.com](http://www.linkedin.com), a professional social networking site), and Indeed ([www.indeed.com](http://www.indeed.com), a job aggregation platform). These alerts maximized the number of positions collected.

## **2 REVIEW OF THE LITERATURE**

A review of the literature related to training, adult learning, and instructional design and technology will reveal many patterns; one theme that emerges is the emphasis on organizational development and employee learning. The field of modern learning and development has been evolving for well over 50 years (Somasundaram & Egan, 2004), with much of the research leaning heavily on the field's impact on employees. For example, in the 1960s, researchers specified that training:

- increased job knowledge (Black, 1961)
- raised workers' productivity (Becker, 1962) and
- improved the organization (Bass & Vaughan, 1966).

These early definitions highlight that the audience for an organization's educational efforts was strictly its staff. In fact, a robust employee learning program was considered to be part of a

strategic advantage: “exemplary organizations are recognizing that a workforce with superior skills is a primary vehicle for sustainable competitive advantage” (Olian et al., 1998, p. 20).

Instructional designers, instructional technologists, trainers, curriculum developers, instructors, and learning specialists all contribute to employee learning initiatives (Kelly, 2016) in a multitude of sectors, such as business and industry, government, military, and healthcare (Larson & Lockee, 2004). However, it is unclear, given the employee-focused nature of organizational learning, if anyone was historically paying attention to the educational needs of the customer.

All of that changed in 1978, when marketing professor James McNeal identified the role that customer training can play in his seminal article, “Consumer Education as a Competitive Strategy” (1978). “Businesses,” he says, “should educate consumers about their products. In meeting their responsibility, they will receive many benefits - including bigger profits” (p. 50). This article marks the genesis of the field of customer education, with its roots deeply embedded in the world of marketing.

Thus began a schism of sorts, with training departments managing employee learning and marketing departments managing the customer education process. This split is evident in the absence of the rich research history of learning and development in the literature related to customer education; historically, much of the research on customer training lacked mention of andragogy, instructional design methodology, learning science, or instructional technology (Aubert, 2007). Instead, research on customer education -- also referred to as customer training or customer learning, among other terms -- has been derived almost exclusively from the sales and marketing world, with the majority of the research focusing not on *how* to deliver

instructional value to the customer but instead on the value that well-trained customers can bring to the organization (Field, Xue, & Hitt, 2012).

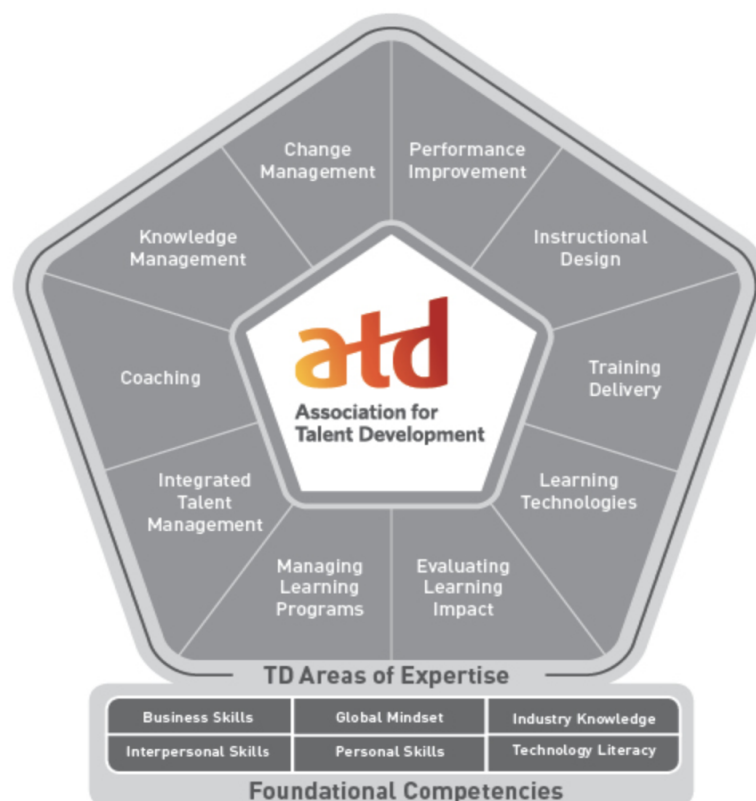
The goal of customer training also has a marketing and sales slant: the purpose is to increase “consumers’ skills and knowledge” with the intent of “achieving specific corporate goals like increasing satisfaction, loyalty, usage intention, affect, commitment or positive word-of-mouth” (Steils, Cri e, & Decrop, 2019, p. 51). Another way to phrase this would be to say: the purpose of customer education is to increase an organization’s profits. This differs from the purpose of employee education, which is generally to increase an organization’s overall effectiveness (Arney, 2017).

Despite the differing audiences and purposes, one could argue that the world of customer education runs parallel to the learning and development field and may even share some common functions. Professionals in both fields facilitate learning to increase skills and knowledge, often by “creating, using, and managing appropriate technological processes and resources” (Januszewski & Molenda, 2007). However, the relationship between these two fields is currently unclear due to the lack of research on customer education. While there is ample research on employee learning through the field of instructional design and technology, for example, customer education has not enjoyed the same attention in the marketing literature (Field, Xue, & Hitt, 2012).

One specific area that currently lacks any substantial research is in the identification of the competencies related to the customer education profession. A competency, according to the International Board of Standards for Training, Performance, and Instruction (IBSTPI), is defined as “a knowledge, skill, or attitude that enables one to effectively perform the activities of a given occupation or function to the standards expected in employment” (Richey, Fields, & Foxon,

2001, p. 26). Competencies are useful guidelines for informing professional practice and connecting that practice to business goals and objectives (Campion et al., 2011; McLagan, 1997). For current and future employees in a specific field, competency models serve as frameworks for training, future planning, skill development, and career mapping.

Competencies in the field of training and development are well-defined, thanks to a multitude of studies, years of research, and a variety of professional organizations championing the development of competency models specific to different positions in the L&D field (Kang & Ritzhaupt, 2015; Kelly, 2016; Moallem, 1995; Ritzhaupt, Martin, & Daniels, 2010; Sugar et al., 2012). An example of a relevant competency model would be one developed in 2014 by the Association for Talent Development (Figure 3).



*Figure 3.* Association for Talent Development Competency Model (2019)

It would be easy to assume that the skillset of a customer education professional would be the same as an employee education professional. However, very little academic research has been conducted as to what types of positions organizations are adding in the field of customer education (Field, Xue, & Hitt, 2012), or what their requirements are; thus, the goal of this study is to identify what those positions are and the competencies needed for these positions. This goal will be accomplished via a job announcement analysis and a Delphi survey with professionals in the field.

A job announcement analysis is a type of content analysis wherein job announcements for a specific position are collected and systematically analyzed (Downs, 1988). This analysis is a useful research tool in establishing a position's work activities and the knowledge, skills, and abilities required for a specific job (Kang & Ritzhaupt, 2015; Singh, 2008). The data resulting from a job announcement analysis can be used in many ways, including performance reviews, training, staff development, and career planning (Mullins, 2005). Job announcement analyses have been conducted in multiple fields, including educational technology (Kang & Ritzhaupt, 2015; Moallem, 1995; Ritzhaupt, Martin, & Daniels, 2010; Sugar et al., 2012;), information science (Choi & Rasmussen, 2009; Croneis & Henderson, 2002; Park, Lu, & Marion, 2009), and human resources (Aguinis, Michaelis, & Jones, 2005).

### **Defining Customer Education**

Customer education has been called “the extent to which firms are seen as providing customers with the skills and abilities to utilize information” (Bell, Auh, & Eisingerich, 2017, p. 307). It has also been defined as “companies’ investments in improving customer expertise” in their products (Aubert, 2008, p. 920). Earlier definitions were much more direct, and placed emphasis on the organization’s objectives; one example is the 1984 definition provided by Meer:

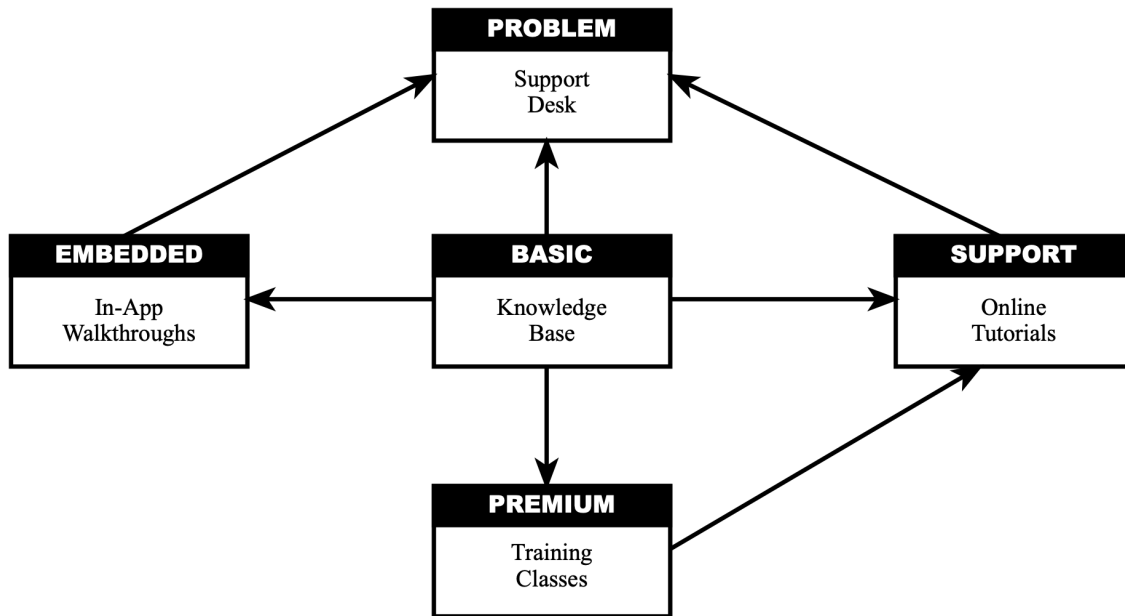
“Customer education refers to any purposeful, sustained, and organized learning activity that is designed to impart attitudes, knowledge, or skills to customers or potential customers by a business or industry. The educational activity is directly related to promoting sales or to assisting the customer in the use of the product or service,” (p. vii).

On rare occurrences, such as in Meer’s 1984 version, do we see a mention of instruction in the definitions of customer education. Another example is provided by Hennig-Thurau, Honebein, and Aubert (2005): “Customer education is defined as the use of instructional tools to enhance those customer skills that enable the consumer to make use of the value embedded in the product by the producer once the product has been bought” (p. 136). Aubert and Ray (2005, translated in Aubert, 2007) provide another instruction-focused explanation, reporting that “customer education is presented as pedagogical activities; most of them are training activities. It implies that companies develop their program according to the instructional design process. First, they must develop the training needs, then design, develop, implement and evaluate training or education actions” (p. 22).

Much earlier definitions of customer education, such as the ones from the 1970s, conflated consumer education with customer education. For example: “many public and private consumer education programs are currently in operation... and more could emerge as consumer education is recognized as a vehicle for improving both adult functional competency and consumer satisfaction” (Bloom & Ford, 1979, p. 270). This definition reflected the consumer protection slant in early customer education initiatives (Bloom, 1976), the objective of which was to teach people how to be better, more informed consumers (Honebein & Cammarano, 2005).



For the purposes of this study, we will rely on a broad definition: “The techniques companies use to help customers develop expertise are collectively referred to as customer education” (Honebein & Cammarano, 2005, p. 195). In this realm, customer education can include basic tools, such as instructional manuals; support tools, like web-based tutorials; problem tools, like support desks; embedded tools, like in-product prompts; and premium tools, such as training classes (Figure 4). Because the role of the customer education provider can span all of these tools, a wide range of knowledge and a broad skill set are likely to be required.



*Figure 4.* A Customer Education Roadmap (Adapted from Honebein & Cammarano, 2005)

### **The Role of Customer Education in the Customer Journey**

From a marketing perspective, researchers (Aubert, 2007; Hennig-Thurau, 2000; Honebein, 1997; Meer, 1984) view customer education as playing a role in the customer journey, which is “the cycle of the relationship/buying interaction between the customer and the organization,” (Nenonen, Rasila, Junnonen, & Kärnä, 2008, p. 59). This journey traditionally has three stages: pre-purchase, purchase, and post-purchase (Lemon & Verhoef, 2016; see Figure 5). Customer education plays a role during two stages: pre-purchase and post-purchase (Aubert, 2007).

During the pre-purchase stage, consumers are looking for information about a product or service and often aim to fill a specific need (Lemon & Verhoef, 2016). The role of customer education during this stage is to “give potential customers the knowledge and skills necessary to increase their awareness and their understanding of a product’s potential usages,” (Aubert, 2007, p. 44). It can also encourage them to consider the brand more positively (Bell, Auh, & Eisingerich, 2017). During the pre-purchase stage, customer education has three goals: to make customers aware of the value of the product (Best, 2005), to promote “potential customers’ self-confidence in their ability to use the product” (Aubert, 2007, p. 45), and, ultimately, to convince the customer to move to the next stage: purchase (Lakshmanan & Krishnan, 2011).

<b>PRE-PURCHASE STAGE</b>	<b>PURCHASE STAGE</b>	<b>POST-PURCHASE STAGE</b>
<ul style="list-style-type: none"> <li>• Need recognition</li> <li>• Consideration</li> <li>• Search</li> </ul>	<ul style="list-style-type: none"> <li>• Choice</li> <li>• Ordering</li> <li>• Payment</li> </ul>	<ul style="list-style-type: none"> <li>• Consumption</li> <li>• Usage</li> <li>• Engagement</li> <li>• Service Request</li> </ul>

*Figure 5.* Customer Behaviors during the Customer Journey (Lemon & Verhoef, 2016)

The next point of the customer journey at which customer education becomes important again is during the post-purchase stage (Aubert, 2008; Hennig-Thurau, 2000). This stage “encompasses customer interactions with the brand and its environment following the actual purchase,” and (morbidly) “lasts from the purchase to the end of the person’s life” (Lemon & Verhoef, 2016, p. 76). At this stage, the goal of customer education is to inform the user about their new product or service and support the user in their exploration of key functionalities (Aubert, 2007).

A different version of the role that education plays in the customer journey is provided by the Technology Services Industry Association (TSIA), which identifies the educational resources and services that should be made available to customers based on an expanded, technology-focused version of the customer journey (Figure 6). In this model, users progress from planning to innovation and require a more sophisticated level of customer education based on their progression through each stage; blog posts, whitepapers, overview videos, gamification, and certification programs are all components of this model, as are “collaboration opportunities” and access to product management (Manning-Chapman, 2017).

## Education Services and The Customer Journey

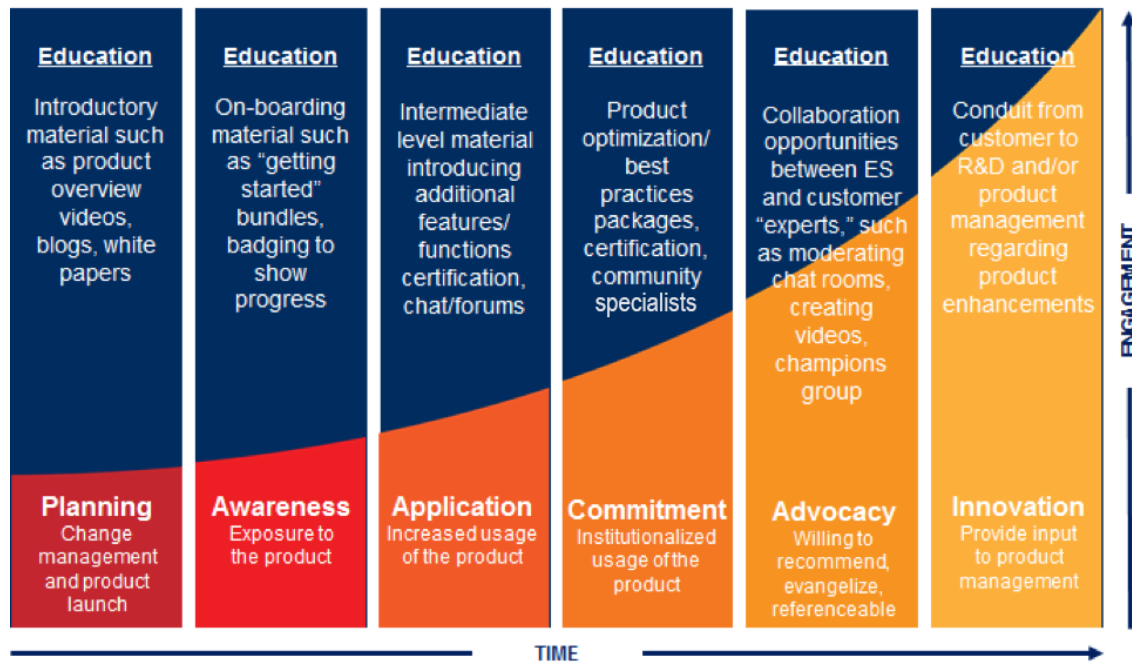


Figure 6. Education Services and the Customer Journey (Manning-Chapman, 2017).

In this model, it is clear to see where the practice of customer education could benefit from the research on learning and development. "Badging to show progress," a practice recommended in Figure 6 for the Awareness stage, could be informed by the research on gamification. Instructional videos have long been studied in the realm of education; that research could contribute best practices to the development of the overview videos in the Planning stage. Much of the research around learner engagement and motivation could apply to all phases, especially with the introduction of certifications and opportunities to collaborate with others in the Commitment and Advocacy phases, respectively.

### Customer Education and Technology Acceptance

Customer education has received attention from the marketing world as a tool to increase sales, affect product adoption, enhance the value of the brand, and help customers along their

journey. The digital world, specifically SaaS companies, have more recently come to accept customer education as a way to increase technology acceptance. Researchers have found that customer education helps customers to “form a more realistic, objective perception about the usefulness of the technology in the early stage of the adoption process. Thus the adoption process tends to be more stable and smooth,” (Lee & Xia, 2011, p. 293). Perceived usefulness is an important indicator in future behavioral intentions to use a technology, according to the Technology Acceptance Model (Davis, 1985).

Not only do educated customers reach technology acceptance more readily, they are also more efficient and effective users of technology (Chow, Woodford, & Showers-Chow, 2008; Retana, Forman, & Wu, 2016; Retana, Forman, Narasimhan, Niculescu, & Wu, 2018). In a recent study, researchers discovered that customers who engaged in a course providing information about the basic features of a major public cloud infrastructure services provider used the service 46% more than their counterparts (Retana, Forman, & Wu, 2016), with usage directly tied to profit. A similar study found that educating customers of a cloud infrastructure service led to an increase in usage and consequently a 147% increase in net profits (Retana, Forman, Narasimhan, Niculescu, & Wu, 2018). Researchers have posited that customer knowledge is a “valuable asset” (Shah, Rust, Parasuraman, Staelin, & Day, 2006), and these recent studies have shown precisely how profitable increasing customer knowledge can be, especially for the technology sector.

### **3 METHODOLOGY**

The purpose of this chapter is to introduce the research methodology for this study, which aims to identify the competencies required for customer education professionals. The two research questions that guided this study were: (1) What knowledge, skills, and abilities are most

frequently sought for positions with customer education functions? (2) What are considered to be the most important knowledge, skills, and abilities that make customer education professionals effective?

### **Theoretical Framework**

This research is guided by social constructionism, an epistemological perspective that theorizes that knowledge is socially, not individually, constructed, and “places great emphasis on everyday interactions between people and how they use language to construct their reality” (Andrews, 2012, n.p.). Competency modeling is considered to be a form of social constructionism because “a shared definition of a desired future of the organization (in this case, employees with the attributes required for the success of the organization) is created through... widespread involvement in the creation of the model,” (Campion et al., 2011, pp. 250-251). Social constructionism often seeks to classify knowledge that is gathered from a multitude of people, building conceptual classifications (like a competency model) that have “linguistic character and are embedded in a wider cultural framework” (Giesinger, 2017, p. 205). These conceptual classifications have no meaning outside of their social value and are not predetermined by nature, but are socially acquired and accepted in a specific culture (Andrews, 2012).

### **Research Design**

This qualitative descriptive study consisted of two phases: 1) a content analysis of customer education job announcements and 2) surveys of customer education practitioners, according to a modified Delphi model. A qualitative descriptive study is an appropriate research design when the researcher “seeks to discover and understand a phenomenon, a process, or the

perspectives and worldviews of the people involved” (Bradshaw, Atkinson, & Doody, 2017, p. 1).

Job announcement analysis is a form of content analysis (Hsieh & Shannon, 2005) that has been widely used in several fields, including medicine (e.g. Meyer, 2017), educational technology (e.g. Byun, 2000; Kang & Ritzhaupt, 2015; Klein & Kelly, 2018; Moallem, 1995; Ritzhaupt & Martin, 2014; Ritzhaupt, Martin, & Daniels, 2010; Sugar, Hoard, Brown, & Daniels, 2012) and library and information science (e.g. Choi & Rasmussen, 2009; Croneis & Henderson, 2002; Gold & Grotti, 2013; Harper, 2012; Triumph & Beile, 2015; Wu & Li, 2008; Shank, 2006). During this process, the researcher collects job postings from different sources and then conducts a content analysis with the research questions in mind (Choi & Rasmussen, 2009). Content analysis “is a research method for subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns,” (Hsieh & Shannon, 2005, p. 1278). This qualitative approach represents an objective way of quantifying and describing phenomena and has three steps: data collection, analysis, and reporting (Schreier, 2012).

## **Research Procedures**

### **Phase One: Job Announcement Analysis**

For the purposes of this study, job announcements were collected from online sources, with Google ([www.google.com](http://www.google.com)) being a primary search tool. LinkedIn ([www.linkedin.com](http://www.linkedin.com)) and Indeed ([www.indeed.com](http://www.indeed.com)) were also searched, and alerts were set up to notify the researcher on any new related positions. Position announcements were systematically collected from October 1, 2019 to January 25, 2020. Because of the lack of standardization in the customer education

field, a variety of queries were used to ensure any jobs related to the broad field of customer education were considered. These queries included:

- Customer education
- Customer training
- Product training
- Adoption training

Each job posting was saved to the researcher's computer with the job title and organization in the filename.

All collected job postings were screened for inclusion on the following criteria:

- The job announcement includes responsibilities that are explicitly customer-focused or client-facing
- The main focus of the job was on a variety of customer education activities and was not limited to one function (e.g. "Customer Education Instructional Designer" was not considered for the study, because the competencies for instructional designers are well-defined)
- The hiring organization is considered a SaaS company, or one whose primary offering is a cloud-based software service, often through a license model that is subscription-based (Cohen & Neubert, 2019)

Positions from all geographic locations were considered. Positions that include employee training responsibilities were excluded, and duplicate job postings were eliminated. The number of customer education jobs collected during the data collection period was 83. Among all collected job postings, there were 5 redundant job postings and 47 that, upon further inspection, did not meet the requirements. The total valid sample for this job announcement analysis was 31.



All position announcements meeting the criteria were used in the analysis phase of the study. Each individual job posting was considered as a unit of analysis.

Job title and organization information was collected from all qualifying job postings, along with all 312 task statements, and input into Google Sheets. Titles were organized into one of three seniority levels (specialist, manager, and director) based on the position title and requirements. A taxonomy of job titles by level can be found in Chapter 4.

An open coding process was used to define codes for each task statement. To achieve this, each task statement was reviewed line-by-line and a concept was assigned to it based on key words and phrases. For example, “Be a team player,” was coded with “Collaboration,” as was “Work cross-functionally with other customer-facing teams to enhance the training offerings.” Then, all concepts were reviewed, and similar and overlapping concepts were combined. Twenty-nine final codes were identified and examples were identified from correlating task statements; these definitions were maintained in a codebook (Appendix D). All 29 codes were grouped into one of three domains: Foundation, Industry, and Occupation, based on the model and definitions provided by the US Department of Labor (USDOL) Employment & Training Administration (ETA) (as shown in Figure 7). This model was developed using a “building blocks” approach, wherein the three domains serve as the building blocks of a competency pyramid, with the required knowledge and skills becoming more specialized towards the top of the model. The Foundational competency domain includes three tiers, or competency groups:

- Tier 1: Personal effectiveness competencies, like dependability, lifelong learning, and professionalism; these are most commonly referred to as “soft skills”
- Tier 2: Academic competencies, such as reading, writing, and mathematics
- Tier 3: Workplace competencies, like teamwork, creative thinking, and decision-making

Tiers 4 and 5 are represented by the Industry competency domain, which includes industry-wide competencies and technical skills and “represent the cross-cutting knowledge, skills, and abilities needed by workers within an industry” (ETA, 2019, p. 17). The final tier, Occupation competencies, include management and occupation-specific competencies. This forms the foundation of the competency framework (see Figure 8). Finally, each task statement was re-coded with one of the resulting 29 final codes. Results from this analysis can be found in Chapter 4.

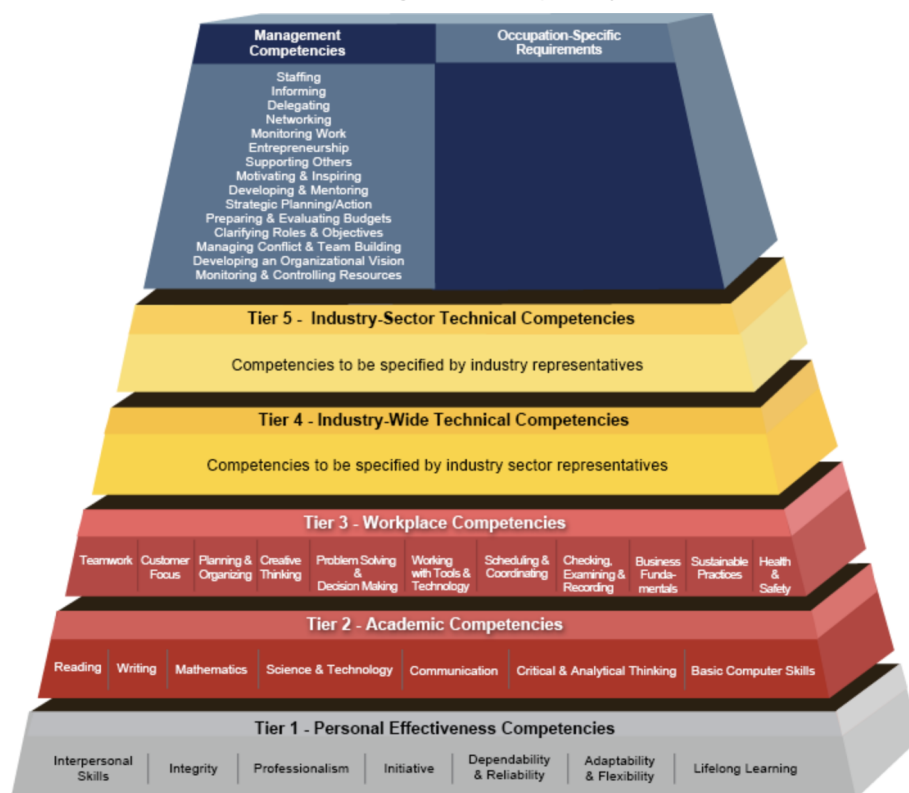
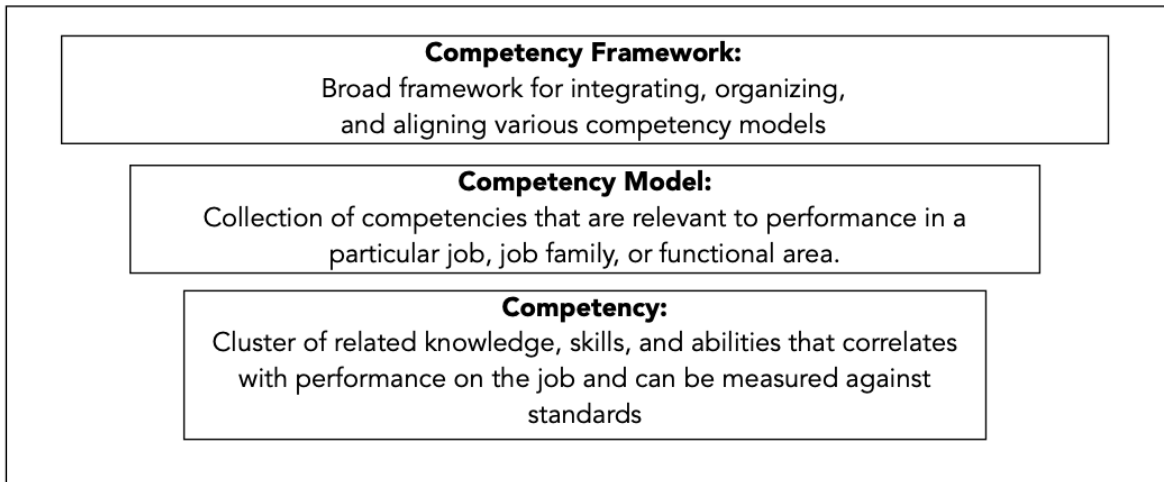


Figure 7. Generic Building Blocks Competency Model (ETA, 2019)



*Figure 8.* Level of detail in competency modeling (adapted from Campion et al., 2011)

## **Phase Two: Delphi Method**

The Delphi process, developed in the 1950s, has been widely used in qualitative social science to survey experts on a specific topic (Tognetto et al., 2019), and has been used in the healthcare education field to identify experts' opinions on necessary competencies for professional education and training (e.g. Burke et al., 2009; Hsu & Sanford, 2017; Jünger, Payne, Brine, Radbruch, & Brearley, 2017; Midlöv, Höglund, Eriksson, Diehl, & Edgren, 2015). In a traditional Delphi process to develop a competency model, experts would be asked to propose competencies that should be included. However, this study adopted a modified Delphi process and provided proposed competencies based on the job announcement analysis in Phase One.

Participants were recruited for the Delphi method survey in three ways:

- *Via LinkedIn.* The first 13 profiles matching the query “customer education” were sent messages (Appendix A) inviting them to participate in the study. Note that the number of profiles that the researcher could contact was limited by LinkedIn.

- *Via email.* 3 practitioners who were personally known to the researcher were contacted via email (Appendix A)
- *Via Slack.* A message about the study was posted in the Customer Education Slack channel (<http://customered.slack.com>), which has 791 members as of January 2020. Participants who indicated their interest were messaged directly with an invitation to participate (Appendix A)

The initial questionnaire was divided into three sections:

1. Information sheet about the Delphi Method and consent form (Appendix B)
2. Demographic information, including professional qualifications; all 26 participants, listed in Appendix D, self-reported that they met the criteria for participation (Appendix C)
3. Specific items from the job announcement analysis, for evaluation by the participants

A Delphi study generally consists of several iterative rounds of questioning in order to come to a consensus among the experts. In this research study, building consensus focused on the competencies required for each position level. In the first round of this study, the participants were asked to rate each competency listed as “important,” or “not important” (Appendix E) for each position level. A 70% inclusion threshold was established based on a previous study (Diamond et al., 2014). If at least 70% of the participants rated the competency as “important,” the item was automatically included in the competency model for that level; if at least 70% of the participants rated the competency as “not important,” it was automatically excluded for that level. Remaining items where consensus had not been reached were included in the second round, along with any additional items that participants suggested for inclusion. The second round proceeded the same as the first, with any additions included; participants were asked to vote “important” or “not important” on new and existing competencies, with the same 70%

consensus threshold. At the end of the survey, all of the results were shared with the participants. See Figure 9 for a flowchart of the steps of the process.

### **Trustworthiness**

In qualitative studies, trustworthiness is the dimension by which the study's rigor is measured (Brady, 2015; Creswell & Creswell, 2018; Miles, Huberman, & Saldaña, 2014); trustworthiness is related to not just the final product resulting from the study but also the process by which it was developed (Miles, Huberman, & Saldaña, 2014). According to Brady (2015), rigor control in a Delphi study is attained in two ways: 1) with participants' ability to contribute during the study and 2) with the use of consensus. The process of iteration also lends itself to trustworthiness (Brady, 2015). To further increase trustworthiness, a methods journal was kept, and all methodological decisions made during the course of the study were documented (Miles, Huberman, & Saldaña, 2014).

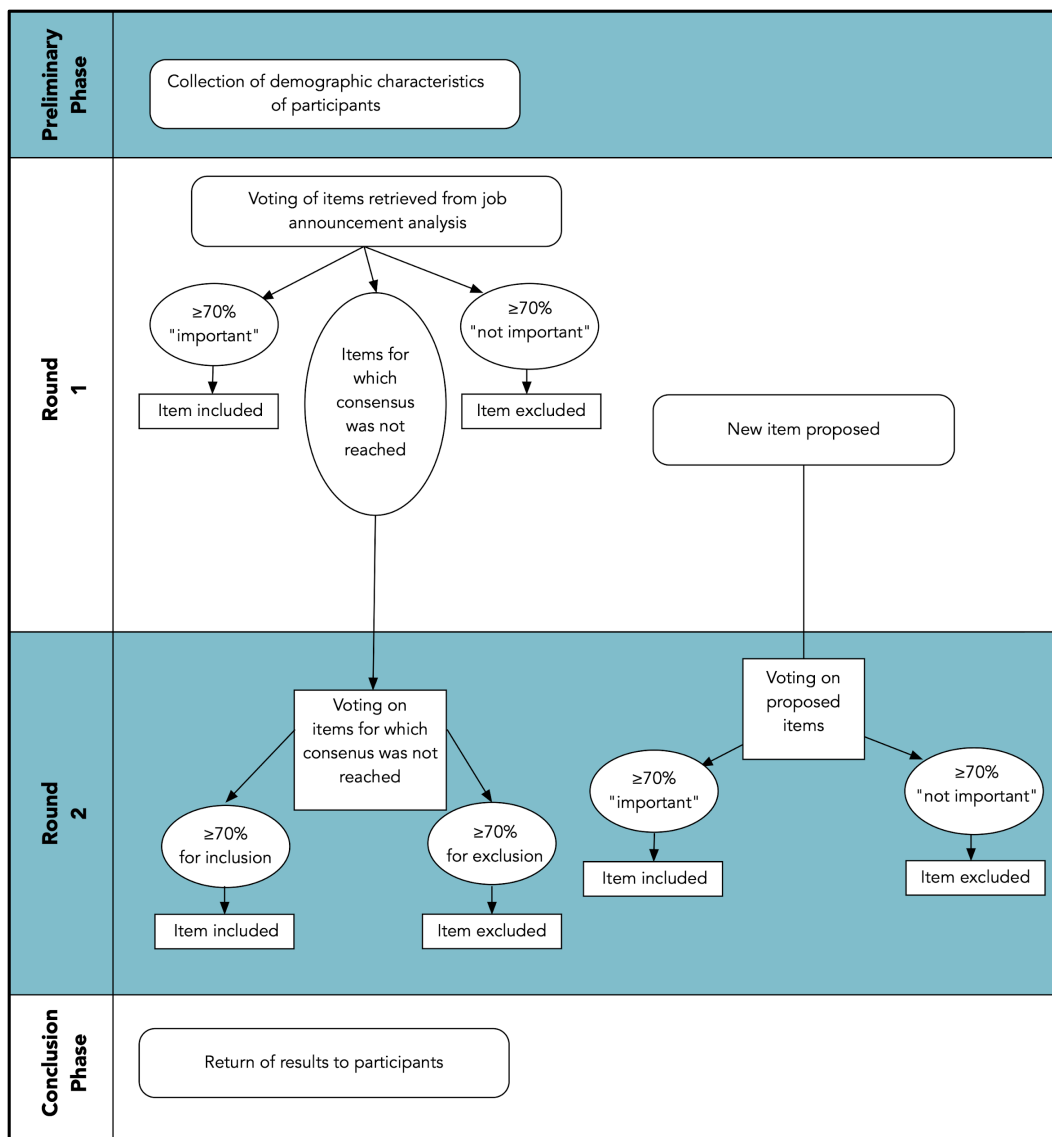


Figure 9. Flowchart of the steps of the Delphi process (adapted from Tognetto et al., 2019).

## 4 RESULTS

In this chapter, the study results are presented according to the research questions. Additional findings of noteworthy importance are also presented.

### Question 1 Results

*RQ1: What competencies are most frequently sought for positions in SaaS organizations with customer education functions?*

To answer question 1, a content analysis of job announcements was conducted, and 31 positions and 312 tasks were analyzed. Using the methodology outlined in Chapter 3, the analysis resulted in 25 unique position titles at 3 seniority levels (Table 1); analysis of the tasks resulted in 29 total competencies (Table 2).

*Table 1.*  
All Position Titles and Seniority Levels

Director Level	Manager Level	Specialist Level
Director of Customer Education	Adoption & Training Manager	Client Learning Specialist
Director, Product Learning & Education	Associate Manager, Customer Education	Customer Education & Content Specialist
Global Head of Scaled Customer Education	Customer Education & Knowledge Manager	Customer Education & Enablement Specialist
Head, Global Customer & Partner Education	Customer Education Expert Manager	Customer Education & Training Specialist
	Customer Education Manager	Customer Education Specialist
	Customer Education Programs Manager	Customer Educator
	Customer Support Training Manager	Customer Onboarding Specialist
	Customer Training Manager	Customer Success and Training Specialist
	Manager, Customer Education	Customer Training Specialist
	Senior Manager, Customer Education	
	Senior Solutions Product Manager, Customer and Partner Education	
	Sr. Manager, Product Training	

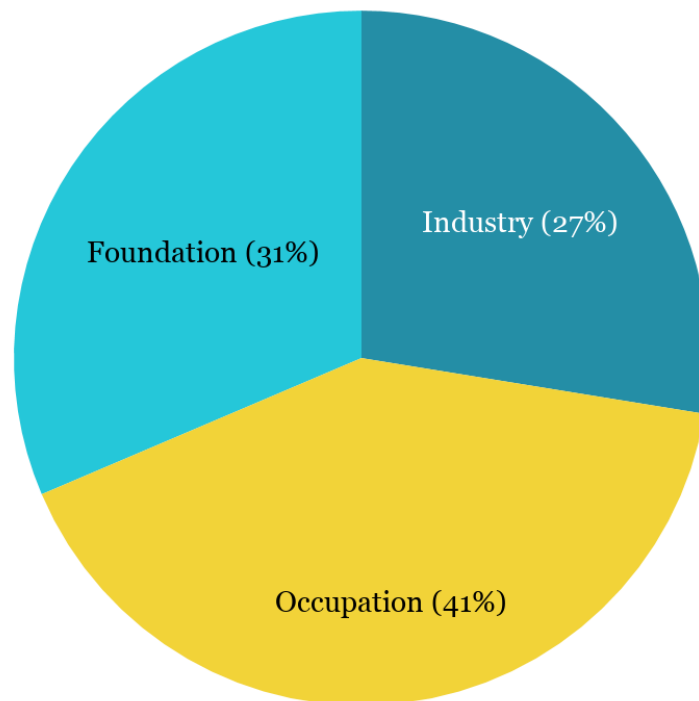


*Table 2.*  
All Competencies Across Domains

Foundational	Industry	Occupation
Adaptability	Community Management	Coaching
Collaboration	Customer Onboarding	Evaluating Instructional Impact
Communication	Data, Analytics, & Reporting	Instructional Delivery & Facilitation
Conflict Resolution	Driving Revenue & Business Value	Instructional Design
Customer Service	Growth & Scaling	Leadership
Growth Mindset	Marketing	Learning Sciences
Lifelong Learning	Outreach	LMS Administration
Project Management	Product Knowledge	Management
Research	Prospect Qualification	
	Technical Communication & Documentation	
	Technical Support	
	Technology Feedback & Design	

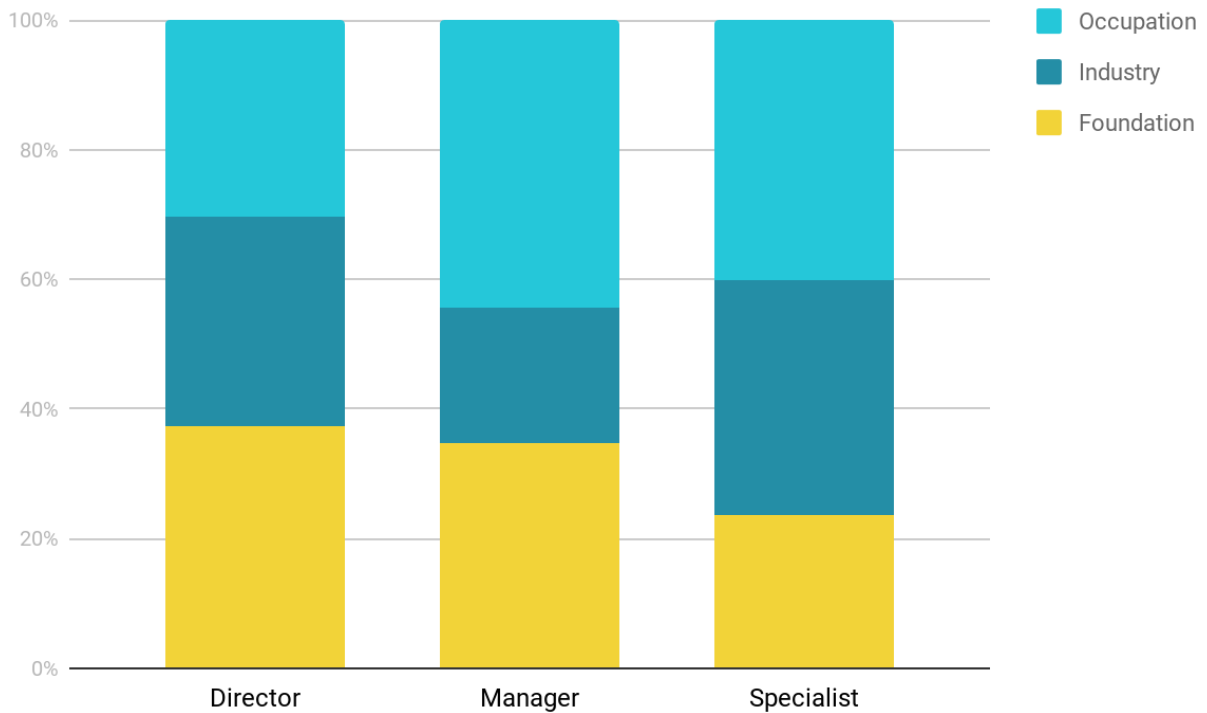
### Domain-Level Results

Across all tasks analyzed, the three competency groups were distributed as illustrated in Figure 10. Occupation-specific competencies appeared in all of the tasks most frequently (41%), followed by foundational competencies (31%) and then industry competencies (27%).



*Figure 10.* Competency Domain Distribution across All Tasks

This figure illustrates the importance of the occupation-level competencies, which include instructional design, instructional delivery and facilitation, learning sciences, and learning management system (LMS) administration.



*Figure 11.* Frequency of Competency Domains in Tasks by Position Level

Figure 11, shown above, illustrates the frequency of competency domains in all of the tasks for each position level. These results are somewhat expected; director and manager-level positions would require a solid foundational skill base. One unexpected finding is that the manager-level positions have more occupation-level tasks, when it would be expected that the director-level positions would have more tasks occurring at this level.

### Position-Level Results

Table 3 shows the 11 competencies required across all three seniority levels and the number of positions each competency appears in. These are the most frequently required competencies for customer education positions in SaaS organizations, irrespective of seniority level.

*Table 3.*  
Competencies Required for All Seniority Levels

Competency	Positions	Percentage of Total Positions
Instructional Design	21	84%
Evaluating Instructional Impact	12	48%
Communication	12	48%
Collaboration	11	44%
Technology Feedback & Design	9	36%
Product Knowledge	9	36%
Training Program Management	8	32%
Technical Communication & Documentation	7	28%
Growth & Scaling	7	28%
Driving Revenue & Business Value	6	24%
Learning Sciences	5	20%

*Position Level: Director*

Four director-level positions representing 43 tasks were analyzed. Of the competencies required, only one competency was shared by all four positions: *instructional design*. See Table 4 for the competencies required for director-level positions.

*Table 4.*  
All Competencies Required for Director-level Positions

Competency	Positions	Percentage of Director-Level Positions
Instructional Design	4	100%
LMS Administration	3	75%
Evaluating Instructional Impact	3	75%
Technical Communication & Documentation	2	50%
Product Knowledge	2	50%
Management	2	50%
Collaboration	2	50%
Technology Feedback & Design	1	25%
Learning Sciences	1	25%
Leadership	1	25%
Growth & Scaling	1	25%
Driving Revenue & Business Value	1	25%
Communication	1	25%
Coaching	1	25%

*Position Level: Manager*

Of the 12 managerial positions, *instructional design* was the most frequent competency and appeared in 11 of the positions; additional competencies are listed in Table 5.

*Table 5.*  
All Competencies Required for Manager-level Positions

Competency	Positions	Percentage of Manager-Level Positions
Instructional Design	11	92%
Communication	7	58%
Management	6	50%
Evaluating Instructional Impact	6	50%
Collaboration	6	50%
Instructional Delivery & Facilitation	5	42%
Project Management	4	33%
Driving Revenue & Business Value	4	33%
Coaching	4	33%
Training Program Management	3	25%
Technology Feedback & Design	3	25%
Technical Support	3	25%
Product Knowledge	3	25%
Growth & Scaling	3	25%
Data, Analytics, & Reporting	3	25%
Customer Service	3	25%

*Position Level: Specialist*

Of the 9 specialist-level positions, 2 occupation competencies appeared in most positions: *instructional design* and *instructional delivery & facilitation*. Additional competencies are displayed in Table 6.

*Table 6.*  
All Competencies Required for Specialist-level Positions

Competency	Positions	Percentage of Positions
Instructional Design	6	67%
Instructional Delivery & Facilitation	6	67%
Technology Feedback & Design	5	56%
Product Knowledge	4	44%
Communication	4	44%
Technical Communication & Documentation	3	33%
Growth & Scaling	3	33%
Evaluating Instructional Impact	3	33%
Collaboration	3	33%
Adaptability	3	33%
Technical Support	2	22%
Marketing	2	22%
Learning Sciences	2	22%
Customer Service	2	22%
Community Management	2	22%
Research	1	11%
Prospect Qualification	1	11%
Project Management	1	11%
Outreach	1	11%
Management	1	11%
Growth Mindset	1	11%
Driving Revenue & Business Value	1	11%
Data, Analytics, & Reporting	1	11%
Customer onboarding	1	11%

## Question 2 Results

*RQ2: What are considered to be the most important competencies that make customer education professionals in SaaS organizations effective?*

To answer this question, we can look at the data resulting from the second phase of the study, the Delphi method.

### **Delphi Method, Round 1**

In the first round of surveys, participants were given a list of all competencies, along with examples of their tasks (Appendix D), that emerged from the first phase and asked to rate each one as “important” or “not important” for the three different position levels. All 26 participants answered Round 1 of the survey. Those results are shown in Table 7.

Competencies highlighted in green in Table 7 reached consensus at 70% importance and were included in the competency model for that position level; those in red reached consensus at 70% unimportance and were eliminated. The remaining competencies (not highlighted) did not reach consensus as being important or unimportant and were included in the Round 2 survey for reconsideration.



*Table 7.*  
Results from Delphi Method, Round 1

Competency	Importance: Specialist	Importance: Manager	Importance: Director
Adaptability	96%	100%	92%
Coaching	38%	96%	92%
Collaboration	100%	100%	96%
Communication	100%	100%	100%
Community Management	42%	62%	35%
Conflict resolution	27%	96%	100%
Customer onboarding	89%	85%	46%
Customer service	100%	92%	73%
Data, analytics, and reporting	35%	100%	100%
Driving revenue and business value	38%	85%	100%
Evaluating Instructional Impact	50%	100%	96%
Growth & scaling	35%	92%	100%
Growth mindset	73%	96%	100%
Instructional delivery and facilitation	88%	65%	42%
Instructional design	69%	73%	50%
Leadership	24%	100%	100%
Learning sciences	48%	88%	77%
Lifelong Learning	92%	84%	88%
LMS Administration	62%	81%	23%
Management	4%	96%	100%
Marketing	23%	96%	96%
Outreach	24%	85%	81%
Product knowledge	96%	85%	58%
Project Management	80%	92%	73%
Prospect qualification	8%	54%	50%
Research	64%	77%	58%
Technical communication & documentation	100%	58%	19%
Technical support	62%	19%	8%
Technology feedback & Design	77%	89%	58%

The Round 1 survey also asked participants to suggest competencies that they would add to the list provided. 9 additional competencies were suggested (Table 8). These suggestions were included in the Round 2 survey, along with competencies that did not reach consensus in Round 1. Participants were asked to rate each competency's importance for the three position levels within one week.

*Table 8.*  
Additional Competencies Suggested During Round 1

Suggested Competency
curiosity
self-starter
empathy
user experience
elicitation/discovery
strategic thinking
change management
media production
graphic design

### **Delphi Method, Round 2**

19 participants completed the Round 2 survey, representing a 27% attrition rate. Of the suggested additions, respondents' ratings were mixed (see Table 9). Several competencies were rated as important by at least 70% of respondents and were added to the competency models. *Curiosity, motivation, empathy, and user experience* were rated as important by at least 70% of respondents for all three position levels and were thus added to the competency models for all three positions. *Strategic thinking* and *change management* were added to the competency models for manager-level and director-level positions, and *elicitation/discovery* was added to the

manager-level model. The remaining competencies were either rated as not important or no consensus was reached.

*Table 9.*  
Importance Ratings of Competencies Suggested in Round 1

Competency	Specialist	Manager	Director
curiosity	95%	100%	79%
motivation	95%	95%	89%
empathy	100%	100%	95%
user experience	94%	88%	71%
elicitation/discovery	63%	84%	58%
strategic thinking	37%	84%	95%
change management	11%	84%	84%
media production	68%	21%	5%
graphic design	58%	16%	5%

For the specialist level, 11 competencies did not reach consensus in Round 1 and were re-rated in Round 2. Those results, in Table 10, indicated that *instructional design* should be added to the competency model and that *coaching* and *growth & scaling* should be removed. The 8 remaining competencies had no consensus. Figure 12 shows the results of both rounds of the Delphi method for the specialist-level positions.

Table 10.  
Round 2 Delphi Study Results: Specialist

Competency	Importance	Result
Research	68%	No consensus
Coaching	16%	Not Important
Evaluating instructional impact	53%	No consensus
Instructional design	79%	Important
Learning sciences	53%	No consensus
LMS administration	63%	No consensus
Community management	47%	No consensus
Data, analytics & reporting	58%	No consensus
Driving revenue and business value	42%	No consensus
Growth and scaling	16%	Not Important
Technical support	47%	No consensus

Important	Adaptability	Empathy	Motivation
	Collaboration	Growth Mindset	Product Knowledge
	Communication	Instructional Delivery & Facilitation	Project Management
	Curiosity	Instructional Design	Technical Communication
	Customer Onboarding Customer Service	Lifelong Learning	Technology Feedback & Design User Experience
No Consensus	Community Management	Evaluating Instructional Impact	Research Technical Support
	Data, Analytics, & Reporting	Learning Sciences	
	Driving Revenue & Business Value	LMS Administration	
Not Important	Coaching	Outreach	
	Conflict Resolution	Prospect Qualification	
	Growth & Scaling		
	Leadership Management		
	Marketing		

Figure 12. Delphi Results for Specialist-level Positions

For the managerial level, four competencies did not reach consensus and were re-rated for Round 2. None of these re-rated competencies reached consensus in the second round (Table 11). Figure 13 shows the results of both rounds of the Delphi method for the manager-level positions.

*Table 11.*

Round 2 Delphi Study Results: Managers

Competency	Importance	Result
Instructional delivery and facilitation	63%	No consensus
Community management	68%	No consensus
Prospect qualification	53%	No consensus
Technical communication & documentation	67%	No consensus

Important	Adaptability	Data, Analytics, & Reporting	Instructional Design	Project Management
	Change Management	Elicitation/Discovery	Leadership	Research
	Coaching	Empathy	Learning Sciences	Strategic Thinking
	Collaboration	Evaluating Instructional Impact	Lifelong Learning	Technology Feedback & Design
	Communication	Growth & Scaling	LMS Administration	User Experience
	Conflict Resolution	Growth Mindset	Management	
	Curiosity	Instructional Design	Motivation	
	Customer Onboarding		Outreach	
	Customer Service		Product Knowledge	
	No Consensus	Community Management	Technical Communication & Documentation	
Instructional Delivery & Facilitation				
Prospect Qualification				
Not Important	Technical Support			

*Figure 13.* Delphi Results for Manager-level Positions

In Round 1, 8 competencies did not reach a consensus for director-level positions. Those competencies were re-rated in Round 2 (Table 12). Two competencies, *research* and *technology feedback & design*, were added; *instructional delivery & facilitation* was removed, and the remaining competencies had no consensus.

*Table 12.*  
Round 2 Delphi Study Results: Directors

Competency	Importance	Result
Research	74%	Important
Instructional delivery & facilitation	26%	Not Important
Instructional design	42%	No consensus
Community management	42%	No consensus
Customer onboarding	53%	No consensus
Product knowledge	63%	No consensus
Prospect qualification	47%	No consensus
Technology feedback & design	79%	Important

Figure 14 shows the results of both rounds of the Delphi method for the director-level positions.

Important	Adaptability	Data, Analytics, & Reporting	Leadership Learning Sciences	Project Management
	Change Management	Driving Revenue	Lifelong Learning Management	Research
	Coaching	Empathy	Marketing	Strategic Thinking
	Collaboration	Evaluating Instructional Impact	Motivation	Technology Feedback & Design
	Communication	Growth & Scaling	Outreach	User Experience
	Conflict Resolution	Growth Mindset		
	Curiosity			
	Customer Service			
No Consensus	Community Management	Product Knowledge		
	Customer Onboarding	Prospect Qualification		
	Instructional Design			
Not Important	Instructional Delivery & Facilitation	Technical Communication & Documentation		
	LMS Administration	Technical Support		

Figure 14. Delphi Results for Director-level Positions

### Delphi Method, Overall Results

Overall, the results from the Delphi study indicate that 26 results are important for the director level; 31 were considered important for the manager level; and 17 were considered important for the specialist level. Of those competencies, 11 are shared across all three positions; these are considered to be the most important competencies for customer education positions in SaaS organizations. These results can be seen in Figure 15.

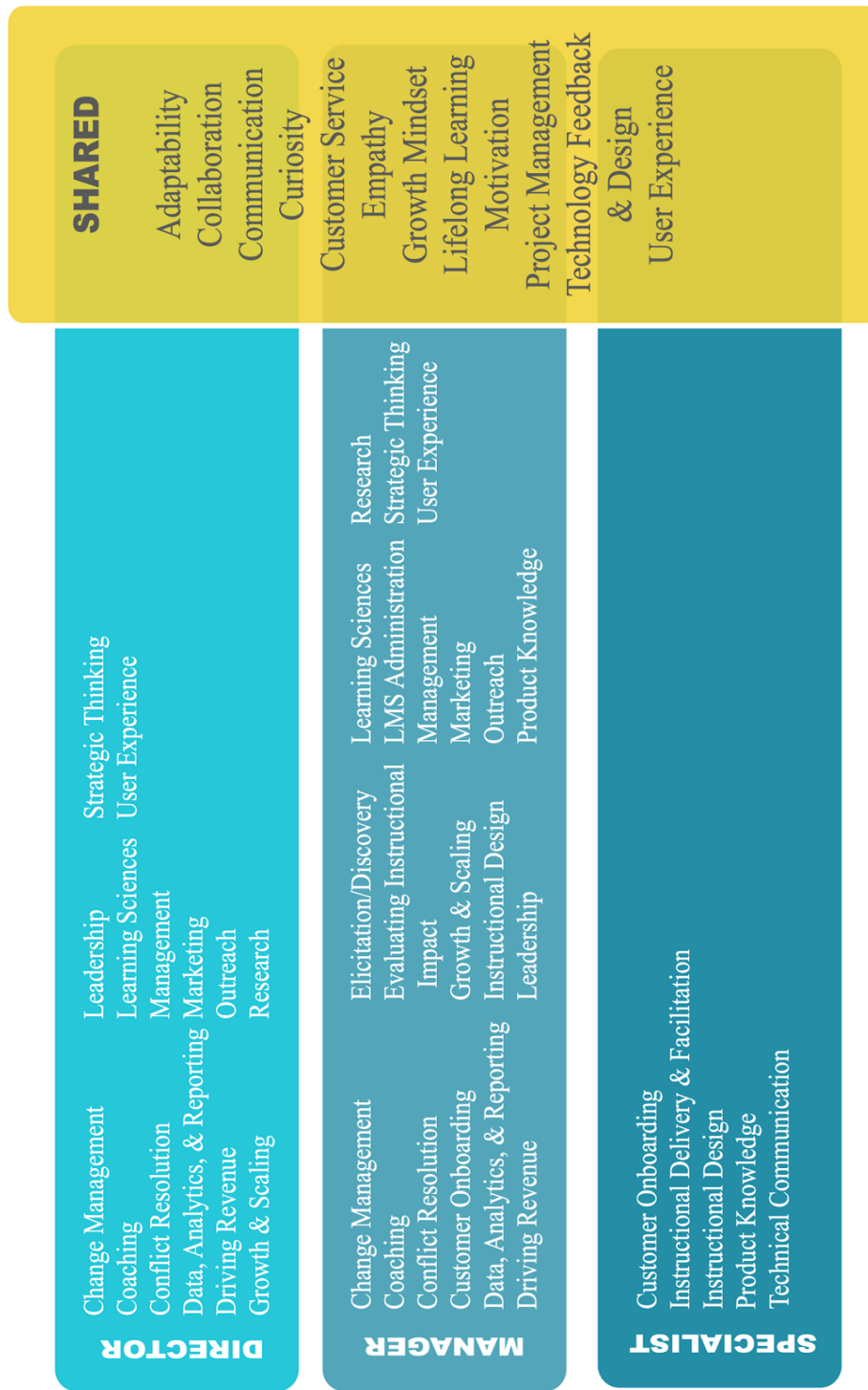


Figure 15. Overall Delphi Results



## Core Competencies

This study has identified the most frequently required and most important competencies for customer education professionals. The first phase of this study provided information about which skills were most **frequently required** for customer education positions; the second phase provided information about which skills were **most important** for customer education positions. By comparing the results from both phases, a core set of competencies for each seniority level emerges. Core competencies represent the key knowledge, skills, and abilities that enable a person to operate and function most effectively in an organization (Lahti, 1999).

### Position Level: Director

For the director-level positions, which represented only 14% of the positions sampled, 10 core competencies are shared from the results from Phases 1 and 2 (Figure 16). These core competencies represent the knowledge, skills, and abilities that a director leading a customer education initiative should have. *Collaboration* and *communication* are foundation-level skills for customer education directors; on an industry level, *driving revenue, growth & scaling*, and *technology feedback & design* are considered core competencies. At the occupation level, *coaching, evaluating instruction, leadership, and management* are found.

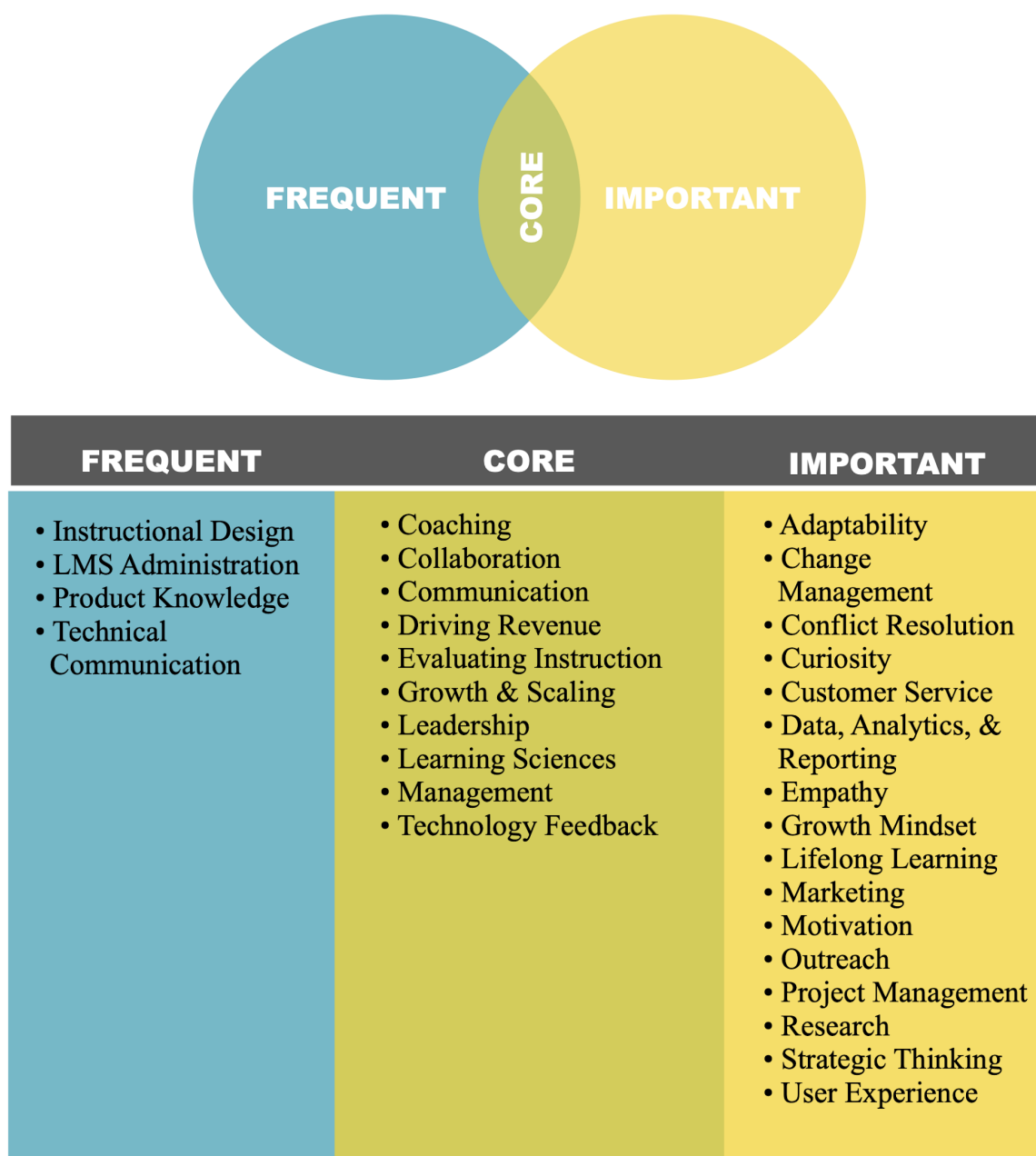


Figure 16. Combined Results, Director-level Positions

Of these core competencies, 2 are foundation competencies, 3 are industry competencies, and 4 are occupation competencies. The resulting core competency model for Customer Education Directors can be seen in Figure 17.

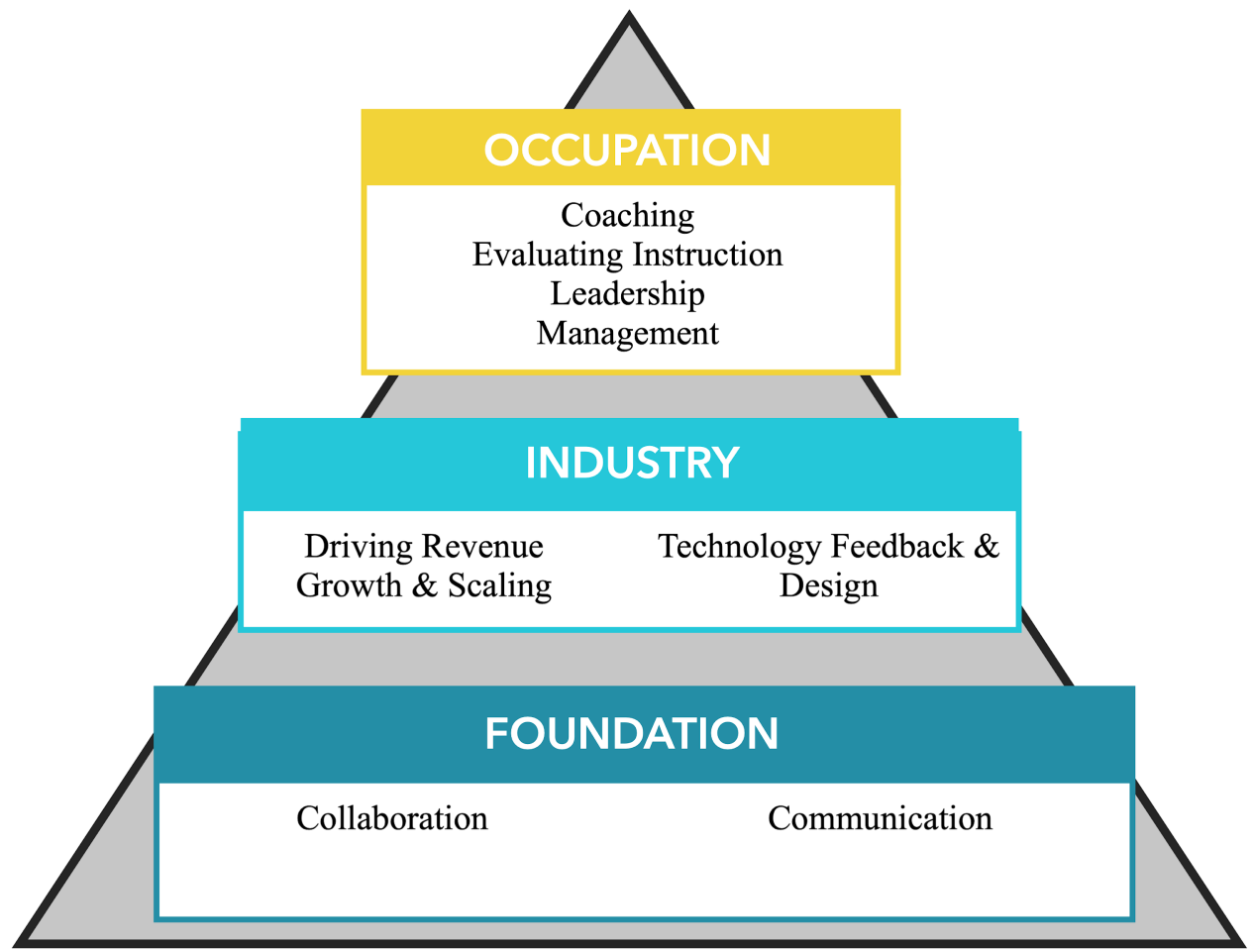


Figure 17. Core Competency Model, Customer Education Director

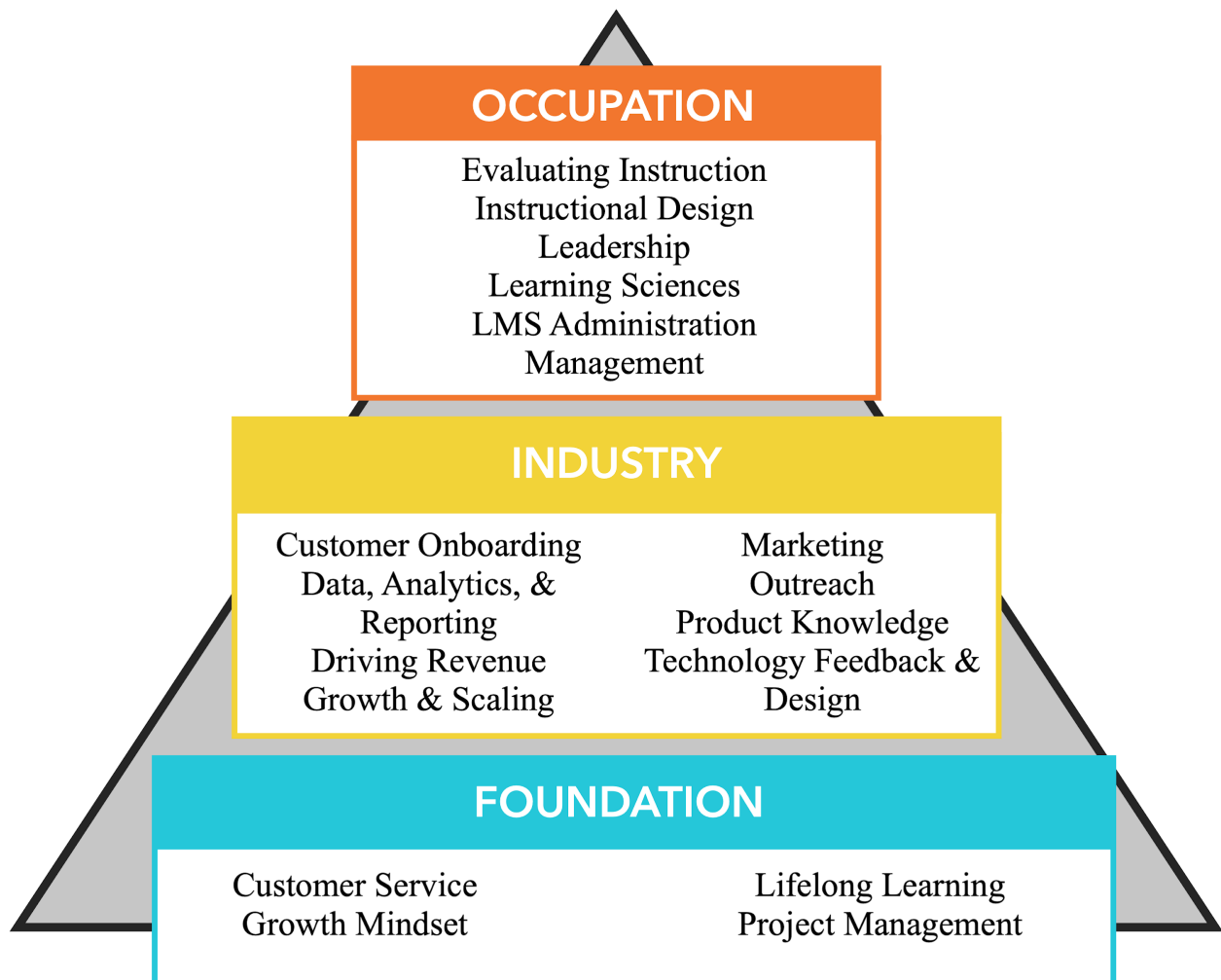
### Position Level: Manager

For the manager-level positions, which represented 54% of the positions sampled, 17 core competencies are shared from the results from Phases 1 and 2 (Figure 18). These core competencies represent the knowledge, skills, and abilities that a manager, leading a team charged with customer education functions, should have.

FREQUENT	CORE	IMPORTANT
<ul style="list-style-type: none"> <li>• Community Management</li> <li>• Instructional Delivery &amp; Facilitation</li> <li>• Technical Communication &amp; Documentation</li> <li>• Technical Support</li> </ul>	<ul style="list-style-type: none"> <li>• Customer Onboarding</li> <li>• Customer Service</li> <li>• Data, Analytics, &amp; Reporting</li> <li>• Driving Revenue</li> <li>• Evaluating Instruction</li> <li>• Growth &amp; Scaling</li> <li>• Growth Mindset</li> <li>• Instructional Design</li> <li>• Learning Sciences</li> <li>• Lifelong Learning</li> <li>• LMS Administration</li> <li>• Management</li> <li>• Marketing</li> <li>• Outreach</li> <li>• Product Knowledge</li> <li>• Project Management</li> <li>• Technology Feedback &amp; Design</li> </ul>	<ul style="list-style-type: none"> <li>• Curiosity</li> <li>• Elicitation/Discovery</li> <li>• Empathy</li> <li>• Leadership</li> <li>• Motivation</li> <li>• Research</li> <li>• Strategic Thinking</li> <li>• User Experience</li> </ul>

Figure 18. Combined Results, Manager-level Positions

Of the core competencies for Managers, 4 are Foundation competencies, 8 are Industry competencies, and 6 are Occupation competencies; the resulting competency model for Customer Education Managers can be seen in Figure 19.



*Figure 19.* Core Competency Model, Customer Education Manager

### Position Level: Specialist

For the specialist-level positions, which represented 33% of the positions sampled, 12 core competencies are shared from the results in Phases 1 and 2 (Figure 20). These core competencies represent the knowledge, skills, and abilities that an individual contributor, on a team charged with customer education functions, should have.

FREQUENT	CORE	IMPORTANT
<ul style="list-style-type: none"> <li>• Community Management</li> <li>• Data, Analytics &amp; Reporting</li> <li>• Driving Revenue</li> <li>• Evaluating Instruction</li> <li>• Growth &amp; Scaling</li> <li>• Learning Sciences</li> <li>• Management</li> <li>• Marketing</li> <li>• Prospect Qualification</li> <li>• Research</li> <li>• Technical Support</li> </ul>	<ul style="list-style-type: none"> <li>• Adaptability</li> <li>• Collaboration</li> <li>• Communication</li> <li>• Customer Onboarding</li> <li>• Customer Service</li> <li>• Growth Mindset</li> <li>• Instructional Delivery &amp; Facilitation</li> <li>• Instructional Design</li> <li>• Product Knowledge</li> <li>• Project Management</li> <li>• Technical Communication &amp; Documentation</li> <li>• Technology Feedback &amp; Design</li> </ul>	<ul style="list-style-type: none"> <li>• Curiosity</li> <li>• Empathy</li> <li>• Lifelong Learning</li> <li>• Motivation</li> <li>• User Experience</li> </ul>

Figure 20. Combined Results, Specialist-level Positions

Of the core competencies for the specialist-level position, six are Foundation competencies, four are Industry competencies, and the remaining two are Occupation competencies (Figure 21).

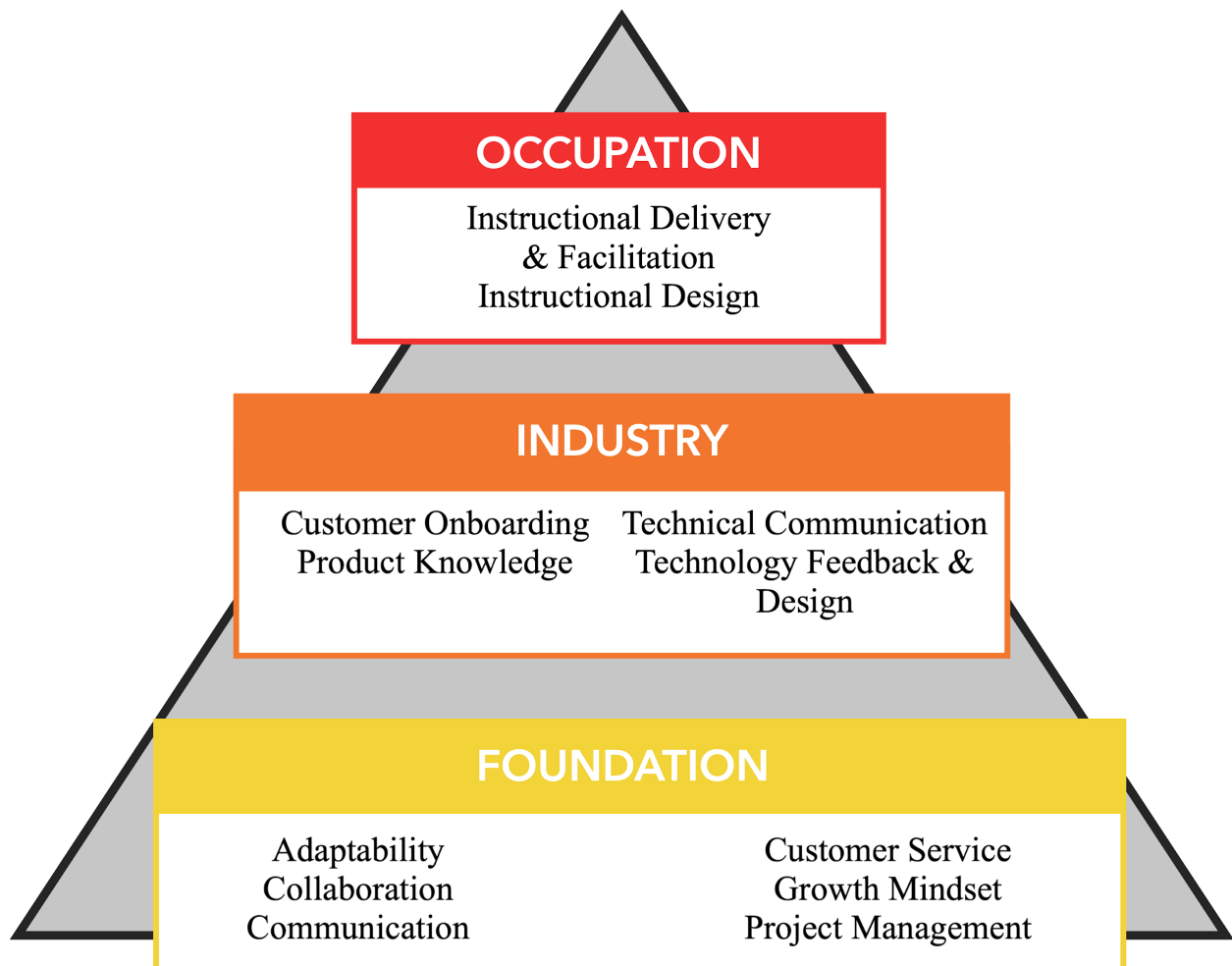


Figure 21. Core Competency Model, Customer Education Specialist

### Core Competencies for Customer Education Professionals: A Model

By combining the core competencies for all seniority levels, a clear picture of the core competency model for customer education professionals emerges (Figure 22).

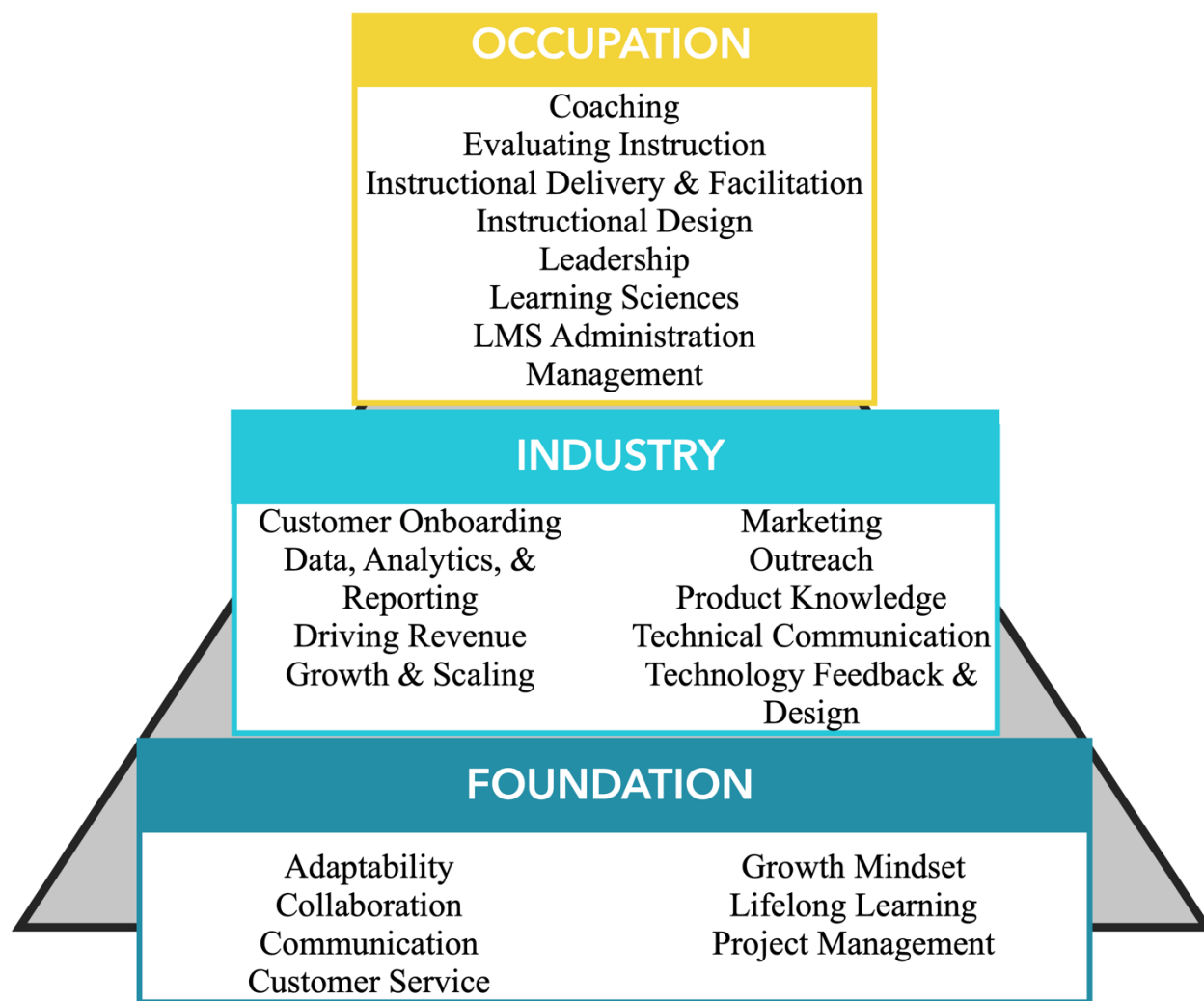


Figure 22. Core Competencies for All Customer Education Positions



In this model, it is evident that there are a multitude of requirements for customer education professionals, some that extend beyond the traditional competencies for instructional design professionals. A recent study of competencies for instructional design professionals (Klein & Kelly, 2018) identified the following as core competencies:

- Instructional design
- Instructional technology
- Communication
- Management
- Personal skills

In comparing the results from Klein and Kelly (2018) to the findings from this study, the differences between the customer education professional and the instructional design professional emerge. Customer education professionals have requirements that fall outside the scope of the traditional instructional designer position, such as *driving revenue, growth & scaling*, and *marketing*. In this model we can clearly see the influence of the marketing field on customer education; where traditional instructional design is measured by its impact on employees, customer education is tasked with positively and directly influencing an organization's bottom line.

## **5 DISCUSSION**

This final chapter provides a summary of the major findings from this study and the implications of those findings. Study limitations and suggestions for future research are also provided.

## Summary & Conclusions

This study has provided greater insight into the competencies that are most frequently required and are considered to be the most important for customer education professionals in Software-as-a-Service organizations by analyzing 31 job announcements and surveying 26 customer education practitioners. In general, the results demonstrate that:

1. Customer education professionals are required to possess a wide range of competencies, with *instructional design, evaluating instructional impact, communication, collaboration, technology feedback and design*, and *product knowledge* being the most frequently required in job advertisements.
2. Customer education professionals consider *adaptability, collaboration, communication, customer service, growth mindset, lifelong learning, project management*, and *technology feedback & design* to be the most important requirements for all seniority levels, and also suggested *curiosity, motivation, empathy*, and *user experience* as important competencies for all positions.
3. Foundational core competencies for any professional working in a customer education role in a SaaS organization include *adaptability, collaboration, communication, customer service, growth mindset, lifelong learning*, and *project management*.
4. Industry core competencies for any professional working in customer education in a SaaS organization include *customer onboarding, data, analytics, & reporting, driving revenue, growth & scaling, marketing, outreach, product knowledge, technical communication*, and *technology feedback & design*.
5. Occupation-level core competencies for professionals in SaaS-based customer education positions include *coaching, evaluating instruction, instructional delivery & facilitation*,

*instructional design, leadership, learning sciences, LMS administration, and management.*

From a career development perspective, we can conclude that in order to move from one level to the next, the development of specific competencies would be required. To determine that skill progression, we can compare each level of the competency models.

- To move from specialist to manager, the customer education professional should consider developing the following competencies:
  - *Data, analytics & reporting*
  - *Driving revenue*
  - *Growth & scaling*
  - *Marketing*
  - *Outreach*
  - *Product knowledge*
  - *Evaluating instruction*
  - *Leadership*
  - *Management*
  - *Learning sciences*
  - *LMS administration*
- To move from manager to director-level positions, the customer education professional should focus on developing *coaching* skills.

### **Implications**

There are several implications for this study, for a wide range of audiences: practitioners, employers, students, professional organizations, and academic programs.

#### **Practitioners**

Customer education professionals can use the results from this study to help guide their professional development and career planning activities. For those entering the field of customer education, this study provides necessary information about the skills needed to be successful as

an individual contributor. For those in the field looking to advance in their role, the results from this study provide an effective roadmap for training and skill development.

### **Employers**

Because the field of customer education is still nascent and has been largely ignored in the research, employers looking for standards regarding job descriptions and position requirements may find themselves empty-handed. The results from this study can serve as a useful reference in the development of job ads, job descriptions, and even performance standards. Employers can also use the core list of competencies for each position as a guide or checklist during the interview process.

### **Students**

This study provides insight for students in instructional design & technology (IDT) programs. Because the customer education role has elements of instructional skills, IDT program graduates would make excellent candidates for these positions. However, additional skills, like *technical communication* and *project management*, would enhance the likelihood of success for IDT graduates seeking entry-level customer education positions. By reviewing the lists of frequently required and most important competencies, students can identify which areas they should develop to be prepared for a role in customer education.

### **Professional Associations**

In the field of learning and development there are several professional organizations, like the Association for Talent Development (ATD), that provide professional education, conferences, and networking opportunities. These organizations often develop competency models (like the one developed by ATD, shown in Chapter 1). There is not yet a professional association for customer education professionals. However, when one is formed, the

development of a competency model will likely be undertaken. This research can serve as a jumpstart to the development of a more formal customer education competency model and as a foundation for the research around standardizing the customer education profession.

### **Academic Programs**

This study provides an opportunity for forward-thinking colleges and universities to customize their curriculum to prepare their IDT students for roles in the customer education field. Based on the findings from this study, it is clear that customer education specialists require more than just basic instructional design and instructional delivery skills. IDT program coordinators may consider the addition of instructional components for skills like *technical communication* or *technology design* to their program. There is a documented need for the IDT professional who also understands marketing, technology adoption, project management, and user experience concepts. To prepare professionals for this hybrid role, IDT program coordinators should coordinate and partner with their colleagues in business schools and information technology fields. Finally, academic program coordinators can consider these study results to more fully understand the gap between the demands of the job market and the skills of current students.

### **Limitations & Opportunities for Future Research**

This study, as expected, has limitations that present opportunities for future researchers. In terms of the required knowledge, skills, and abilities for customer education professionals, this study provides a snapshot from a specific period in time for one specific type of organization, the SaaS organization. The results from this study can serve as a baseline for future researchers who wish to further explore customer education roles in a wide range of organization types and across sectors.

One additional limitation of this study is created by the collection of job announcements. It is unclear who created these announcements -- a member of the human resources team? Or a customer education professional? -- and what level of knowledge this person had of the competencies needed for customer education. These job announcements were selected in good faith, assuming that they were accurate representations of the knowledge, skills, and abilities needed for success. Future researchers may consider focusing solely on job announcements and validating those frequently required competencies with hiring managers.

Future researchers may also consider expanding the Delphi study and gathering more data about their participants. Because this study sought to establish a baseline, there was no emphasis or weighting placed on seniority levels of the Delphi participants. However, future research should consider the roles and responsibilities of the participants, as well as their years of experience in the field, as indicators of their expertise.

This study also draws distinctions between customer education and instructional design and provides some analysis of the differences between the two fields. These distinctions could be examined in future research to further understand the similarities and differences between the competencies needed for employee training professionals and customer education professionals.

This research study does not answer all questions related to the customer education field. Additional research will be needed to confirm the results from this study, to more fully grasp the future of customer education, to identify trends affecting the future of the field, and to monitor those trends over time. This study represents just the beginning of the investigation into this emerging field.

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## APPENDICES

### APPENDIX A. RECRUITMENT EMAIL

Dear <insert participant's name here>,

I would like to invite you, as an expert in your field, to participate in a study that aims to identify the competencies needed for customer education professionals. I am a doctoral student at Georgia State University, and this research is part of my dissertation study.

I realize that you are likely very busy, but because of the important input you can bring to the project I hope that you will agree to participate. In practical terms, this would require no more than thirty minutes of your time, spread out over three separate occasions, and would simply require you to complete three surveys indicating your agreement on certain statements.

This study is completely voluntary, and while there are no monetary benefits, I will email you a copy of the customer education competency model that emerges from the research. To participate, please visit <insert URL here>.

If you have any questions about this study, please email me at [jhuprich1@student.gsu.edu](mailto:jhuprich1@student.gsu.edu).

Thank you very much for your time and consideration.

Sincerely,

Julia Huprich

## **APPENDIX B. DELPHI STUDY INFORMATION SHEET & CONSENT FORM**

We would like to invite you to take part in a Delphi consensus study. Before you decide whether or not you would like to take part, it is important for you to consider why the research is being done and what it will involve. Please read this information sheet carefully.

**What is a Delphi study?** The Delphi technique seeks to obtain consensus on the opinions of experts through a series of structured questionnaires. As part of the process, the responses from each round are fed back in summarised form to the participants who are then given an opportunity to respond again to the emerging data. The Delphi is therefore an iterative multi-stage process designed to combine opinion into group consensus.

**What is the purpose of the study?** Little is currently known about the knowledge, skills, and abilities required to support customer education initiatives. The purpose of this study is to discover what competencies are required for success by customer education professionals, with the hopes that the competency model resulting from this study could inform future training, management, and human resources practices.

**Why have I been invited to take part?** As an expert practitioner in the field of customer education, your knowledge is a valuable resource. Specifically, we would like to ask for your views on the results of a job announcement analysis that has yielded a series of competencies for customer education professionals. We plan to recruit 15-20 participants who meet the following criteria:

- Over the age of 18

- Have served in a role providing customer education or managing the function for at least three years
- Work at a SaaS organization

**What will I be asked to do if I take part?** We are inviting you to participate as a Delphi panel member. This would involve completing a brief questionnaire, rating possible customer education competencies in an online survey. It is envisaged that this should take approximately 10 minutes. You would subsequently receive a summary of the group's responses and a further online questionnaire to re-rate the original list of competencies. This process would continue until a group consensus is achieved or three Delphi rounds have been completed. In order to allow timely conclusion of the study we would respectfully request a response time of 1 week for completion of each round.

**Confidentiality.** Your answers will be linked to your name and email address, but only the researcher will have access to that data. All responses received in the study will be strictly confidential, and your identity will not be divulged. Direct quotes to free-text answers may be used as part of the study report or later Delphi iterations, but these will not be traceable back to you.

**Consent.** To indicate your consent, please continue with the study by clicking here. Please note that participation in this study is voluntary, and you may opt to skip any question you don't want to answer.

### **APPENDIX C. DELPHI STUDY PERSONAL INFORMATION SURVEY**

1. Are you currently over the age of 18? Yes/no
2. Have you served in a role providing or managing a customer education function for at least three years? Yes/no
3. Do you currently work or have you previously worked at a SaaS organization? For the purpose of this study, a SaaS organization is defined as one whose primary offering is a cloud-based software service, often through a license model that is subscription-based.  
Yes/no

If all answers are yes, proceed with the competency survey using data gathered from the job announcement content analysis.

## APPENDIX D. COMPETENCIES

Competency Domain	Competency	Example
Foundation	Adaptability	Ability to thrive in a fast-paced, unpredictable environment
Occupation	Coaching	Committed to the team's professional development and growth, proactively help to develop and champion each team member's success as part of a comprehensive development plan
Foundation	Collaboration	Demonstrated ability to work with employees throughout an organization, including product managers, customer success, marketing personnel, and management
Foundation	Communication	Clearly and concisely explain, verbally and in writing, potentially complex technical issues to diverse audiences
Industry	Community Management	Develop and maintain social media groups including content calendar and engagement
Foundation	Conflict resolution	Great mediation skills and experience de-escalating customers and colleagues
Industry	Customer onboarding	Manage a portfolio of customers during their first stages of using the platform
Foundation	Customer service	Experience building and maintaining relationships, while working to mitigate churn and drive engagement and renewals
Foundation	Data, analytics, and reporting	Convert general data and findings into specific, actionable recommendations, and develop and use dashboards to visualize business outcomes
Industry	Driving revenue and business value	Develop educational content to support the entire customer lifecycle and drive business with the goal of improving account retention and decreasing customer churn

Occupation	Evaluating Instructional Impact	Identify key metrics for assessing training effectiveness, reporting on program health and iterating training approach and materials to constantly improve training quality
Industry	Growth & scaling	Drive retention and growth among customers by understanding their business needs and helping them succeed
Foundation	Growth mindset	Be proactive and entrepreneurial with an eagerness to continually improve
Occupation	Instructional delivery and facilitation	Deliver engaging and interactive Instructor Led Training (ILT) experiences to customers onsite and online
Occupation	Instructional design	Develop learning curricula that meet the needs of customers across different use cases, functions and modes of consumption
Occupation	Leadership	Lead and motivate people and encourage teamwork, communicate effectively with senior/executive management, and define a clear vision of what determines a successful solution for the customer and for the company
Occupation	Learning sciences	Demonstrated understanding and application of effective learning strategies
Foundation	Lifelong Learning	Keep abreast of industry trends, research, and recommend best practices, KPIs and benchmarks
Occupation	LMS Administration	Select and implement a learning management system to enable self-paced and virtual instructor-led training
Occupation	Management	Capably articulate the team's strategy and operating plan ensuring that all team members understand their roles and accept and are accountable for their responsibilities.
Industry	Marketing	Implement programs and work with stakeholders to ensure awareness of customer education offerings

Industry	Outreach	Define who needs to learn about the platform and how to reach them effectively
Industry	Product knowledge	Build encyclopedic knowledge of the functionality and capabilities of the platform, keeping pace with the continued evolution of product features and capabilities
Foundation	Project Management	Expertly manages projects from ideation through execution and evaluation
Industry	Prospect qualification	Work with sales and marketing to review training attendees to determine prospect qualification and ensure proper follow up
Foundation	Research	Periodically research and produce insights for key subject areas
Industry	Technical communication & documentation	Develop support documents / scaffolding materials to support client success
Industry	Technical support	Efficiently deliver solutions to customers by email and live chat and drive results by meeting or exceeding individual and team productivity and quality goals
Industry	Technology feedback & Design	Identify opportunities for product enhancement; work with the product and engineering teams to implement key areas of improvement

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## APPENDIX E. JOB ANNOUNCEMENTS SAMPLED

<b>Position</b>	<b>Organization</b>
Adoption and Training Manager	Vidyo
Associate Manager, Customer Education	Zendesk
Client Learning Specialist	Centro
Customer Education and Content Specialist	Opal
Customer Education and Enablement Specialist	Medallia
Customer Education and Knowledge Manager	GamEffective
Customer Education and Training Specialist	Hybrent
Customer Education Expert Manager	LevelSet
Customer Education Manager	AppAnnie
Customer Education Manager	Asana
Customer Education Manager	Enverus
Customer Education Manager	Teachable
Customer Education Manager	WalkMe
Customer Education Programs Manager	Segment
Customer Education Specialist	Bonusly
Customer Education Specialist	Widen
Customer Educator	Teachable
Customer Onboarding Specialist	Boundless
Customer Success and Training Specialist	MS SHIFT
Customer Support Training Manager	Wish
Customer Training Manager	Airtable
Customer Training Specialist	ActiveCampaign
Customer Training Specialist	Miro
Director of Customer Education	Mattermost
Director, Product Learning and Education	LiveVox
Global Head of Scaled Customer Education	LinkedIn
Manager, Customer Education	ActiveCampaign
Sr. Manager, Customer Education	Commvault
Sr. Solutions Product Manager, Customer and Partner Education	GitHub
Sr. Manager, Product Training	Seismic

## APPENDIX F. DELPHI PARTICIPANTS

Title	Organization
Senior Customer and Partner Training Specialist	JumpCloud
Senior Manager, Curriculum and Content Development	Jamf
Head of Customer Education	Asana
Senior Manager Mailchimp Academy	Mailchimp
Product Manager, Customer Education	Facebook
Lead, Customer Education	Bolt Financial
Content Strategist, Customer Education	UserTesting
Customer Success Manager	Encircle, Inc.
Director, Talent	Billtrust
Freelance Customer Education Content Developer	self-employed
Digital Transition Learning and Development	Nike
Sr. Manager - Customer Education	Outreach
Customer Enablement Manager	Guru (getguru.com)
Manager of Product Education	Finalsite
Director of Platform Strategy	Intellum
Senior Services & Education Manager	Opal
Sr. Instructional Designer	Seismic
Sr Training Program Manager	Amazon
Senior Principal Instructor/Cloud Delivery Lead	Oracle University
Managing Director	Zenya Learning LLC
Director of Customer Education	Heap
Customer Education Re-evolutionary	MomentStorm Media Inc.
Manager - Customer Success Enablement	Top Hat Monocle, Corp.
Customer Learning Manager	ShootProof
Global Enterprise Customer Learning and Enablement Leader	Slack Technologies, Inc
Sr Manager, Product Marketing	Skilljar

**APPENDIX G. GEORGIA STATE UNIVERSITY IRB APPROVAL LETTER**

## INSTITUTIONAL REVIEW BOARD

Mail: P.O. Box 3999  
Atlanta, Georgia 30302-3999  
Phone: 404/413-3500

In Person: 3rd Floor  
58 Edgewood  
FWA: 00000129



February 03, 2020

Principal Investigator: Jonathan D Cohen

Key Personnel: Cohen, Jonathan D; Huprich, Julia C

Study Department: Learning Sciences

Study Title: COMPETENCIES FOR CUSTOMER EDUCATION PROFESSIONALS IN SAAS ORGANIZATIONS

Review Type: Exempt Amendment

IRB Number: H20356

Reference Number: 358750

Approval Date: 12/13/2019

Status Check Due By: 12/12/2022

Amendment Effective Date: 01/30/2020

The Georgia State University Institutional Review Board reviewed and **approved** the amendment to your above referenced Study.

This amendment is approved for the following modifications:

- The survey has been updated to reflect data analysis from phase 1. Minor changes have also been made to the consent form.

The amendment does not alter the approval period which is listed above and a status update must be submitted at least 30 days before the due date if research is to continue beyond that time frame. Any unanticipated problems resulting from participation in this study must be reported to the IRB through the Unanticipated Problem form.

For more information, visit our website at [www.gsu.edu/irb](http://www.gsu.edu/irb).

Sincerely,

A handwritten signature in black ink that reads "Jamie f Zaikov".

Jamie Zaikov, IRB Member