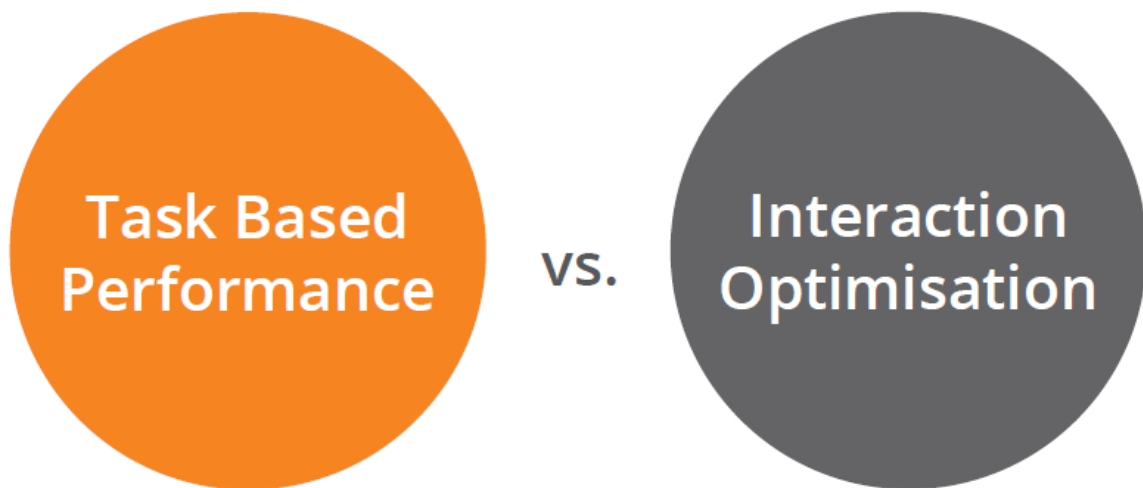


Customer Experience Capability and Capacity Framework

A model for building adaptive goal based
customer advocates



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CX CAPABILITY AND CAPACITY FRAMEWORK

1. Introduction

All customer experiences are influenced by a complex set of interactions between a customer, the organisation and the employee. The most dynamic and unpredictable element of any customer experience involves human interaction.

Both customers and employees are shaped by past experiences, personality types, states of mind and personal biases. As a result each customer interaction is a unique event, the outcome of which cannot be scripted.

Current approaches to customer service training attempt to build competency through the acquisition of discreet skill sets. Typical content may include “Overcoming Objections”, “Managing Difficult Customers”, “Identifying Sales Opportunities”, “Building Rapport” and many other elements required to perform effectively in a customer service environment. The focus is on teaching people to perform tasks rather than achieve goals.

This learning approach does not recognise the complexity of customer interactions. No customer interaction involves a single competency. All customer interactions are complex and multidimensional requiring the application of many different competencies simultaneously. Yet, current learning systems continue to teach a linear based approach where one acquires a discreet set of skills. Often, there is no time dedicated to the integration of these skills into a homogeneous approach to customer advocacy.

Customer service training of this type is irrelevant in a customer driven organisation and is unlikely to develop customer advocacy in employees. Customer service training must develop a core set of capabilities that can be applied dynamically to achieve an outcome that meets both the customer’s and the organisation’s goal. This requires an adaptive approach to each customer interaction that is self-directed as opposed to scripted interactions.

The Customer Experience Capability and Capacity Framework (CXF) is a methodology for developing adaptive and resilient customer advocates.

The CXF draws on research from varied areas such as self-regulation, cognitive science, mindsets, digital learning, andragogy (adult learning theory) and neuroscience. A critical part of the CXF is helping learners explore approaches to how learning occurs and neuroplasticity.

The CXF is based on contemporary research about how the brain learns and thinking occurs and applies this to improving the customer experience. As such, the CXF focuses less on content and more on an employee’s capacity to learn, and to strengthen and develop their brains. The underlying principles of the CXF are based on the belief that people don’t come with fixed intelligence but experience brain changes every step of the way while learning. This can be achieved through the development of self-efficacy (Bandura, 1986) and growth mindsets (Dweck, 2007). Self-

efficacy refers to “beliefs in one’s capabilities to organize and execute courses of action required in managing prospective situations. Efficacy beliefs influence how people think, feel, motivate themselves, and act” (Bandura 1995:2).

The theory states that high self-efficacy is necessary for a learner to choose to exert effort and persist in doing so to overcome obstacles and setbacks to performing a task effectively. Self-efficacy can be increased by self-persuasion or persuasion by a significant other. Dweck’s work on mindsets builds on this notion and creates a practical framework for thinking about intelligence and personality. In short, a fixed mindset has a fixed view of intelligence whereas a growth mindset sees intelligence as changeable.

2. Overview of the CX Capability and Capacity Framework

One of the core beliefs that underpins the CXF is that Investment in people’s capacity (the ability to understand and achieve a goal through resilience, will and way finding) as opposed to people’s capability (the ability to perform a task) holds the key to creating customer advocates.

The CXF debunks the traditional approach to learning where 90% of the investment occurs in the first 90 days. We all learn and develop over time. We know that pacing and spacing is required to avoid cognitive overload and to embed learning. New employees are overwhelmed learning the basic tasks. Developing deep capacity when learners are exerting effort to learn basic tasks isn’t possible. To address this issue the CXF employs a Learning Scaffold to develop skill over time.

While the CXF can be applied to any training approach it has been designed with a particular focus on digital learning. The underlying assumption is that the learners will likely be geographically dispersed, time restricted and large in number. These factors engender an ongoing digital learning experience that supports the employee throughout their employment lifecycle.

The CX Learning Algorithm has been designed to allow each learner to proceed at his own pace. The algorithm also assesses the state of the individual and triggers micro-interventions when it senses a learner is struggling or procrastinating.

There are three core elements to the CXF as follows:

CX Competency Segments – A methodology for mapping the unique products, services, job types and culture to design a learning experience that builds resilient and adaptive employees.

CX Learning Scaffold – The CXF employs a learning scaffold to build capability over time by facilitating a learning journey that commences with task achievement and progresses through to a goal achievement. There are four levels of the CX Learning Scaffold: Foundation, Competent, Expert and Master.

CX Capacity Tools - At the core of the CXF is the CX Capacity Tools that develop a learner’s ability to adapt to change as opposed to rote learning of discreet skills. The CX Capacity Tools aid the learner’s progression through the four levels of the CX Learning Scaffold. The CX Learning Algorithm forms part of the CX Capacity Tools.

Each element of the CXF is described in detail in the following sections of this document. Mastery of the CXF by an individual will lead to higher customer satisfaction and customer retention levels, greater employee engagement and employee retention, and increased revenue. Organisations should measure and track these elements of the service environment to assess the impact of the CXF on their business.

3. Introduction to the CX Competency Segments

The CX Capability and Capacity Framework (CXF) is a methodology for the development of capability and capacity in high customer contact roles that directly affect the customer experience (CX). The CXF is comprised of a number of CX Competency Segments. Each CX Competency Segment develops a core capability required by an employee to master customer interactions and align the customer's goals with the organisation's goals and objectives.

The CX Competency Segments is a flexible methodology for mapping the unique products, services, job types and culture of an organisation to design a digital learning experience that builds resilient and adaptive employees with a growth mindset. It develops a goal orientation to each customer interaction as opposed to a transactional outcome.

The CX Capability and Capacity Framework is comprised of 5 core CX Competency Segments. These segments represent the capabilities an employee must develop in order to deliver an outstanding customer experience. The CX Competency Segments are not fixed and can be compressed or expanded to suit the specific needs of an organisation and its employees. The five core CX Competency Segments are:

ESSENTIALS
GOAL SETTING
CONNECTING
NAVIGATING
EMPOWERING

While each segment has a discreet set of objectives they are not intended to be linear. Although many interactions will progress sequentially from one segment to another the model is intended to be fluid. One can pass back and forth between the segments, leap from one segment to another and repeat segments as required to achieve the CX Interaction Goal (CX Goal).

3.1. ESSENTIALS

Segment Definition

This segment seeks to establish the transactional competency of an employee. The focus of this segment is to build competency to perform a role and is highly customised to each employee's role within a specific function within an organisation. The objective of this segment is to familiarise the employee with an organisation's products and services, systems, processes and policies.

Core Essentials Modules

Products – establish competence in regard to the organisation’s products including pricing models, features and attributes. This includes the entire product range including retail products the organisation distributes.

Example, a mobile communications company would sell a number of handsets, tablets and other products.

Services - establish competence in the organisation’s services including the features and benefits and the ability to match these to a specific customer profile.

Example, a mobile communications company would offer many different data and voice packages to support the products being sold.

Systems – establish competence using the organisation’s systems to fulfil customer requests and complete routine transactions.

Processes – the actions, both inside and outside, the systems required to complete a transaction.

Policies – establish competence in understanding and applying the organisation’s policies within the context of the employee’s job role.

Example, establish an understanding of the return policy for purchases.

3.2. GOAL SETTING

Segment Definition

This segment seeks to establish an understanding of an organisation’s goals and objectives in regard to a customer’s experience. In addition, this segment teaches the employee to establish customer interaction goals (CX GOALS) at the outset of each customer interaction. This segment establishes a critical element of the CX FRAMEWORK by teaching the concept of goal directed interactions. The remaining three CX CAPABILITY SEGMENTS build the employee’s capability to achieve each CX GOAL. As an employee achieves more capability the CX GOAL will become more complex.

Core Capability Modules

Corporate Values – establishes an understanding of the organisation’s core values and links them to the customer experience.

Brand Values – establishes an understanding of the organisation’s brand value such that these can be applied to the customer experience.

Customer Experience Philosophy – establishes an understanding of the organisation’s philosophy in regard to the customer experience. This enables the employee to set goals that are relevant to the organisation’s customer philosophy. CX Goals will vary greatly if the organisation’s philosophy is to deliver a value based service as opposed to a premium service experience.

CX Goal Creation – establishes the capability for an employee to assess the customer’s situation and determine an appropriate CX Goal for each customer interaction. The CX Goal must be aligned to the organisation’s customer experience philosophy.

3.3. CONNECTING

Segment Definition

This segment seeks to establish the capability to connect with a customer. This requires the employee to use proper voice tone, empathy and situational awareness. The objective of this segment is to establish trust between the customer and the organisation at the outset of the interaction.

Core Connecting Modules

Common Ground – establishes an understanding of the customer’s mindset, mood and social factors and being able to reflect these back to the customer in manner, tone and conversational direction.

Discovery- establishes the capability to facilitate a discussion to uncover the customer’s requirements in full through interactive dialogue to elicit responses that clarify the customer’s requirement.

Objective Mapping – establishes the capability for the employee to identify the customer’s objective after discovering the customer’s requirement. The purpose of this segment is to identify outcomes that will meet the customer requirement and the CX Goal through questioning techniques and seeking conformation that the employee has correctly identified the customer’s objectives. Objective mapping is essential as it leads to establishing trust. A customer interaction may have multiple objectives and these need to be linked back to goal setting.

Ownership – establishes the principle of assuming ownership for meeting the customer’s objective and where relevant assuming responsibility for any service issues on behalf of the organisation. It is essential that the employee understands the importance of establishing credibility in the customer’s mind that the objective will be met.

Establish Trust – establishes the ability of the employee to create an environment of trust between the customer, the employee and the organisation. The reputation of all three players must be maintained in achieving this segment. So, building trust by aligning with the customer to denigrate the organisation does not reflect attainment of this skill.

3.4. NAVAGATING

Segment Definition

This segment seeks to establish the capability of the employee to meet the customer’s objectives and guide the customer toward the CX GOAL. This requires the employee to listen carefully to the customer’s feedback, gauge emotion and maintain control and momentum toward the CX Goal.

Core Navigating Modules

Directed Conversation – establishes the ability for the employee to assume control for the direction of the interaction, thereby avoiding lengthy diversions and working proactively toward the CX Goal.

Present Solutions – establishes the capability for the employee to identify potential solutions and present these to the customer in a clear and empathic manner. It is important to assess the customer's willingness to accept a solution and seek alternatives as required.

Build Trust – establishes the capability to develop a deeper level of trust with the customer by acknowledging the customer's feedback and working collaboratively to reach the customer's objective with confidence.

Managing Service Gaps – establishes the ability of the employee to identify gaps in the organisation's capability and the customer's objective and minimising the impact of this gap on the customer experience.

3.5. EMPOWERING

Segment Definition

This segment seeks to establish the capability of the employee to empower the customer to achieve his objectives and realise the CX Goal. The customer will feel in control of the outcome and have confidence that any commitments will be met.

Core Empowering Modules

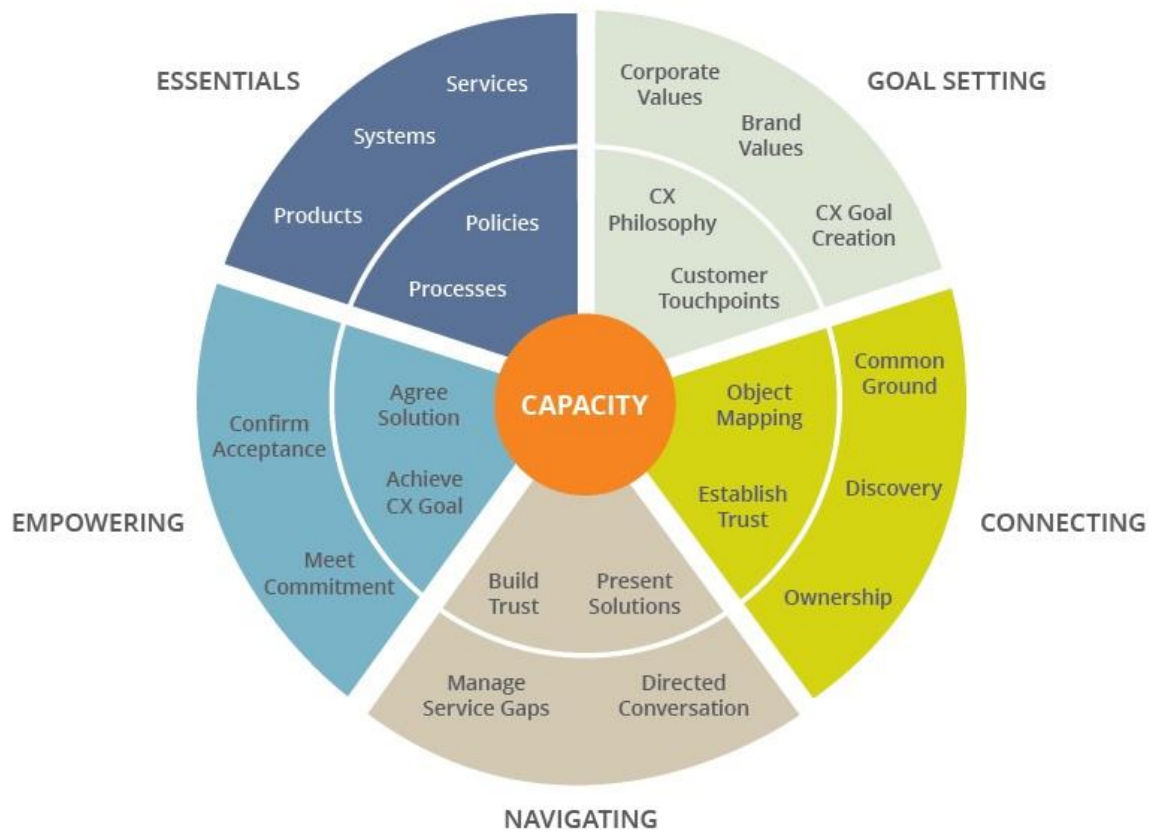
Agree Solution – establishes the capability of the employee to review the options available to meet the customer's objective and negotiate an agreed solution that is aligned with the CX Goal.

Confirm Acceptance – establishes the ability to ensure the customer and the employee have a common understanding of the solution, time frames, processes and outcomes as well as any follow up activity required.

Meet Commitments – establishes the importance of meeting the commitments the employee has made on behalf of the organisation including all follow up activities until the agreed solution has been achieved.

Achieve CX Goal – establishes the ability to validate that the solution provided was consistent with the CX Goal.

Diagram 1: CX SEGEMENT MODEL



4. The CX Learning Scaffold

The CXF is designed to build capacity over time in contrast to traditional training programs that invest 90% of learning in the induction phase. Learners have a finite capacity. While induction programs tend to exhaust the learner’s capacity teaching basic routine tasks the CXF builds capability to adapt to the CX environment. The CX Learning Scaffold encourages a long-term approach to building learnable intelligence.

The CX Capability and Capacity Framework has four distinct learning levels described as the CX Learning Scaffold. The CX Learning Scaffold is designed to reflect the progression of an employee’s level of competence in applying the CXF in the work environment.

The CX Learning Scaffold has four levels as follows:

- FOUNDATION
- COMPETENT
- EXPERT
- MASTER

A typical learning journey will commence at Foundations and progress sequentially through each level of the CX Learning Scaffold to Master. An employee may achieve different levels for each CX Segment. Thus, one may have attained Mastery of Goal Setting and still be at Competent for Navigating.

Learning Goals should be dynamic with the objective of keeping the employee at the same level of the CX Learning Scaffold for all CX Capability Segments. Thus, if an employee finds it easy to build competency for any given CX Capability Segment the learning path should be skewed in favour of the other CX Capability Segments to maintain balance as the employee progresses up the CX Learning Scaffold.

A brief summary of each level of the CX Learning Scaffold is as follows:

4.1. FOUNDATION

The focus of this level of the CX Learning Scaffold is to grasp the concepts and be able to identify each of the CX Capability Segments and to perform the basic tasks required to perform a function. The objective of this level is to build ABILITY.

4.2. COMPETENT

The focus of this level is to solidify the basic concepts and apply them to each customer experience. The employee will be fully competent at basic tasks and be able to apply the CX Capability and Capacity Framework to resolve routine matters and use the CX Framework to guide the interaction. The objective of this level is to demonstrate ADAPTIVENESS.

4.3. EXPERT

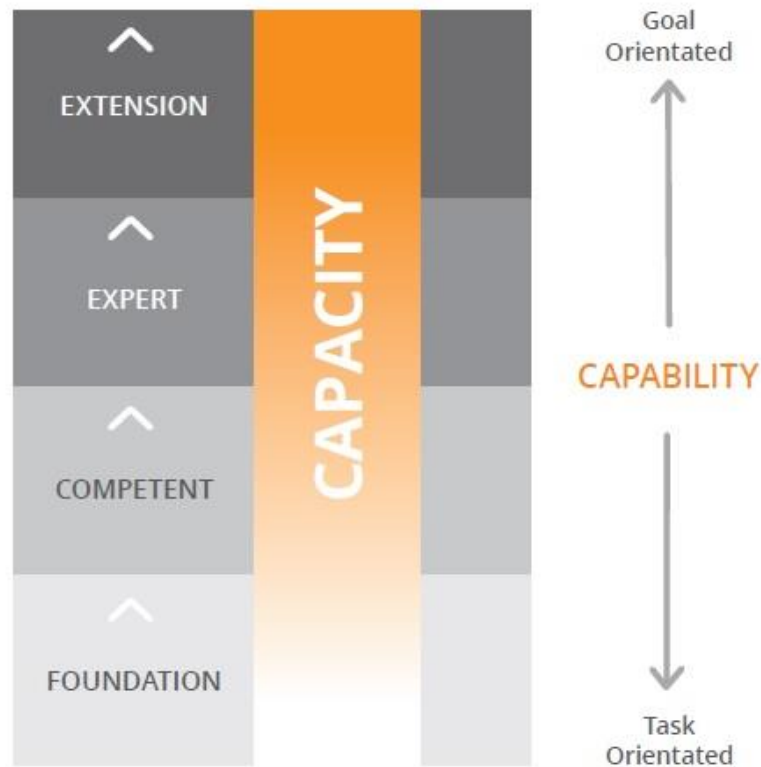
The focus of this level of the CX Learning Scaffold is to demonstrate fluid competence in applying the CX Capability and Capacity framework. The employee is able to move seamlessly between each CX Capability Segment, routinely achieve the CX Goal and achieve this efficiently resulting in a high level of productivity. The objective of this level is to achieve Fluency.

4.4. MASTER

The focus of this level is for the employee to be able to extend the framework by creating new learning content and developing thought leadership within a group. Attainment of this level demonstrates a deep understanding of the CX Capability and Capacity Framework such that the employee can train others and contribute to the development of the framework. The objective of this level of the CX Learning Scaffold is to contribute to the development of future versions of the CX Capability and Capacity Framework.

Diagram 2: CX Learning Scaffold

Capacity at the Core of Learning

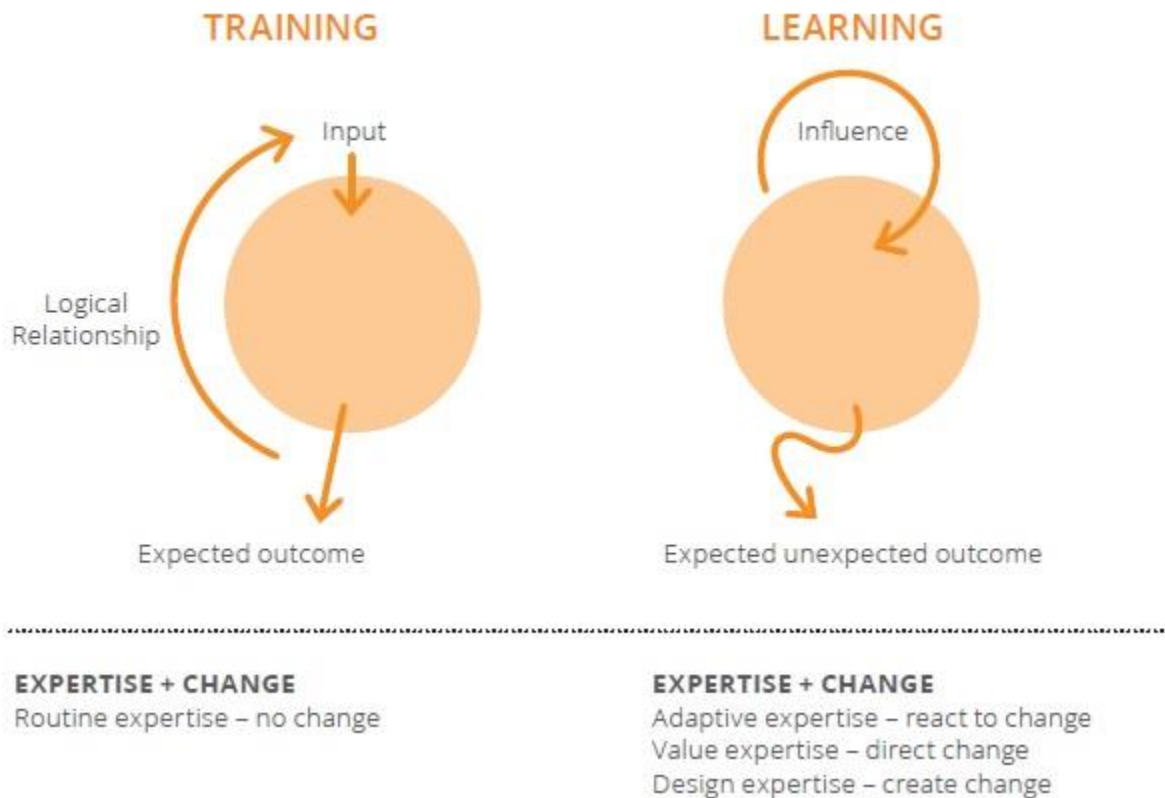


The CX Learning Scaffold incorporates the work of Susan Mackie in designing a metacurriculum for young learners known as the ThinkPlus Metacurriculum. In the ThinkPlus Metacurriculum Mackie uses the concepts of a learning scaffold to guide the development of mindsets in young learners. Mackie applies the research of Lin, Schwartz and Bransford about the need to ensure knowledge is transferred into action. Under this approach the emphasis on learning shifts from “routine knowing”, that doesn’t result in behavioural change, to “adaptive knowing” that leads to behavioural change (Bransford et al 2010).

Diagram 3. CX Learning Journey

The CXF distinguishes between Training and Learning. In training a learner is taught a discreet task with known inputs and expected outcomes. These are routine and basic elements of most jobs. Learning differs in that it teaches the learner to seek out solutions to loosely defined problems. There is no direct route and often the answer is undefined. Learning builds the skill of problem solving through the development of will and way finding.

The following diagram depicts the difference in the two approaches:



In addition, the CX Learning Scaffold applies the work of Professor John Hattie. A Meta-Analysis conducted by Prof John Hattie (2003) showed that the concept of scaffolding learning has been demonstrated to achieve superior learning outcomes. The CX Learning Scaffold applies this research to digital learning and each level of the CX Learning Scaffold has been designed based on the latest thinking in regard to how to people learn and build both capability and capacity.

The CX Learning Scaffold builds on the work of Hattie and applies it in the context of high customer contact learning environments.

Traditional approaches to learning seem clear cut. You identify what you want the student to learn. You provide knowledge and present an opportunity to practice skills or concepts. You give feedback so the learner can gauge whether the learning has succeeded. Educating a learner in behavioural skills requires practice and feedback.

This approach relies on a storehouse metaphor (Klein 2006). It assumes that the learner is missing some critical form of knowledge – factual knowledge or procedures. The knowledge that is missing is defined and a practice regimen or study is set-up. Then feedback is provided and then tested to see whether the new knowledge is successfully added to the storehouse.

The storehouse metaphor is useful for learning factual information or for learning simple procedures and does not work for cognitive skills. Cognitive learning should help learners discover new ways to

understand events. The CXF applies a greater amount of behavioural learning techniques at the Essentials level. Learning becomes more cognitive as the learner progresses up the CX Learning Scaffold.

The following table denotes the differences between storehouse learning and cognitive learning.

Storehouse – Behavioural Learning	Mental Models - Cognitive Learning
Declarative knowledge - learning new routines and procedures.	Pattern recognition skills – improving quality of their mental models.
Additive process with existing patterns – not creating a new filing system, simply adding new files to an existing system.	When learning new patterns and prototypes students are not simply adding new items to their list. They are learning how to categorise new items and changing categories and redefining the patterns and prototypes as they gain new experience.
Behavioural learning requires us to add additional facts to our knowledge base.	Perceptual learning depends on us re-fashioning the way we attend and the way we see.
Follows traditional components of learning: diagnosis, practice, feedback, or learning objectives.	Cognitive learning requires a sense-making activity that includes: diagnosis, learning objectives, practice and feedback.
Learning about additional information	Learning is about changing the way we understand events, changing the way we see the world, changing what counts as information in the first place. The functions of diagnosis, practice and feedback are all complex and depend on sense making.

5. CX Capacity Tools: From Teachable to Learnable Intelligence

Capability + Capacity = Performance

At the core of the CXF is the CX Capacity Tools that develop a Learner’s ability to adapt to change as opposed to rote learning of discreet skills. The CX Capacity Tools aid the learner’s progression through the four levels of the CX Learning Scaffold.

In order to maximise performance and achieve potential, there has been a concerted focus on the development of capacity: skills and behavioural competencies within the CX Learning Scaffold. The development of capability alone does not address the aspect of capacity: the ability to process, store

and integrate these capabilities and embed the learning. The Capacity Tools incorporate the research of Professor Carol Dweck (Stanford University) to address the need to build capacity. The entire CX Learning Scaffold is based on the idea of building Capability and Capacity in tandem to optimise learning outcomes.

Progression through the CX Learning Scaffold requires the individual to reflect upon the skills attained and the level of competence achieved. It is essential to provide continuous feedback and to build resilience as the individual progresses through each stage of the CX Learning Scaffold. Without appropriate feedback and a mechanism to build resilience the individual is unlikely to move beyond the lower levels of the CX Learning Scaffold. The CX Capacity Tools contain feedback mechanisms for the learner and the supervisor. This enables the learner to be self-directed while allowing the supervisor to intervene to modify the learner's journey as required.

Developing optimal performance requires developing a growth mindset in the employee. In a Growth Mindset, people understand that challenges framed as learning can help you become smarter. Struggling and working on a challenge is good for the brain and our neurological growth! Mindsets play a critical role in people's view about personality, capacity and capability in terms of whether they are static traits, and hence cannot change, or have malleability and can in fact change.

People with a growth mindset actively seek out challenges to learn, ask for feedback, maintain effort over a sustained period and persist in the face of difficulty. In a fixed mindset, people avoid feedback, work to look smart and avoid any situation that undermines the way they are perceived by others.

The main purpose of the CX Capacity Tools is to create a culture of resilience, growth mindset, self-regulation and the concept that individuals are malleable not fixed entities. We must re-imagine learning if we are to prepare employees for the CX challenges ahead. We need to move away from simply focusing on teaching transactional tasks and instead build learnable intelligence that extends beyond induction.

Interspersed throughout the CX Learning Scaffold is learning tasks that assist to develop a Growth Mindset and Self Efficacy (Bandura 1977). It is through attention and developing the right mindsets and cognitive processes (meta-cognition) that enhance people's mental capacities. The combination of developing both capacity and capability is seen as the next level of performance enhancement. We are conducting and build research in this area with Prof Carol Dweck, Stanford University. Research indicates that learning that incorporates development of Growth Mindsets has a significant performance improvement (Dweck, et al 2006).

Building Self Efficacy teaches customer service employees to explore different routes to achieve a goal through the development of will and way finding skills. With efficacy comes the ability to persist and employ different strategies to find solutions. Building Growth Mindsets and Efficacy gives employees the capacity to create meaningful customer interactions.

The Capacity Tools also seek to develop and foster the “State” of customer service employees that is a critical element in delivering lasting and sustainable Customer Experiences.

The one constant in the digital era is change. As product development life cycles accelerate and products become more and more tailored, overcoming change fatigue and a helplessness response is essential to avoiding burnout and disengagement. The work of Fred Luthans on Psychological Capacity has demonstrated that each customer interaction is influenced by the emotional state of the employee (Fred Luthans, 2008). Developing hope and optimism in employees assists organisations to create a change ready culture where employees have the psychological resources to cope with change and still engage each customer interaction with enthusiasm. The alternative, an organisation filled with pessimism, cynicism and low engagement, will inevitably lead to poor Customer Experiences.

5.1. CX Learning Algorithm – Creating Optimal Learning States

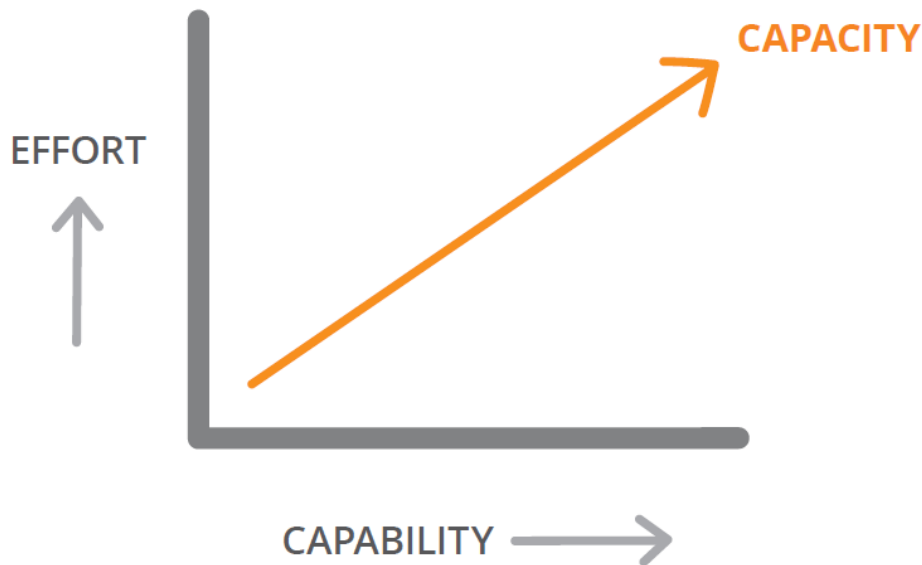
Superior performance results not from stressful states but from optimal arousal inducing the flow state. Flow results from immersion and focused concentration and activates unique brain waves. This helps drive optimal learning engagement and assists with changing habits and deepening learning.

The CX Capacity Tools rely on Covert Performance Measures to achieve the optimal learning state. An example of Overt Performance Measures is giving an employee a specific time to complete a task. Research demonstrates that Overt Performance Measures cause stress and reduce learning capacity (Wills, Judy (2007) *The Neuroscience of Joyful Education*) (LePine, Jeffrey A; LePine, Maurice A; Jackson, Christine L (2004), *Challenge and Hindrance Stress: Relationship With Exhaustion, Motivation to Learn, and Learning Performance*). Using Covert Performance Measures the CX Capacity Tools assess performance against an organisation’s benchmark for a task. During skill acquisition the frequency of this task is increased until the desired benchmark is achieved consistently without stating the actual benchmark. Once the skill has been acquired, by consistent achievement of the benchmark, the frequency of the task is decreased. This is referred to as skill maintenance.

Applying this approach underpins the Learning Pathways in the CX Learning Scaffold. Each employee will progress through skill acquisition and skill maintenance modes for particular capabilities at their own pace. It is through assessing competence covertly that drives the frequency of tasks presented to the employee. The Learning Pathway can be overridden by a manager or the organisation to emphasise certain skill development or promote immediate messages.

Embedded into the CXF is the CX Learning Algorithm to enable learning that is adapted to the individual. A key element of the algorithm is the dissonance score that identifies when a learner is struggling and triggers micro-interventions to build psychological capacity (hope, optimism, self-efficacy and resilience) and a growth mindset. The dissonance score tracks three critical vectors: Capacity (the learner’s State), Effort (the learner’s growth mindset) and Capability (the learner’s ability to perform a task). These three factors are critical to digital learning. Micro-interventions can

take many forms from growth mindset exercises, trainer or supervisor alerts and peer support. The use of the algorithm provides a support structure to recover employees that struggle without impeding the progress of others.



6. Neuroscience of Learning and the Implications for Curriculum Design

Learning is one of the defining aspects of being human. Truly profound learning experiences change who we are – we change through learning. All learning involves thinking and doing, action and reflection. Learning changes what we can do – it is always active “you haven’t learned to walk until you walk” - Peter Senge

Learning is change. Learning changes the physical structure of the brain and results in organisation and reorganisation. Learning is always happening – consciously and unconsciously. Yet, when developing curricula, we spend most of our time focused on content we want learners to know rather than how they will learn.

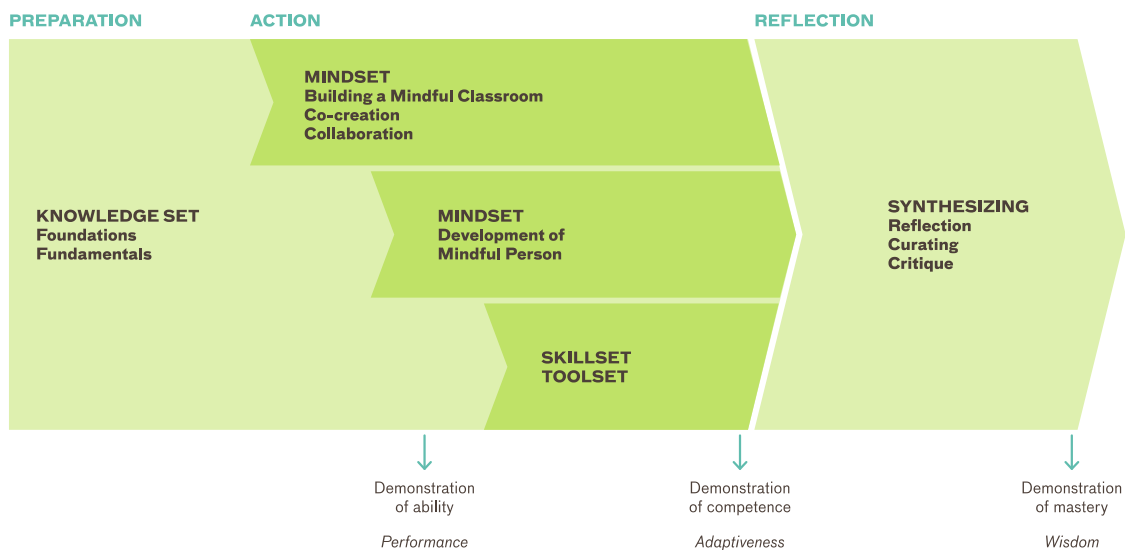
The CXF has been developed to design learning interventions that tap into how the brain naturally learns and that enables learners to sort through the clutter and noise in the environment. Cognitive sciences and neuroscience have produced some profound insight into the ways that learning occurs. Recent research in these fields assists in creating learning experiences that are both more effective and more efficient.

Specifically, the CXF recommends a learning cycle that is closely linked to Kolb’s learning cycle that begins with gathering information followed by reflection, creating and active testing. Each step of the cycle is associated with sensory, associative and motor functions (Zull 2002). It should be noted while this alignment with the brain is oversimplified, and the functions of the brain are far more networked and hierarchal than suggested, it provides a useful way to understand the overall workings of the brain as related to learning.

We do not learn from experience, we learn from reflecting on the experience. - John Dewey

To increase learning effectiveness, curriculums should design learning solutions that allow for gathering, reflection, creation and practice of retrieval within the learning process itself. While employing this approach may seem to require greater time and effort in actuality it is more efficient: the result is that what is learned is more deeply embedded and the likelihood of the learner being able to apply learning dramatically increases. Diagram 6 demonstrates the application of Kolb's learning cycle is designing curriculums.

Diagram 6. CX Learning Scaffold: Applied Pedagogy



Ensuring the inclusion of all the elements of the cycle may require an initial slowing down and a reduction in the quantity of content that can be covered in a learning experience, however the result will be a profound shift in the quality of learning—and ultimately the difference between time and money well spent or time and money wasted. Slowing down is counterintuitive in the information environment in which we operate—but it becomes absolutely imperative when one weaves in a deep understanding of how the brain functions. Deciding what is really most important becomes a critical design step.

6.1. Neural Networks and Connections

Neuroplasticity is perhaps the single most important concept in terms of learning and the brain. The more we fire the more we wire. This is core to the concept of Dweck's Growth Mindset. The knowledge that our brain is constantly changing and growing—that cortical plasticity extends throughout the human lifespan—shifts our understanding of what is possible for learners. Learning is not just changing external behaviour, but changing the very wiring of the brain as it relates to those behaviours. Deep, lasting change is possible at all ages. This is why participatory research and educational design research is so critical in building a depth of understanding and insight into the way people learn.

Expertise is specific. Every individual is a novice in some areas and an expert in others. Expertise in specific domains is not easily transferable to other domains, meaning that learning needs to be tailored to the expertise level of the audience. If the audience contains a mix of expertise levels, it needs to respond to individual needs to the extent possible.

The CX Learning Algorithm enables each learner to progress dynamically through the CX Learning Scaffold. This enables learners to move quickly through content where they are experienced and more slowly with encountering new content.

We need to actively help learners make meaningful connections and tap into prior knowledge and experience. Metaphors, analogies and stories are powerful vehicles for tapping into existing knowledge and experience—effective ways of making connections, seeing patterns and making meaning.

The critical differences between how novices and experts learn has important implications for how learning is organised. We need to tailor our solutions to align with the level of expertise of the audience. If the audience contains a mix of expertise levels, our solutions should take into account the needs of those different levels.

Whether learning is informal or formal, the way we work with information and what we need for it to make an impact stays constant. Helping people create connections—between new information and what they already know, between the big picture and the details that comprise it—is a key to lasting learning.

6.2. The Social Brain

The brain is social—it requires and thrives on interactions with other brains. In fact, the brain develops in concert with other brains—and requires those other brains to develop.

While this is a vast and complex topic whose full implications are as yet unclear, it shows the power of the brain as a social organ. Learning from others happens more directly, more automatically and more powerfully than was ever imagined. This is also supported by John Hattie's research on visible learning in how vital peer-peer learning is in achieving optimal learning.

People learn from one another, sometimes without even realizing that they are doing so. With the increasing shift from face-to-face learning to digital formats, careful thought must be given to how we build human interaction into learning solutions and the use of social media in the CXF design.

We are wired to need social interactions and to make real connections with others. There is great power in the interactions among learners and between instructors and learners. We need to continue to find ways to nurture these connections in an increasingly digital environment.

The CXF recognises the social brain through the use of peer-to-peer assessment methods. This enables learners to connect with each other and share experiences and ideas as part of the learning journey.

6.3. Guiding Attention

Information and stimulation overload are here to stay. Actively incorporating attention management strategies during learning design is of paramount importance. The following are guiding design principles that should be considered when building a curriculum:

- Eliminate multitasking to facilitate more efficient and effective encoding of knowledge.
- Minimize the load placed on working memory by limiting distractions and avoiding asking learners to process vast amounts of information at one time.
- Manage attention shifts, allowing learners sufficient time and space to make them.
- Utilize novelty and surprise while allowing learners to make connections with existing knowledge.
- Provide learners with awareness and skills training in attention management.

6.4. The Power of Visuals

Research has demonstrated the power of visual images and the differences between the way the brain remembers words and remembers pictures. The brain has an extraordinary capacity to remember images. Memory experiments with pictures have shown that people can recall seeing hundreds, even thousands, of pictures (Standing, Conezio & Haber, 1970). Pictures seem to operate as “chunks” and while the brain can hold only a few chunks in working memory at a time, visual images allow the brain to hold and enlarge the scope of those chunks. This is because visual processes evolved over millions of years, so the brain machinery is highly efficient, especially in comparison to the circuitry involved in language (Medina, 2008).

Ian Robertson, a Dublin-based neuroscientist, writes that “precisely because imagery tends to be underused, it tends to be less habitual, less automatic—and hence, potentially at least, more flexible” (Robertson, 2002). Visualization can be improved with practice at any age and can be tapped into more powerfully. Science also shows that visualization of an action or an activity engages the very same parts of the brain that actually doing that activity activates in the brain. This is why athletes often engage in mental practices—because they have physical benefit.

Research in neuroscience strongly supports what is already considered a best practice in learning design—engaging multiple senses. It also demonstrates the unique power of visual images and suggests that using rich images and asking learners to engage visually—and through visualization—increases learning.

7. Summary

The CXF is not merely a construct for developing customer advocacy in employees. It is a methodology and digital learning algorithm for developing an adaptive and goal directed approach to customer interactions. This work draws on trans-disciplinary areas of service design, learning sciences, neurosciences and cognitive learning. A part of this development has been in co-junction with Prof Carol Dweck, Stanford University.

The CXF re-imagines how we think about developing customer advocacy in our people based on a modern framework of CX Competencies and teaching these approaches using the latest research in learning and human development.

Underpinning the CXF is an implementation methodology that assists organisations to apply the CXF to their environment and design a powerful curriculum for the development of goal directed, resilient customer advocates.

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