

Design Thinking for the Learning Environment

Education PGD

Course Code: 8297

Unit 1–9



DEPARTMENT OF ECE & ETED
FACULTY OF EDUCATION
ALLAMA IQBAL OPEN UNIVERSITY ISLAMABAD

DESIGN THINKING FOR THE LEARNING ENVIRONMENT

Course Code: 8297

Unit: 1-9



**Department of Early Childhood Education and
Elementary Teacher Education
ALLAMA IQBAL OPEN UNIVERSITY,
ISLAMABAD**

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FOREWORD

Design thinking is a process that facilitates understanding and framing of problems, enables creative solutions, and may provide fresh perspectives on the learning environment. It can be applied across many disciplines to solve real-world problems and reconcile dilemmas. It is a tool that may trigger inspiration and imagination, and lead to innovative ideas that are responsive to the needs and issues of stakeholders.

Design Thinking assists in addressing a full spectrum of challenges from the most vexing to the everyday. It renders accessible creative problem-solving abilities by providing a dynamic framework and practical tools for thinking imaginatively and critically. Every aspect of design thinking is explained and analyzed together with insights on navigating through the process. The application of design thinking to help solve myriad problems from such diverse realms as politics and society, business, health and science, law, and writing. A combination of theory and application makes this volume immediately useful and personally relevant. Designing is more than creating products and services; it can be applied to systems, procedures, protocols, and customer experiences. A design mindset is not problem-focused, it solution focused and action-oriented. It involves both analysis and imagination. Design thinking is linked to creating an improved future and seeks to build ideas up – unlike critical thinking, which breaks them down. Problem-solving is making something go away. Creating is bringing something into being. Design thinking informs human-centered innovation and begins with developing an understanding of clients’ or users’ needs. Design thinking is not an algorithm; unlike math and science problems, there is no single, right, absolute answer; there are multiple solutions, some perhaps more optimal than others. Indeed, design thinking, especially learning about problems through analyzing context and stakeholders, is closely aligned with social science thinking. Design thinking can be a great complement to other disciplinary ways of approaching problems, bringing a diversity of perspectives to bear to solve complex problems. Design thinking may be disruptive in a most constructive fashion. When a potential design solution is evaluated, it may lead to a change in the initial question, or even to a significant modification or rejection of the original hypothesis. The purpose of design, ultimately, is to improve the quality of life for people and the planet.

Prof. Dr. Nasir Mahmood
Vice-Chancellor

ACKNOWLEDGEMENT

Design thinking for a learning environment is a student-centered, solutions-based problem-solving approach. It starts from the phase that involves observing a situation without bias. Then comes the brainstorming potential solutions. This develops potential solutions using the ideas that are already generated. At the test stage, the students reiterate to determine which are successful and which are not. Finally, the students implement the solution they have developed.

Design thinking is a non-linear, iterative process that students use to understand challenging assumptions, redefine problems and create innovative solutions to prototype and test. It is most useful to tackle problems that are ill-defined or unknown to the students, through five stages.

Design Thinking for the learning environment is a course to meet the needs of students who want to develop problem-solving approaches. Through this course they will be able to possess knowledge, skill, and ability to apply a design thinking approach to a variety of situations. The Department of Early Childhood Education and Elementary Teacher Education realized this educational need and developed the course titled Design Thinking for learning environment. In this book, efforts have been made to provide an updated understanding of design thinking to prospective educationists.

This book reflects the efforts and dedication of Dr. Zafar Iqbal. The Department of Early Childhood Education and Elementary Teacher Education is grateful to him for writing this course and will welcome comments and feedback from the readers to improve the course.

The composing and formatting of the scripts was very laborious work requiring extended hours of sitting. Mr Zahid Javed Bajwa has very efficiently completed the task in a short time.

Dr. Rahmat Ullah Bhatti
Course Coordinator.

INTRODUCTION

This course is aimed to help you understand and apply design thinking processes to improve your learning and professional environment. You will also gain exposure to applying the design thinking process for locating and solving problems in a variety of contexts in educational settings. Design thinking is part of the broader project-based learning educational model. It uses a creative, systematic approach to teach problem-solving in different situations. In this approach students' progress through the stages of discovery ideation, experimentation, and evolution in search of innovative solutions to vexing problems. It also solves the problems by prioritizing the students' heads above all else. It relies on observing with empathy and how people interact with their environment. This process is divided into five key steps: Understand, define, ideate, prototype, and test. It empowers students to not only comprehend what they are learning but also encourages them to question and innovate in their work. It fosters creativity, critical thinking, and problem-solving ability, essential qualities in solving the complexities of the modern world.

OBJECTIVES

After successful completion of this course, you will be able to:

- I. Comprehend the design thinking process in different contexts.
- ii. Analyze the potential and limitations of the design thinking process.
- iii. Use the design thinking process to identify, define and solve problems.
- iv. Apply critical thinking skills in the design thinking process.
- v. Interpret the implications of design thinking for improvement in the education sector.

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Unit-1

INTRODUCTION TO DESIGN THINKING

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Reviewed by:Dr. Rahmat Ullah Bhatti

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INTRODUCTION

Design thinking is an effective strategy development for organizational change. Design thinking can be described as a discipline that uses the designer's sensibility and methods to match people's needs. Design thinking draws on logic, imagination, intuition, and systemic reasoning to explore the possibilities for desired outcomes that benefit others. A design mindset is not problem focused. It is solution-focused and action oriented. It involves both analysis and imagination.

Design thinking creates, improves, and seeks to build ideas up, unlike critical thinking, which breaks them down. Problem-solving is making something go away. Creating is bringing something into being. Design thinking informs human-centred innovation and begins with developing an understanding of people's unarticulated needs. The purpose of design thinking ultimately is to improve the quality of life for people.

The biggest driving force behind design thinking is the accelerated rate of change in the education sector and society caused by advances in technology. As institutions become more software-driven, and the rate of change increases, so does complexity. Creativity is about ending the problem worth solving. Design thinking is our best tool for sense-making, meaning-making, simplifying processes, and improving people's experiences. Additionally, design thinking minimizes risk, reduces costs, improves speed, and energizes employees. Design thinking provides leaders with a framework for addressing complex human-centered challenges and making the best possible decisions concerning organizational culture change, and complex societal challenges such as health, education, food, water, and climate change.

OBJECTIVES

After completing this unit, you will be able to:

- Define design thinking regarding education.
- Understand its importance in this age.
- Describe the process/phases of design thinking.
- Know the framework of design thinking.

1.1 Design Thinking

Design thinking succeeds when it finds ideal solutions based on the real needs of real people. People need their interactions with technologies and other complex systems to be simple, intuitive, and pleasurable. When done well, the human-centered design enhances the user experience at every touch point and fuels the creation of products and services that deeply resonate with needs. Design is empathic, and thus implicitly drives a more thoughtful, human approach to business.

Design thinking informs human-centred innovation. It begins with developing an understanding of users' unmet or unarticulated needs. Design thinking minimizes the uncertainty and risk of innovation by engaging users through a series of prototypes to learn, test, and clear concepts. Design thinkers rely on the people's insights gained from real-world experiments, not just historical data, or market research.

The term design is commonly used in various contexts. There may be experience design, social design, integrated design, service design, and place-based design. Graphic design is the most familiar term for all of us. Graphic designers are professionals with the artistic skill to create logos, advertisements, signage, and printed materials. If a person in any field thinks like a designer and learns some of the tools, designers use regularly to drive growth and success, then myriad doors of possibility will open. It is also useful and profitable for the planning and execution of different initiatives.

Design thinking, in the simplest of terms, is an exploratory approach to problem-solving that includes and balances both analytical and creative thought processes. Tim Brown says that insofar as it is open-ended, open-minded and iterative, a process fed by design thinking will feel chaotic to those experiencing it for the first time.

No truer words have been written about design thinking. It will be chaotic the first time, and probably the second and third times, and maybe even the fourth time when to use it. Design thinking is not a typical skill set learned in school. It is a valuable skill that should be embraced by all professionals, not just for whom design is front-and-centre in their job description. It is an egalitarian skill set that can be learned, practised, and championed by professionals.

Design thinking is largely nonlinear and fluid. True exploration is not a forced march between Point A and Point B. It is a meandering trail that ends at the defined destination of Point B yet allows for the flexibility to observe the landscape along the way and, perhaps, discover something new or previously overlooked. The lengthy nature of design thinking does not derive from a designer's lack of the

discipline needed to be organized and deliberate. On the contrary, design thinking is purposefully intended to be circuitous and fluid as a challenge to the conventional means of problem-solving.

A common question is asked, what is next when working toward solving a problem? In design thinking, there is not always a specific 'next' to which one should proceed. In design thinking, each phase can yield multiple possibilities. Now, it is up to the design-thinking person to determine which 'next' to pursue. It is a rapid process that can be applied to even the most confounding challenges. It is a strategic activity that will identify clear opportunities that one can act on quickly.

1.2 The Phases of Design Thinking

Design thinking is an adaptable and flowing natural process. It is not confidently claimed that design thinking happens in this way or that way. However, some phases in this approach serve as signposts indicating the progress in design thinking. The actual task that happens within each phase can vary depending on the problem or challenge at hand.

Let us discuss different phases of design thinking to better understand what happens at each phase and how it fits into the bigger design-thinking process.

1.2.1 Understand

Understanding is the first phase in the design thinking process. In any profession, it is imperative to identify and create a solution to the problem at hand. The degree of understanding goes well beyond that of conjecture or previous history with challenges of a similar nature.

Creating a solution to a challenge is next to impossible without some clear understanding of what the challenge implies. The nature and intensity of the challenge may appear to be one thing on the surface and something else entirely once peels back the visible layers. For example, a local school has seen its share of enrollment decline since a competing school opened nearby. The new school offers a few distinct benefits to students, such as well-qualified teachers, advanced security and a pick-and-drop facility, which the local school doesn't offer. The local school leadership believes those benefits at the competing school are luring students away from their school.

Keeping given the surface reality, that scenario seems plausible, and the local school leadership makes plans to counter the competitor's benefits with some new ones of their own, such as an easier admission process and fee concession to students. If in a competitive environment with more options and benefits for the student seems like a smart move?

How does the local school leadership know that their new benefits will affect a student's choice? Have they talked to their prospective students' group? Have they talked to parents about what services and benefits they want from a school? Have they asked the parents why they chose the school where their child was studying?

Instead of making some decisions in a hurry and adding benefits to the school, the local school leadership needs to take the time to understand their potential students' needs and wants. The best way to reach a solid conclusion is through research. The leadership should make a decision based on their experience, a measured guess based on trends, their gut instinct, or a combination of all three. The most needed is accurate data derived from research. However, taking the time to do the research during the understanding phase cannot guarantee a better performance than going with your gut. It will provide a stronger and more accurate foundation for decision-making. It will also give more confidence that these decisions are the best options.

1.2.2 Define

The second phase is to define the problem. Once you understand the challenge at a level of detail that reveals subtle nuances you likely would have missed without taking the time to develop that understanding, you can clearly define in specific terms what the challenge is and why it needs to be addressed. After the completion of the understanding phase, there is a fair amount of data. The quantity and quality of data are completely dependent on the extent of the research and the nature of the challenge. Enough data is required for developing a comprehensive assessment of the situation or challenge at hand. From that assessment, the specific challenge can be defined. Let us continue the example of the local school. The assessment of the research data reveals that the students going to the competitor school are not choosing it because of its benefits but because it offers a more advanced level syllabus, which is according to international demands.

That is the point the local school leadership should learn. The opportunity to change students' and regain admission lies not in creating additional benefits for new students. The opportunity lies in introducing an advanced-level syllabus. The challenge will be defined as: "Introduce an advanced level syllabus in the local school to be competitive in the market."

Understanding and defining phases generate a wealth of fantastic ideas. Sometimes these ideas are not relevant to problems or challenges.

1.2.3 Ideate

The third phase in design thinking is ideate. When the challenge is defined and one knows what problem needs to be solved, one can unleash creativity and begin

imagining solutions. Ideation is the phase that everyone enjoys the most. The professionals are also tempted to jump ahead to this phase, completely skipping.

In the process of design thinking, this is the phase that people enjoy the most. After defining the challenge, it is time to dream up how to solve it. Another name for ideating is brainstorming. This phase dominates the process of design thinking. To get the most out of brainstorming, one truly needs to suspend reality, disregard the typical parameters of operations, check one's ego at the door, and repeat to oneself, "There are no bad ideas." Be very deliberate in identifying the individuals to be in the brainstorming team. The nature of the challenge will help dictate who those people are. The goal here is a heterogeneous group built around a core of individuals that closely resembles demographics and psychographics. Diversity plays a friendly role. Do not default to including only the senior leadership or subject matter experts during the Ideate phase. Branch out and include a mix of employees from various levels in the organization, including someone from administration and parents of students, who will lend a broad perspective.

The diversity in brainstorming groups is important and the number of people involved is equally important. It needs enough to create some enthusiasm and provide varying viewpoints. But there should not be so many that the activities get unwieldy or warring factions of opinions arise. The preferred groups of no fewer than three and no more than ten.

Once the brainstorming team is selected, schedule a two-hour block of time in which to brainstorm. There will be needed at least a two-hour block and perhaps additional blocks depending on the nature of the challenge to be solved and the efficiency of the group. There will be a need to prototype at least two solid ideas for testing. Do not get caught up on one great idea and decide to stop. Keep exploring the challenge from all angles.

Here are some key rules to keep the group on track, productive, and positive:

- Enter a brainstorming session with an articulated intent of what to get out of it. Everyone should work toward the same goal in a brainstorming session. By communicating intent ahead of time, the team will likely spend some time thinking about challenges in advance.
- In the real world the principal of an institution carries more weight than a teacher in brainstorming sessions. However, during brainstorming, everyone is equal regardless of his or her role or place in the hierarchy. There is no seniority, and the only authority in the room is the one chosen to be the moderator. Everyone is free to speak, and everyone is obliged to listen to the speaker.

- Select someone to be the moderator before the session. This person should be an expert at facilitating conversations, asking pertinent questions, and documenting what is said or done. This person must also be comfortable redirecting the conversation if it has gone off, appropriately interrupting if someone is dominating the conversation, and moving the discussion to one area. Ideally, the moderator has no self-interest in the outcome of the brainstorming.
- During brainstorming every idea, thought, or question needs to be documented. Do not rely on anyone's memory to recall the outcomes from the brainstorming session. Use sticky notes of three colours: one for ideas, one for thoughts, and one for questions. The second method is to document the discussion on a whiteboard, but again assign a different colour to each statement category (idea, thought, question).
- In the start brainstormers' ideas contextually make no sense but are contributed as a kind of joke to break the ice. Just let the ideas flow and get them out of the group's system so they can concentrate on the challenge at hand.

1.2.4 Prototype:

The fourth stage is a prototype that starts once the ideation phase comes to a close. This step is to harvest through the idea inventory and select the cream of the crop. These ideas are taken to the prototype phase. One must be judicious in the selection of ideas, especially quantity-wise. There will need to be a prototype of each one. Plan on prototyping at least two or three ideas. Prototyping will start to give ideas depth to get an impression of how they will take real form. Prototypes are not always tangible items. It is just as important to prototype a service, experience, process, or other intangible.

There are a lot of ideas occupying space along the continuum from awesome to what the hell were we thinking? It is time to filter the chaff from the most delightful morsels out of the volume of ideas. This is where the Prototype phase begins to see its value.

Once finished with the Ideate phase and have moved into the Prototype phase, it is time to put the parameters of the operation back into play and view ideas through the lens of reality. In doing so, brainstorming ideas are put into categories of what is doable, what is possible, and what is so far-reaching that it will require too many resources to pull off.

When the ideas are organized, the operations team or teachers take a close look at which ideas are the most viable to try. Where available resources, doable ideas, and potential impact overlap is the sweet spot, is the area where opportunities lie.

The ideas that lie in the sweet spot should be the ones for which prototypes are developed. What should be done if there are not any ideas in the sweet spot? It is better to go back to the ideation phase and brainstorm some more.

There should be two or three ideas in the sweet spot. Trying to prototype any more than that will get to be overwhelming and potentially costly. To start building prototypes, select the idea that will require the least number of resources to be a starting point. It will ease into the prototype process and is more likely to be a successful and enjoyable activity.

It does not matter if the idea for prototyping is a material object, a process, or an experience. It still needs to be fleshed out to the point that it can undergo enough viable testing to prove that it works and has the potential to succeed.

As discussed earlier, the example of the local school needs to introduce an advanced level syllabus to better compete in the market. The Prototype phase can include a physical mock-up with an advanced-level syllabus within the school.

The prototypes have as much detail and specificity as possible. During the test phase, there will be a complete prototype as possible so that the test subjects are not put in the position of providing feedback based on conjecture.

1.2.5 Test:

The fifth stage in design thinking is the test. Testing saves money during development and avoids potential disasters. This sounds dramatic, but it is true. Testing will keep from committing resources to a project only to find out the wrong path. The upside is that testing does not have to be complicated or expensive.

Design thinking consists of five phases. It is critically important to understand that the design thinking process does not always consist of a direct line from Point A to Point B through these phases. During the work process, there may be a need to back up and repeat a phase. For example, one could find that at the defined phase, there is not quite enough data to help articulate the challenge. Therefore, one needs to go back to the understanding phase and do a bit more research. Or one could discover at the prototype phase that ideas can't be constructed as had hoped. There is a need to Ideate some more. Even at the test phase one feels that prototypes are all ruined and there is a need to start over with the understanding phase.

Now that you have at least two prototypes developed, it is time for the Test phase. Testing prototypes keeps us from charging down the wrong path, and spending way too much money and other resources on a potential solution only to discover that it doesn't work like it should. Testing is a good thing.

Testing can be easy and inexpensive, which is also a good thing. How to test a prototype depends on what it is.

Testing participants should mirror the students for whom the advanced syllabus is introduced. In the local school example, the testing participants could include students, teachers, administration, and parents. Gathering feedback from different stakeholders will yield an array of perspectives.

The shared knowledge and perspective will help keep the testing time shorter and the feedback focused. This will improve the likelihood that the stakeholders will suggest modifications to the idea.

The participants of the test need to sign a nondisclosure agreement and a non-compete agreement before any discussions. They also should be made aware that the testing sessions probably will be documented with audio and video recordings for research purposes only. If a participant refuses to sign the agreements or does not want to be recorded, they are excused from the Test phase. Then give the participants an appropriate overview of the context before any testing. Using the local school example, it would be critical to explain to the participants the challenge the administration is trying to solve and the solution the prototype represents. Then the participants will be prepared to provide meaningful feedback.

Keep the testing atmosphere light and relaxed. The participants should feel welcomed, comfortable, and valued. The organization is portrayed as welcoming, open-minded, and collaborative. The location of testing is again dependent on what is being tested.

As was important during the Ideate phase, documentation is critical in the Test phase. The participants' feedback will directly affect the future success of the process. During the Test phase, the use of an impartial moderator or facilitator, as well as both written documentation of the testing process and outcomes, and audio/video documentation.

The purpose of the test is to uncover insights from all users that would culminate in creating a school that satisfies their needs and wants, while at the same time providing a solution to challenges.

It is not as hard as it sounds. The analysis involves a lot of compare-and-contrast activity. First, review the data from each stakeholder group on its merit. Look for common themes in participants' comments, reactions, and suggestions. If audio/video documentation, look for common themes in participants' facial expressions and other nonverbal cues, particularly in response to a moderator's questions or as correlated with a specific action as part of the test.

Then look across the stakeholder groups, comparing the common themes documented during individual group analysis. Themes that are shared across groups indicate a more universal concern and need to pay close attention because

they will affect work on a larger scale. Themes unique to a stakeholder group may indicate a specific need that should be addressed, but not necessarily with the service, or process currently testing.

Once the analysis is complete for each prototype, look at the whole picture by comparing the prototypes to one another. Common themes will indicate areas that need to be remedied regardless of which prototype moves forward, so acknowledge those but don't spend too much time on them at this point.

Look for the themes unique to a specific prototype and consider their importance in developing a successful solution to the challenge. If one theme is perceived to be more critical than others because the most important stakeholder group identified the theme, compare its needs to available resources. Can allocate resources appropriately to satisfy the theme's needs and therefore improve the chances of success for the service, or process? Conversely, are there several themes that will require smaller investments but collectively yield a bigger effect and potential for success?

By the end of the Test phase, there is a lot of data, some lingering questions, and a bit of gut instinct. However, there are no right answers. The only right answers are those derived from that data and those that you determine to be the best for accomplishing goals. Gather your team and review the testing results. Did they prove or disprove the basic premise that one or more of the solutions presented for testing will solve the challenge? Did one solution perform better than others, or did they all test well? Did they all fall far below expectations?

If none of the solutions tested performed well, stop, and take a hard look to determine why. Answering the why will help determine to what point in the design-thinking process needs to return. Some questions to ask: Did the testing participants appropriate, with relevant context? Were the prototypes understandable, and did they align with the testing parameters? Were the potential solutions strong enough, or do more ideas need to be generated? Is it possible that the challenge was not defined clearly enough?

Backing up in the design-thinking process is frustrating, but it doesn't need to be disheartening. No one gets the solution correct the first time, every time. Consider this: before the design-thinking process, an arsenal of weapons for solving a challenge consisted of gut instinct, assumptions, and a modest amount of data. The design-thinking process is determined largely by the quality of work at each phase. One should stay focused on each phase, without looking at the horizon for the next one. If one looks too far ahead, there might be chances of missing something critical.

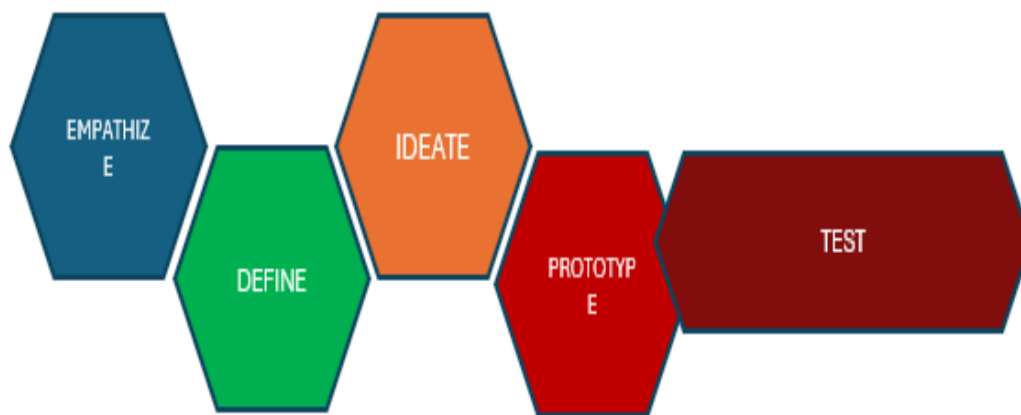
1.3 A Framework for Design Thinking:

In any uncertain situation, it is essential to have a structured thinking process to move ahead. Design thinking offers a structured framework for understanding complexity and pursuing innovation. A new business concept derived from observing customers is a hypothesis. It is a well-informed guess about what customers' desire and what they will value. Rapid prototyping provides the means to place small bets on a hypothesis and test it out before investing in expensive resources.

Design thinking is also like jazz. The structure offers a basic melody from which you can improvise, but like any art form, you need to master the basics. A Design Strategy is to change people's behaviour, so they do not have to think a lot. A lot of what we do is habit, and it is hard to change those habits. So, by having very clear guardrails, we help people to change their habits.

Design thinking is an iterative non-linear cycle which involves developing a deep understanding of users' needs within the context of a particular situation, making sense of data and discovering insights, questioning assumptions, exploring different perspectives, reframing problems into opportunities, generating creative ideas, critiquing, and choosing ideas, testing through prototyping and experimentation, finding solutions, and finally implementing your innovation.

Stanford's Design Thinking Model



The design thinking journey is one that develops from a set of tools to a methodology, to a mindset, and until it becomes a culture. Leadership links design thinking initiatives to strategic goals. It provides direction, resources,

and commitment. Then people lead the change through successful lighthouse projects. They build up an internal design thinking community where best practices are shared.

1.4 Summary

Design thinking is a process for solving different types of problems by prioritizing their importance and emergencies. It relies on keen observation and empathy. It focuses on how people interact with their environment and employs an iterative and hands-on approach to creating innovative solutions. These solutions are, according to the desires of the users, economically viable and technologically feasible for all. Design thinking works because it is a collaborative co-creative process grounded in engagement, dialogue, and learning. When you involve stakeholders in the process of defining the problem and developing solutions, you have a much better chance of gaining commitment to change and getting buy-in for your innovation. Through this powerful tool, professionals can become more creative and problem solvers, regardless of their role. It empowers them to embrace and facilitate innovation within their organization to effect real lasting change.

1.5 Exercise

Answer the following questions in detail:

- 1: What do you understand by design thinking?
- 2: Write a brief note on different phases of design thinking.
- 3: Write a detailed note on the “Ideate” phase of design thinking.
- 4: What is the importance of “test” in design thinking?
- 5: What is a framework for design thinking?

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Unit-2

ROLE OF RESEARCH IN DESIGN THINKING (IN EDUCATION)

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INTRODUCTION

In the design thinking process, once the brief has been defined and agreed, it starts to search for information that can be fed into the creative process at the ideate stage. This research can be either quantitative, with hard size and composition of target user groups, or qualitative, with about what that user group wants. It may be pertinent to build a mental model of users to enable the design team to obtain a good feel for what would appeal to them. This includes factors such as education, career, societal needs, aspirations, job opportunities and so on.

A primary source of research is the feedback generated during the learning phase of projects previously undertaken with the same or similar challenges. Such feedback provides a starting point regarding what worked and what did not work with a specific target group. Secondary research is the information obtained from general secondary sources such as consumer market research reports. These provide the demographic breakdown and historic performance of given markets and market segments and provide a clear view of how a market is structured.

OBJECTIVES

After completing this unit, you will be able to:

- Define types of research in the design thinking process.
- Understand that design thinking is of different types.
- Describe the role of research in the design thinking process.
- Know the customers interprets.
- Recognize the focus group.

2.1 Research and Design Thinking

Information can be classified into two categories: quantitative and qualitative. This helps define the size of a target market and its characteristics. Quantitative information is numerical or statistical information that enables a design thinking team to put physical dimensions to a target market. Total students, and annual admission age groups are all examples of quantitative information. Qualitative information allows the design thinking team to understand why things are as they are; and the reasons that people respond to certain institutions or not. Qualitative information is typically obtained via face-to-face interviews where participants talk about their experiences and preferences for a given topic. This is usually undertaken via a group discussion focus group, or an in-depth interview with carefully selected individuals.

Qualitative and quantitative information can be obtained from reference libraries, but if the information required is not available, different surveys can be commissioned to obtain it. These might include statistical surveys to collect quantitative information from numerical data sampling. It collects information from a population sample to represent the whole. Opinion polls are to assess public opinion using sampling. Quantitative market research is to collect data for marketing purposes. Paid statistical surveys reward participants for providing information. Questionnaires contain a set of questions.

The research identifies and provides a rudimentary classification of the different groups of users in a sector and their characteristics. Once target groups have been identified, they can be further researched to acquire a greater level of detail about their composition and habits, providing both qualitative and quantitative information. For example, the gender, education, and income level profile (quantitative information) and the motivations, likes, dislikes and aspirations (qualitative information) of the groups. This may involve putting oneself in scenarios typical of that group and recording thoughts and observations. Other effects can also be used to simulate the experiences of younger or older users or users with disabilities. Detailed research allows the design team to construct a target user profile and create a fictional ‘typical user’ to add colour to the profile. This provides a basis for creating design solutions at the ideate stage.

A character profile is a tool developed during the research stage, containing written and graphic information about a particular group of people. It is used in the design process to stimulate idea formation and help with decision-making. A character profile is built by looking for keywords and characteristics that define the target group. These can then be augmented with visual clues. This might include their

values, culture, source of income, the technology they use, their aspirations and any peculiarities. This is a mental model construction, put together through research of the group's habits and buying patterns, brainstorming and other processes to identify and define the key characteristics of the group. Remembering that it is dangerous to make assumptions, character profiles should also be made for the outliers of the group; the more extreme people that may not exhibit typical behaviour yet share many of the same qualities.

Secondary research sees the collection and use of existing published information about customers, competitors, and relevant trends of interest such as social and economic trends. Secondary research can be used to feed general information about the target group, the market, and underlying trends in the design process. Various secondary data resources are available at public reference libraries and online. These may allow you to automatically repeat a search every day or to subscribe to web feeds. Secondary data sources include newspapers and trade periodicals, blogs, conference papers, market research reports, trade association and official statistics, commercial business reports, university research papers and think tanks.

Data can be unapproachable, vague, and educational. It takes a lot of time to conduct meaningful research. It seems like an obstacle to progress. Research facilitates progress's emergence from the primordial soup of data so it can begin to take shape and form a solution. When faced with a challenge and using design thinking to help develop a solution to the challenge, we need research, and our initial reaction is probably one or more of these three:

- We do not have time for research.
- We do not have the budget for research.
- We do not have the patience for research.

Most people skimp on research when time and budget are perceived issues. In this chapter, I demonstrate that you do have the time, budget, and patience for research, and that research is an absolute imperative in design thinking to keep you from chasing rabbits down trails that lead to nowhere.

2.2 Design Thinking Research is Different

Design thinking research is not the static search we do in the library or online hunting for facts to support our theses. It is not simply a means to an end. Design thinking research is an inquisitive quest for insights and perspectives. It constantly evolves and truly has no end. It is purposeful in its pursuit of information. It uses the results to make the right and timely decisions.

Design thinking research asks a question in numerous ways and documents the answer. This research does not need to be large-scale quantitative surveys that

undergo regressive analysis to arrive at actionable answers. Nor does design thinking research need expensive, elaborate, in-depth, long-term qualitative studies. Design thinking research is purposeful, affordable, and actionable.

Design thinking research certainly can be as elaborate as budget and time will allow. Mostly, it can be inexpensive, simple, and scalable.

2.3 Quantitative Versus Qualitative

We classify research into two categories: quantitative and qualitative. Each one has its strengths and weaknesses. However, neither is superior or inferior to the other. There are some educational challenges in which it is perfectly acceptable to conduct only one of the two research categories. But these are few and far between. It is recommended to refrain from putting all research eggs into one category's basket. A balanced approach will be more informative and more likely to reveal a broader scope of opportunities to develop solutions to educational challenges.

Quantitative research is characterized by its focus on measurable data that can be extrapolated and applied to a population greater than the one tested. It is commonly used to gather demographic data, measure opinion using a predefined scale, and collect people's behavioural data. Surveys are the poster children of quantitative research because they can be constructed, distributed, and evaluated easily. Whether delivered online, via telephone, or through regular mail, surveys collect data in limited categories using predominantly closed questions. The length of a quantitative survey typically is dictated by what data are known currently and what data need to be collected to complete the desired data set. Quantitative data can also be gathered through web analytics, page views, original visitors, click-throughs, online polls, and people feedback forms.

Qualitative research is characterized by its exploratory nature. It is more about depth than breadth. Its results are not easily extrapolated to larger populations. However, the information collected is rich in a level of detail and nuance that is not possible in quantitative research. The stereotyped image of qualitative data is the focus group. Despite focus groups being characterized and parodied in popular media, this interview method is valuable because it provides an opportunity for deeper exploration into the people's opinions, behaviour, and lifestyle factors that might influence that behaviour. The nature of the topic being researched will dictate the type and size of the group and the demeanour of the interview. In early childhood education class while discussing potty training with a group of young parents, the questions will likely be light and humorous and the atmosphere convivial. However, if you are discussing fee and progress issues, the questions will

take a more serious tone. Other means of gathering qualitative data include one-on-one interviews.

2.4 The Role of Research

Research in design thinking plays the roles of Equalizer, Archeologist, Interpreter, and Devil's Advocate. It helps uncover the roots of the challenge instead of its face value. It translates the needs and wants of the people to take proper action. It can be the tempered balance of enthusiasm that shines a cautionary light on a solution's potential flaws. The Equalizer:

In design thinking, research surveys are the ideal equalizer. They can provide a measured overview of the market, the competitive environment, students, and teachers demographics, and similar broadscale views that give the lay of the land. Surveys essentially level the playing field for research. They can be conducted cheaply and quickly and can be quite pointed out in their questions.

If we find ourselves working in a vacuum with no known data, surveys can remedy that situation. We can gather even the most basic data like people's names. Consider this scenario: we have a new teaching method with a minimized factor for students' satisfaction. We have plenty of educational data, and perhaps even students' data harvested from across the country. However, we have not launched a unique education system yet, so we have zero educational data unique to us. We have a general idea of our target population based on the existing information we gathered, but we want to ask specific questions to discover a successful education system for people.

We can distribute a survey to a population that looks like our general target people and collect data from scratch. That data set might include questions about income, family size, geographic region, current school preference, frequency of use, everyday expenditure, and opinions about the environment. Once the data is collected and analyzed, we will be able to identify the consumer groups most likely to make the switch. The outcome could read something like this: "The people with monthly income from 20000 to 40000 choose public schools for their children. The parents of children in rural areas are very concerned about the environment." We now have a well-defined, specific parent segment supported by data.

We may have some parents' data to work with but need more details. We may have some parents' contact details and past views history, but not much more. In that case, the scenario may look like this: we are a school owner and during the admission process, we collect age, race, marital status, home ownership status, income level, and credit score data. If we want new admissions, we also gather data

on the existing schools' trends. At this point, we have a detailed picture of our students, but we want to know more.

When the students get admission, we distribute a brief survey via mail or email that asks the parents additional questions about parents responses about our school.

2.5 The Archeologist

Qualitative research is like the image of an archaeologist. It is like a brave explorer bent on unearthing hidden treasures, truths, and beliefs. It is to shed light on how and why we do what we do as humans. Imagine that somewhere, someone conducted some research on a group of parents a lot like we do to determine what type of school they would most prefer for their children's education. Then they used the data from that research to select that type of school.

Qualitative research is fascinating, highly valuable, and eminently important to the design-thinking process. The preferred means of qualitative exploration are focus groups and their intercepts.

For conducting this type of research, it is good to note that collecting the insights revealed during either of these activities is best recorded with video and supplemented with written notes.

2.6 Customer Intercepts

These are a quick, somewhat informal way to get brief answers to limited questions that are relative to what a customer is doing in real-time. To conduct these, we truly intercept customers during their involvement with us. Therefore, the way we approach customers is critical, as is the brevity of our interaction with them. As we are considering the questions, we want to ask customers and the way we will approach them, putting ourselves in their shoes. Construct the intercept in such a way that if we were the customer, we would willingly answer a few questions posed by a stranger.

Our culture propagates a distrust of strangers. Our countenance and body language are important in getting a response. Our actions speak louder than words here. For successful customer intercepts, the interviewer should be open, friendly, curious, approachable, and somewhat extroverted without coming across as overbearing or obnoxious. Senior leadership should conduct interviews, when possible, as they get the opportunity to hear the customer feedback firsthand. However, anyone on the team who matches this description would be a good choice as an interviewer.

Before conducting any intercepts, determine the questions for which we need answers. We will want to identify no more than two main questions, with a follow-up question for each. These should be short and sweet. We should also think through questions that might be asked of us by the customer and formulate our answers.

Next, determine where these intercepts will happen. For locations anywhere other than our place. We will need to secure permission from the appropriate people. If we plan to conduct our intercepts in public spaces, take the time to investigate whether we need permission from local authorities. Once we have our location, scheduled dates, and times during which we are most likely to encounter the type of customers we want to interview.

Let us illustrate all this customer intercept information with an example. We operate a small primary school that provides education to locals. We want to conduct customer (parents) intercepts to better understand the decision-making process for students. Our interviewer is placed near enough to the classrooms to be able to see how the teaching-learning process is happening. We should introduce ourselves and indicate that we are interviewing you about your preference for this school.

After the introduction, our interviewer should inform the customer that his answers are being recorded for research reference only and obtain the customer's verbal permission if the interview is being recorded. Then the questions can begin. In this scenario, the lead question could be "Why did you select that school?" If the customer's answer is not specific, for example, "I don't know," the follow-up should be more direct, such as, "Did you find this school better than the others? Or did you select the school based on the fee?" Our second main question could be about the standard of education. The interviewer could inquire about what features would prompt him to switch to this school. At this point, the interviewer is done and should thank the customer for their help. The customer may engage the interviewer in conversation, and that is fine as long as the interviewer is not missing opportunities to speak to other customers.

2.7 Focus Groups

Focus groups are the stuff of which advertising legends are made. Although there is always some kernel of truth in a stereotype. The focus groups don't have to be expensive, complicated, or dramatic. They won't make or break a product or service. They will, however, provide the opportunity to explore, somewhat in-depth, the why behind customer behavior.

The open-ended interaction of focus groups leads to the stimulation of thoughts and emotions, the revelation of material, which is not ordinarily forthcoming in an individual interview, the examination of how people in various roles interact, and the observation of important behavior. The open-ended nature of focus groups makes the research technique appealing. They are inherently exploratory, framed by two or more investigative, collaborative activities through which a moderator guides the group to reveal relevant insights from the customers' perspectives. Focus groups are best used when more detailed,

nuanced information is needed or when the customer's decision-making process is complicated. Healthcare and finance are prime examples of industries that benefit from focus group research when developing their products and services.

The primary ingredient for focus groups apart from target customers is the moderator. I consider personality to be critical when selecting a moderator. He or she must be able to make connections with the focus group participants and quickly build a comfortable rapport yet maintain enough distance and control to keep the group on task. The moderator is not a part of the group but is their guide. I consider moderating a group to be like supervising other people's children: the moderator is friendly, likeable, and engaging, but always in control. If you can contract with an independent moderator, I encourage you to do so. Conducting a focus group requires a certain amount of skill, finesse, and experience. If you don't have a budget for a moderator, don't let that be a barrier to using focus groups to your advantage. With a little studying and preparation, you could lead the group yourself. It's not ideal, but it can be done.

The second critical component for a focus group is the moderator's guide. This is a written document that outlines how the group will spend its time together. If an independent moderator is used, the guide will likely contain granular details, including scripted copy for the moderator's welcome, introduction, instructions, and so on, as an added benefit to you, the client. An independent moderator will want to ensure that you are informed of all the focus group procedures. If you are serving as your moderator, the guide should provide as much detail as you need to stay focused and communicate clearly with the group. The moderator's guide is a document for the moderator's use, so it doesn't need to be pretty, just thorough.

With a clear understanding of how the focus group will flow and having selected a moderator, it's time to recruit participants. I have moderated groups with as many as twelve participants and as few as three. My ideal focus group is no fewer than three but no more than six. There is no magic to that number; I find the group size manageable for a moderator and engaging for a participant. If you have a group larger than ten, you run the risk of groupthink (the natural tendency of groups to gravitate toward a harmonious outcome while forsaking their individual opinions) taking hold and skewing your results.

The participants you invite to the focus group should reflect the characteristics of your target market as closely as possible. Furthermore, you should organize your focus group participants so that the group is as homogeneous as possible, for example, stay-at-home mothers with stay-at-home mothers, and working mothers with working mothers. By grouping participants together, you help create rapport among the group, and they can build on one another's answers and thoughts. You can recruit focus group participants in many ways, the most popular and cost-effective of which include social media, and your personal and professional networks.

There is a wealth of inquiry-driven research tools that can complement focus groups or stand-alone. These tools serve as interpreters of customer insight and are particularly beneficial in providing added clarity to customers' responses to the questions asked.

2.8 Summary

Research helps eliminate the dangers inherent in making assumptions, which can be detrimental to success. Design thinking research methods both qualitative and quantitative are affordable, accessible, and incredibly user-friendly. The bottom line is that any of these research activities are frameworks for asking questions and getting answers that can be leveraged to help succeed. Remember, the only dumb question is the one not asked.

2.9 Exercise

Answer the following questions in detail:

1. Explain the types of research in the design thinking process.
2. What is the role of research in the design thinking process?
3. Explain the sentence, "Design thinking research is not static research"?
4. Explain Quantitative and Qualitative research.
5. What is meant by "focus groups"?

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Unit–3

DESIGNING A PROBLEM-SOLVING STRATEGY

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INTRODUCTION

A strategy is the path, purposefully outlined, one must adopt to achieve the desired goals or outcomes. Behind the strategy, there is a series of deliberations, data-based decisions, products, and services. It also involves an organization's culture, from which goals, decision-making processes, and measurements of success evolve. A strategy is energizing, dynamic, and meaningful.

The lack of design thinking affects the strategic planning process. The roots of design thinking are empathy, purpose, and adaptability. Working with design thinking principles is inherently dynamic. The design thinking principles help in developing a problem-solving strategy and it will be dynamic, flexible, and effective.

OBJECTIVES

After completing this unit, you will be able to:

- Understand a problem-solving strategy.
- Know the circle of influence.
- Work on a context map.
- Explain stakeholder visioning.

3.1 SWOT Analysis

It is exciting to have some opportunities in the education sector. Everyone instinctively wants to rush to take advantage of them before anyone else does. In that rush, people miss the due diligence needed to develop a sound strategy. Once they are neck-deep in a process without those guides, they often realize that they have no clear vision of what to do next. Progress stops, operations hit a tailspin, and they might even panic a bit. To avoid that downward spiral, they need to harness and channel their energy into smart, purposeful planning.

The first, most critical step is to clearly define the educational opportunity. For this purpose, SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis and assessing the competitive landscape can be used. These are two common and important tools used for identifying and articulating educational opportunities. The design thinking tools will add depth and additional insight to develop and define problem-solving strategies.

Conduct SWOT and competitive analyses first, because they will give the foundation of information on which we can build our strategy. The following three design thinking tools can be used in educational strategy planning: Circles of Influence, Context Map, and Stakeholder Visioning. These tools will guide from three critical perspectives:

1. Ourselves and our network,
2. The world outside and its influences, and
3. The key stakeholder groups are involved in our venture.

The information these tools yield is laced with opinion. It balances the data-driven information in your SWOT and competitive analyses.

3.2 Circles of Influence

We most often hear the phrase ‘circles of influence’ in a persuasive context. For our purposes, the context is the support and development of our system. The root of the Circles of Influence exercise lies in tapping into our personal, professional, and extended networks, and identifying additional connections. It will leverage us to explore new courses, evaluate products and services, reach new clients, and more.

If we are the sole proprietors, we can conduct the Circles of Influence activity on our own. We can include our close friends, trusted colleagues, and mentors but no more than four people. If we have an established leadership team that is larger than five people, we could consider working through this activity with a larger group. We will need to be diligent in keeping everyone focused and productive to avoid any mishaps.

Among all design thinking tools, Circles of Influence is best done through a visual exercise. It is not just a boring list of whom we know. It is very hard to uncover connections in such a linear way. Use a dry-erase board, a flip chart or poster board, or some other large surface on which we can write. We write goals or purpose across the top, for example, “Launch our system in three cities of no more than 100 employees as a beta test.” Be as specific as you can.

Under the goal statement, we draw two large circles, leaving enough room between and around them to allow for written notes. Using a different colour of ink for each circle is visually stimulating but not critical. In the centre of the left circle, write “Doers”; in the centre of the right circle, write “Supporters.” Give participants, including ourselves, a stack of sticky notes. Give each person a different colour pad of stickies, which will clarify the dynamics of potential connections.

Starting with the Doers circle, have the group think of people they know who can provide specific, task-oriented help to achieve our goal. Each person needs to be named specifically— “Jamil in human resources at system ABC” versus “someone in human resources at system ABC.” As each participant in our group thinks of a doer, he or she writes the doer’s name on a sticky note and places it in the doer’s circle. Once the group has thought of everyone possible, they collectively evaluate and discuss how connecting with each doer would be advantageous. Would the connection be mutually beneficial? Does the person know other potentially helpful people with whom our team could connect? Where can we plug these contacts into our strategic approach so we can get closer to accomplishing our goal?

Work together to identify whom to speak with first from the Doers circle. Who is the easiest person to talk to with the best return? Take notes during discussion so we do not lose any of these details, or better yet, audio or video record it as we would a focus group.

Now move on to the Supporters' circle and follow the same process with specificity in naming the people who belong in that circle, such as “Amna with Rehana.” The difference between the Doers and Supporters circles is subtle but distinct: the people in the Supporters circle might not be able to do something specific to benefit our system strategy, but they provide thought leadership, support, enthusiasm, and a willingness to go the extra mile for us if asked.

Not everyone in the circles will provide value in the way we hope. Focus on the successes. In this example, perhaps it turns out that Jamil was delighted to be a beta tester, and Amna provided wise counsel that kept us on track.

3.3 Context Map

While working on a challenging situation and developing a system strategy, it is truly difficult to see the bigger picture. We see the details of our interests and miss others entirely. We cannot see the forest for the trees.

We do not truly have a good grasp of a situation until we see it in a fuller context. The Context Map activity is designed to provide that bigger context. It is based on the premise that once we have a larger, systemic view of the environment in which our system is operating, we will be better prepared to plan for and anticipate needs at a larger scale.

The Context Map activity is interactive and requires some preparation on our part to get the most out of it. The group will drive the contributions and outcome of the activity. As the leader, we will be responsible for encouraging them along with relevant and thought-provoking questions. The goal is to describe the external environment in as much detail as possible, with the intent that the group can respond proactively, rather than reactively. The context map will help our team see the forest, not just the trees.

The Context Map exercise always begins with an outline of current trends. The other sections can be completed in any order. It is recommended to let them dictate the order after the Trends sections are completed and pay attention to the workflow. The areas that generate more content are fair indicators of where the team's focus and energy lie. Occasionally, the conversation drifts into analyzing the internal context. What is happening within our organization? So, we may find it necessary to redirect the conversation. Remember, the Context Map exercise is best used for external exploration.

You will need flip-chart paper, markers, and an expanse of wall for this activity. You can draw the necessary elements, which are described in more detail next, on the flip chart ahead of time and then post it on the wall or post the paper first and then draw—whichever is easier for you. For explanation, let's assume you are posting the paper first and then drawing.

Paste six large sheets of paper on the wall so we have two rows of three columns. In the center of the top middle sheet, draw something that represents our system, for example, a place setting if we own a computer or a software company. It does not have to be elaborate. Then, label the picture appropriately with our system name. On that same piece of paper, in the upper left corner, write Political Factors. In the upper right corner, write Economic Climate. On the top left and top right sheets of paper, draw several long arrows pointing toward the center sheet, leaving enough room between them to add notes later. Label these sheets “_____ Trends,” leaving the blank empty. Later in the activity, we will name the trends. On the bottom left sheet, draw more arrows again, with space in between. This time pointing up and to the right toward the top middle sheet. Label this sheet Technology Factors.

On the bottom middle sheet, draw an image that represents our primary client and label the sheet Client's Needs. If we have more than one client group we want to explore in this activity, add sheet below that one and draw something representative of that second group. Do not include more than two client groups in the context map, or the activity will get unwieldy.

On the bottom right sheet, draw arrows pointing up and to the left toward the top middle sheet, and label that sheet uncertainty.

Now we are ready to bring in our team and get started. Introduce the Context Map activity and explain its purpose: to help the team define and understand the bigger picture in which the system functions. Start with the Trends sections and have the team contribute the content while we add their comments to the sheet. Once the team feels the current trends have all been captured, move on to another section, but let them choose which one.

Follow the same process contributing content and comments for the remaining sections, one at a time, until they are all complete.

Once all the sections are complete, go back to Trends and review the team's original contributions in the context of the completed map. Do any of those identified trends need to change? Are they all on point? For example, if our team isn't confident that the self-sustaining food movement has exerted enough influence in the market to affect our system, they may choose to remove that trend from the map. Make any adaptations as necessary and then, as a team, come up with a description for those trends in the blank space.

To close the Context Map activity, lead the group through a summary discussion of what occurred and solicit feedback along the lines of insights. The last step is to agree as a group that the context map is the most accurate representation of the environment in which the system is operating. The context map is posted for several days following the activity for reinforcement if it can be posted in an area away from clients and potential competitors.

3.4 Stakeholder Visioning

Every system has multiple groups of stakeholders. They have varying degrees of vested interest in its success and perspectives on what that success looks like. Stakeholder Visioning, when used in developing a system strategy, provides a 360-degree review of our system from the multiple perspectives of our stakeholders. It also allows the participants to relate intuitive knowledge and subject matter expertise. With these multiple perspectives, we can explore possible futures and uncover potential gaps that could impede success.

Divide our team and assign them to a stakeholder group that they will represent during the activity. We will have at least two groups: clients and employees. Depending on the nature of our system, we may want to include others, such as parents, community members, stakeholders, investors, or mentors. Have them sit together in their new groups and consider having each participant wear a nametag with their group name on it. For example, Clients, or in some other way indicate each group so that participants are identified, and no one gets confused.

Ask them to step into their roles and imagine our system and their involvement in it five years in the future. What will the system be like? What will they value as a group? What trends do they think will have emerged? What do they think the competitive environment is like? What specifically will have changed over those five years? Have the participants write their responses on sticky notes, one thought per note. If it helps them communicate their ideas better, then they can illustrate the

notes, as well. Then have each group present their perspectives. For example, an employee might value increased profits and be concerned that the system may become less competitive in five years, whereas a vendor might value the opportunity to diversify its own by working with ours and might see a potential permanent partnership in five years.

Once each stakeholder group has presented, ask the participants to step out of their roles and review the perspectives from their points of view. Sort the sticky notes into common themes. Within those themes, have the team identify any opportunities that can be incorporated into our system strategy now to capitalize on future potential.

3.5 Summary

A sound problem-solving strategy is critical to success, and traditional means of planning a strategy are no longer sufficient. In developing a plan to keep our system viable and resilient, people need design thinking. When we add design thinking tools to the process, we can push our system strategy to be more robust and comprehensive.

3.6 Exercise

Answer the following questions in detail:

- 1: What is meant by SWOT analysis?
- 2: Explain the “Context map” in detail.
- 3: What is Stakeholder Visioning?
- 4: What is a Circle of Influence?

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Unit– 4

DESIGNING LIVE PEOPLE EXPERIENCES

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INTRODUCTION

Live customer experiences are the most visible way to manifest design thinking. It is the way a client interacts with the brand or service in person. Now that the client experience has become recognized as an important part of the success of a system, it has emerged as a specialized discipline.

It allows people to engage and interact with brands, products, and services in a sensory context, helping them connect with the brand in meaningful, personal ways. These personal interactions and the connections they build lead to informed decisions. Designing live client experiences propels our system beyond the narrative of the features of our product or service; clients experience the benefits firsthand.

From physical space to service delivery processes to employee competencies, every touch point is an opportunity to showcase our system. It sets the tone of the people's conversation to build loyalty. Even though we live and work in a digitally dominated world, live experiences remain a significant and valuable interaction point among people. They can make or break people's perceptions, and they are one of many areas that benefit greatly from the purposeful application of design thinking.

OBJECTIVES

After completing this unit, you will be able to:

- Know the live people experience.
- Explain physical location.
- Understand the importance of colours.
- Know the role of human beings.
- Know about the empathy map.
- Describe the code of conduct.

4.1 Physical Location

Our physical space like an office, school, college, university, academy, or open space is where a system's first impressions are often made. Putting some thought into how our system interacts with the target group in a physical space is particularly important where rely heavily on person-to-person interactions. Let us put this concept into personal terms as an example.

Imagine we are hosting someone very important at our home for dinner. Perhaps they are our future in-laws, our banker, the chairman of a nonprofit on whose board we serve, or a prospective new partner in our education system. We want to put our best foot forward, right? We give our house a thorough cleaning, arrange freshly potted flowers on the front porch, set the table with our best crockery and leave nothing questionable. We have all done this because we wanted our guests to feel welcome and comfortable, but also because we wanted to portray ourselves, our brand, in a certain light.

Now let us put this in business terms. Imagine we are hosting a potential client for a meeting at our office, during which we hope to get a good number of admissions for our education system. Is our office designed to provide the type of experience with our brand that we want that client to have? Or is our space somewhat haphazardly put together without any consideration of our system?

If our physical space is an office, is it welcoming without being overwhelming? Is it designed to engage clients as they navigate space? Is our team trained to provide specific interpersonal experiences for clients?

To evaluate our system experience in terms of physical space, as honestly as possible, put ourselves in our customers' shoes. Better yet, recruit a few of our leadership team and friends to join us and gather several perspectives.

Start evaluating from the parking lot: is the area clean, and does it feel safe? Is our entrance well-marked, attractive, welcoming, and free of debris?

These points seem basic, but they are essential and often overlooked.

Next, evaluate the clients' experience when they arrive at our office or institute. Do the interior design and standees align with our brand? As we are discussing the education sector, it should be approachable, affordable, egalitarian, and friendly. The interior of our office should support our purpose and message with open spaces, welcoming but energizing colours, and places to sit. It should appeal to beginners as well as experienced clients. People should try to explore our system. If our office is on an upper floor, take the elevator and perceive it through our client's viewpoint.

Once we arrive at our office, the reception area or lobby should reinforce our brand. For example, a conservative healthcare corporation may furnish its lobby with traditionally styled, dark wood furniture accented with oriental rugs and classic still-life painting reproductions. A cutting-edge architecture firm, on the other hand, may design its reception area with reclaimed materials, ultra-modern furnishings, and colourful, original artwork. If the physical setting of our reception or lobby is inconsistent with our brand message or devoid of any attention to detail, then the client experience is one of confusion and uncertainty, which is not the first impression we are counting on.

Carry this evaluative process throughout the public spaces of our office or institute and pay attention to detail. Offices, restrooms, classrooms, conference rooms, and playing areas are opportunities for reinforcing the experience we purposefully design. They are also where an experience that started beautifully can deteriorate, sometimes irrevocably.

4.2 Importance of Colours

Colours are important for their instantaneous effects on human beings. For example, blue connects the human mind to the universe and alleviates any sense of tight enclosure or claustrophobia that could occur in a windowless environment.

It should be kept in mind that colours play their roles in marketing, as well as behavioural science. They play their roles in designing physical space and affecting live customer experiences.

Simply put, colour theory attempts to explain what feelings specific colours evoke and why. It is a highly subjective design element. The emotion a colour evokes in one person could be markedly different in another. The reaction to colour can be influenced by personal preference as well as cultural perspective.

There are widely accepted generalities that we should consider when evaluating our physical space in terms of the customer experience and supporting our brand. Some colours seem to evoke feelings that are quite different from each other, a result of how and how much the colour is used in the design.

2.1 Hot Colours

Hot colours include red, yellow, and orange and generally convey passion, happiness, enthusiasm, and energy. Red, a primary colour, and its various hues can be used to communicate power and passion, as well as danger. Brighter reds have more energy; muted, darker reds have more elegance. Yellow, which is also a primary colour, can be perceived as happy and hopeful, but also as cautious. Softer yellows convey a sense of calm, whereas darker yellows with a more golden hue

can convey wealth or permanence. Orange is vibrant and energetic and is often associated with vitality and movement. Orange garners attention in a way that is considered less aggressive than red.

4.2.2 Cool Colours

These colours include blue, green, and purple. They are considered calming, soothing, and less intense than their warm counterparts. Therefore, these colours and their various hues are frequently used to convey a sense of professionalism and maturity. Blue is most readily associated with calmness, responsibility, and peace, with darker hues conveying a greater sense of stability and strength while lighter hues feel refreshing. Green is the colour of nature and almost universally conveys a sense of life, growth, new beginnings, and wealth. Brighter greens, incorporating a lot of yellow, are energising and inspirational. Alternatively, darker greens that include more blue than yellow are seen as stable, solid, and reliable. Purple has long been associated with royalty, wealth, and spirituality. Darker, richer hues of purple convey wealth and regality. Lighter purples, such as lavender and lilac, are more commonly associated with spirituality and romance.

The use of colour in physical space can go a long way toward creating the type of environment and by extension, the kind of feeling we want our clients to experience. In terms of our education field, colour should be used to reinforce our brand and its image. For example, a plant nursery would certainly lean toward using a lot of green symbolizing nature, life, and growth in its physical environment whether through the plants it stocks, paint, decorative elements, or both. However, a nursery may also want to punctuate its environment with yellow (happy) and orange (energy), both of which appear frequently in natural settings. Alternatively, an education system might opt for shades of blue (professionalism) and purple (wealth) along with a lot of green to show happy living.

If the colours in our physical space are not aiding in creating the kind of experience we want for our clients, such as too much red in a psychologist's office or too much blue in the gym, do not despair. Often, a new paint colour will put our space back on the right track. If painting is not an option for us, or if a lot of our colour comes from our furnishings, we still have alternatives. The psychologist with too much red in his office can temper that fire with cooler colours by incorporating a few accessories in shades of blue or purple. The gym owner could energize the workout environment with shades of orange or yellow.

4.3 Role of Human Beings

It is a fact that we human beings are responsible for making or breaking a live client's experience. We know this because we have experienced it firsthand in our encounters with brands. The services we frequent most deliver a client experience that has made us feel welcomed, understood, appreciated, satisfied, or some combination of these. We should not deliver anything less to our clients. To ensure that great experience, we need to indoctrinate our team. They need to be living, breathing representations of our services with a commitment to the golden rule: treat others as you want to be treated. It works in life, and it works in dealings.

We should follow the empathy map. Empathy makes the world go around smoothly; without it, we have misunderstandings and disruption. The empathy map tool leads teams through a process that helps them develop empathy for the clients, which leads teams to craft experiences that they as the clients would want.

4.4 The Empathy Map

The goal of the empathy map in terms of clients' experiences is to gain a deeper understanding of clients, and their wants, needs, and expectations regarding their interaction with our team, services, and brand. It is like a process of walking in someone else's shoes. The empathy map is a metaphorical pair of shoes. Creating an empathy map can be simple and completed in less than thirty minutes, which makes it a doable exercise to conduct during a staff meeting. It is the perfect place to start our team's training in designing clients' experiences.

Ideally, we will conduct the empathy map exercise with a team of no more than ten and no fewer than four. If we are a sole owner or a young start-up with a very small team, consider asking our spouse, a mentor, a friend, or any other trusted advisors and individuals to join.

To start, we or our moderator, if we choose to use one will need a large whiteboard or flip chart and markers in at least two colors. In the centre of the board, draw something that represents our customer. I often use the ubiquitous "Hello, my name is _____" name badge with 'our Client' in the blank. It's easy to draw and everyone recognizes it (Figure 4.1). Across the top of the board, write out the topic we want to address in the exercise. In this case, it is 'Our client's experience in our office/institute and with our team.'

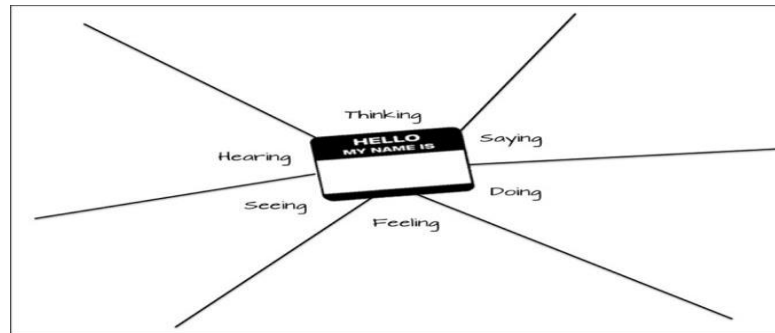


Fig. 4-1. Empathy Map

Then divide the remainder of our board into six sections, radiating out from the name badge image. Label the sections ‘Thinking,’ ‘Hearing,’ ‘Saying,’ ‘Doing,’ ‘Seeing,’ and ‘Feeling.’ Now it is time to put on those metaphorical shoes and start walking. Have everyone participating imagine him- or herself as our client with the intent of populating the diagram with real sensory experiences from the client’s point of view.

We can start populating the diagram from any section, and the order in which we fill it in does not matter. We may find ourselves and our team jumping among sections as the responses flow. Note the most common question from participants at the beginning of this exercise is “Are we saying what the customer is thinking/hearing/saying/doing/seeing/feeling *now*, or do we say what we want the customer to think/hear/say/do/see/ feel?” This is an extremely valid question and begs for clarification. In a perfect world, the team would stay focused on the client’s responses as they would be in the present. If those responses do not align with what the experience should be, address that separately with a different design thinking tool. However, the world is not perfect and that singular focus on the ‘now’ can be difficult to maintain. Rather than force the issue, let groups respond in terms of both ‘now’ and ‘want.’ This allows us to capitalize on the inevitable brainstorming around the client experience that arises during the empathy map exercise. The key is to distinguish between the ‘now’ and ‘want’ by using different colours of ink. Be sure to include a key somewhere on the board that identifies which colour is assigned to each type of response.

For this example, we will start with ‘thinking.’ Have our team consider what the client is thinking during a live client experience and write those thoughts in the diagram, using the terms and language our client would use. Using the specialty running the school as an example, the client might be thinking, “I’m not sure what questions to ask,” “This employee is listening to me,” or “I feel comfortable in here even though I’m not serious.” Remember, the point of the exercise is to empathize

with clients so we can design a live experience they will appreciate. Continue in this manner through all of the senses until the diagram is complete.

Now that our empathy map is complete, we have a lens through which we can view our business, our operations, our staff's training, and our product and service offerings from our client's perspective. Understanding the client's perspective and adopting it as our own are invaluable as we move through the following design thinking exercises to design engaging, live client experiences.

4.5 Client Experience Mapping

Now that we better understand our client after using the empathy map design thinking tool, what do we do with that knowledge? We design the live experience our clients most desire. The client journey map (CJM) is a visual means by which we design how a client interacts with our brand or services. Originally and still effectively used in service design, the CJM identifies all the touch points where a client interacts with our brand, including decision-making and carrying on, where delivering the optimum client experience can be even more critical than at other points along the journey.

The objective of a CJM is to map a client's experience with our brand. Think of a game board with pathways and a definitive start and finish. Our map at the end of this exercise will look somewhat like a game board with descriptive detail in each space.

We will need the usual design thinking materials for this exercise as we have used them with others: a whiteboard or flip chart, markers, and two colours of sticky notes.

We must start at the beginning of any process or project. In CJM, our starting place is the first point of contact our client has with our institute, and there could be several of them. Returning to our institute example, the starting places for a client's live experience are the institute, the telephone, and online. We may be wondering how an online starting point can be a part of a live client experience. Consider how often clients, including ourselves, search online for directions to an institute, look up an institute's operating hours, or review its website before visiting the physical location. That activity leads to the live experience and is therefore important to the process.

To create our CJM, on the far left of our workspace (whiteboard or flip chart page), start three rows or paths, with 'Institute,' 'Phone,' and 'Online' as our starting places. Be sure to leave a few inches of space between paths, so we have room to add sticky notes.

Next, pick one path to focus on. For our purposes, let us focus on the institute path. The first step along the institute path is entering the premises. Draw a square like we would see on a board game and label it ‘Enter.’ On one colour of sticky note, have our team write short descriptions of what the client’s experience is now on entering the institute. For example, ‘Client squints because there is not enough light to see,’ or ‘The sightline is open, so the client can see the whole institute at a glance.’ On the other colour of sticky notes, have our team write short descriptions of what we want the client’s experience to be: ‘Client sees the latest achievements on display,’ and ‘Client hears the door chime, so he or she knows employees are aware that someone has walked in.’ If there are descriptions that fall into both now and want categories, great! We should write those descriptions on both colours of sticky notes and put them in their respective areas (Figure 4.2).

Institute

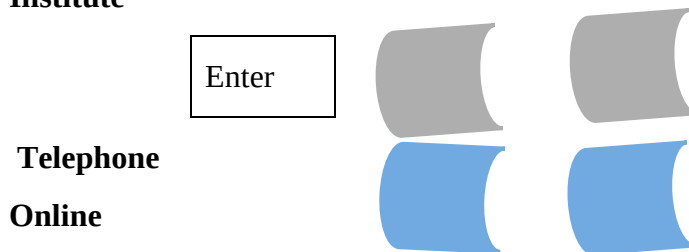


Fig. 4-2. CJM

Identify the next interaction on the CJM and draw a square. For our example, that interaction is the client being greeted by an employee, and the square is labelled ‘Greeting.’ Go through the same process as did with ‘Enter,’ describing on the assigned colours of sticky notes the client’s experience now and as we want it to be.

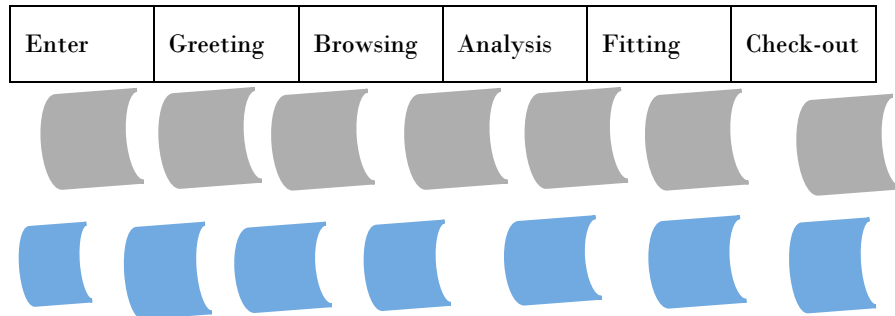
A CJM can be as detailed or as high level as we choose, based on how deeply we want to analyze and improve the live client experience. However, even if we opt for detail, do not get mired down in intricacies. Rarely, if ever, is it necessary to map the experience for every category or service we offer. We are mapping our client’s journey through the ‘forest,’ not their journey up to each tree within the forest.

For the institute example, one of the additional types of interaction is ‘Browsing Product.’ Browsing is a ‘forest’ activity—broad and big-picture. If we broke browsing down into subsections such as ‘browsing facilities,’ ‘browsing services,’ and “browsing courses,” we would be focusing on the trees and could miss the forest entirely.

To flesh out the experience for our example, we would add ‘Foot and Gait Analysis.’ For each of these steps along the path, the team follows the same descriptive

process used with “Enter” and “Greeting.” The result of the Institute path would look something like Figure 4.3.

Institute



Telephone

Figure 4-3 Customer Journey Map activity diagram, with one completed path

4.6 Online

When all our live client experience paths on our CJM are complete, review them for commonalities. What shared experiences exist that we want to maintain or reinforce? Are there shared deficiencies between paths that demand immediate correction? Where can we invest our resources to produce the best possible outcomes and improve the live client experience? Document all thoughts, ideas, solutions, and tasks, and sort them into one of four action lists with thirty-day, sixty-day, ninety-day, and undetermined deadlines. For example, if the institute clients are squinting as they enter the institute because the lighting is inadequate, list ‘Change wattage of entry lighting; brighter bulbs’ on the thirty-day action list. Notice the specificity of the action listed. That kind of detail empowers self-directed action among our team. Push the team to sort the ideas into the action lists with deadlines, because deadlines are the catalysts for completing any kind of task. The undetermined action list should be the shortest of them all; ideally, it is empty. A task without an assigned deadline has a high probability of lingering without completion. If we cannot determine a deadline for a task, we probably lack the proper information to decide in the first place. Therefore, shift the task to finding the information, and put a deadline on it.

When the thoughts, ideas, solutions, and tasks have been sorted into action lists, move on to assigning team members the responsibility of taking the lead in marshalling those tasks and getting them accomplished. Depending on the skill sets and personalities of our team members, the nature of tasks, and our leadership style, team members could volunteer to lead, or we could directly assign them responsibilities as necessary.

4.7 Clients and Employee Relations

Understanding our clients and designing a live experience that is engaging and relevant is invaluable. However, experience is of no value if our employees are not aligned and committed to delivering and serving our customers' expectations. We may have heard the old saying, "You can lead a horse to water, but you cannot make him drink." Now that we have led our employees to the water, the experience our client wants, this next design thinking tool will help to get our employees to drink, and deliver the experience.

4.7.1 Code of Conduct

A code of conduct is the basis of any dealing anywhere in the world. In design thinking tools it is a bit intimidating, and that is all right. Our outcome from the Code of Conduct exercise is a shared understanding among our team regarding what is required of them individually to deliver a meaningful live client experience.

In the center of a whiteboard or flip chart, write the words "Pleasant" and "Meaningful." Ask each member of our team to call out what actions, behaviours, and beliefs they believe are necessary to make the live customer experience pleasant and meaningful. Write each thought and idea on the workspace in a mind map diagram. Group the thoughts and ideas around "Pleasant" and "Meaningful" as appropriate.

For the institute example, contributions (Figure 4.4) could include 'Make eye contact when we greet a client,' 'Do not appear to be in a rush,' 'Shake the client's hand at the end of the meeting, even if they have not agreed,' and 'Encourage the client to be brutally honest about how they feel about the institute.'

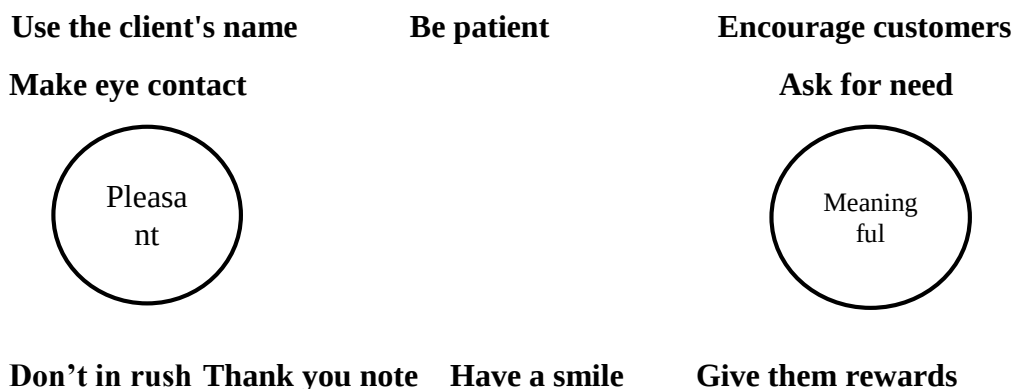


Fig 4-4.

Now quickly review each of the contributions and how they are grouped. Does everyone have the same understanding of each statement? Does everyone agree

with how the statements are grouped? Is there anything missing? When the team is satisfied with the diagram, review each statement, and ask why it is important to the live client experience. Document their responses alongside the statement being addressed.

Once all statements have been reviewed and responded to, the diagram will resemble a work agreement that the team has co-created and to which they tacitly agreed. Our role at the end of the Code of Conduct exercise is to review the outcome with our team, noting each statement and the value they assign to it. Remind them they now have a shared commitment to follow this code. Granted, it is a sneaky way to get employees aligned, but it works. The key is in the co-creation.

Enforcing the code of conduct and ensuring adherence to the commitment can be a challenge. It is a culture in which employees can constructively police themselves so that they keep each other focused and on task, without needing to be directly involved. Unfortunately, there will be times when we must step in and correct the behaviour of either the code violator, the corrector, or both. It's a downside of being the boss.

Perhaps the best and most relatable example is parenting multiple children. They all know their parents' expectations of their behaviour. They readily police themselves, and generally, that works just fine. Occasionally, though, there are tattletale moments and parents must step in when self-policing is delivered in a nonconstructive way.

One means of ensuring enforcement of the code while minimizing our need to parent our employees is making the code part and conversation. Weave the content of the code of conduct into employee communications, add a review to the agenda of staff meetings, and consider posting the visualized code (Figure 4.4) in a break room or similar space as an ever-present reminder.

4.8 Summary

We can use design thinking tools to create system interactions with purpose and meaning, and to do that effectively, we must be able to empathize with our target group. Quite simply, we must put ourselves in other shoes to feel their expectations and reactions. How would we want to interact with our system and services? What would we want to derive from that interaction? What would we want to feel afterwards?

4.9 Exercise

Answer the following questions in detail:

- 1: Explain physical location.
- 2: What is the importance of colours?
- 3: What does the Empathy map mean?
- 4: What is meant by Hot colours and Cold colours?
- 5: Describe the role of Human beings considering the given context.
- 6: Explain Client and Employ relation.

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Unit–5

DESIGNING DIGITAL CLIENT EXPERIENCES

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INTRODUCTION

The live client experiences are undeniable and important to any organization. Being aware of the live experience is incredibly valuable in the Planning phase. However, the realities of the digital world are undeniable, and the evolving client touch points that technology provides. A good digital experience is not based on functionality but on how a client feels while interacting with it.

In the digital space, client interaction is immediate and direct. A client can interact with a business and brand with intent, or through chance because of an Internet search. A client can interact with the system and brand online, via mobile technology, and through social media. Leveraging these possible means of interaction through technology requires a commitment to consistency in message, branding presentation, and quality across all digital platforms and devices.

Although the digital world in which we live and work is continuing, it is also evolving. What the digital landscape looks like today will be vastly different in a few short years. Technological advances result in new devices through which we can reach clients and digital environments in which we can interact with them. Regardless of how technology changes, the basis of our client interaction stays the same. The quality of the client's experience, not the vehicles through which it occurs is what helps shape a system's success. As educationists and professionals, we need to keep our eyes on that prize. Above all, remember to design the same positive experience with your client in the digital space as you would if the customer were standing in front of you.

OBJECTIVES

After completing this unit, you will be able to:

- Know the digital customer's experience.
- Explain Information architecture.
- Describe navigability and usability.
- Keys to a functional website.
- Know the social media experience.
- Understand reputation management.

5.1 The Online Experience

Online experiences are now universal in all systems. For developing a brand, a website is an immediate and basic need. It adds legitimacy and authenticity to a system. Clients expect to find a website that provides sufficient information, as well as opportunities to interact with the system in a way that meets their expectations. Often a website provides firsthand experiences to the clients. As with live client interactions, first impressions have an impact.

Designing a relevant and meaningful client experience in the digital realm involves more than just offering compelling graphic design and basic functionality. It requires a deep understanding of the client that guides a thoughtful approach to information architecture, navigability, and usability. It also requires entering the process knowing that the website is tested it delivers what the client wants. It is a prototype. It is expected to have revisions even after the task is done.

5.2 Information Architecture (IA)

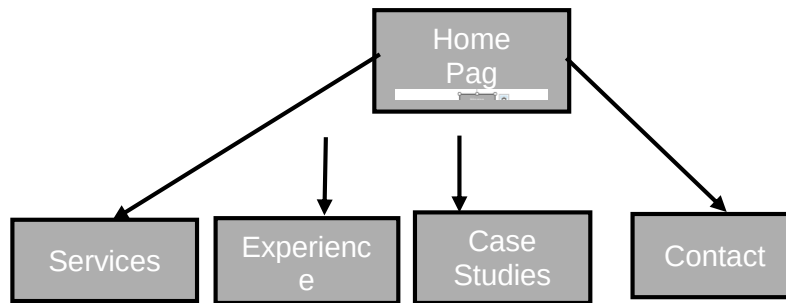
Information architecture means how the website's content is structured, shared, and found. The Information Architecture Institute defines IA formally as:

- The structural design of shared information environments.
- The art and science of organizing and labelling websites, intranets, online communities, and software to support usability and findability.
- An emerging community of practice focused on bringing principles of design and architecture to the digital landscape.

While discussing and designing the website's IA, we need to consider first and foremost what our client wants to accomplish by visiting our website. That is the foundation on which we built the building. The best way to illustrate the development of IA is through examples.

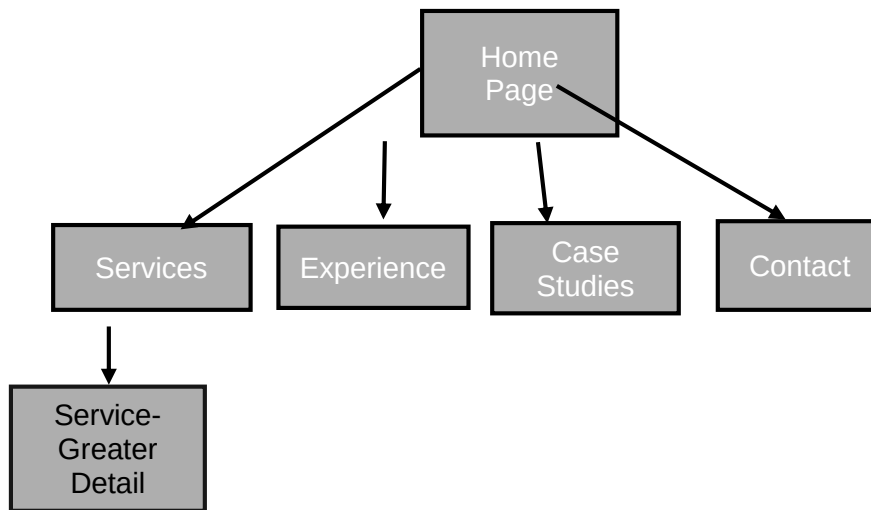
Let us have a professional consulting firm in the field of education that needs to design its IA in preparation for developing a website. First, we ask ourselves why we need a website. In other words, what does our client want to accomplish via our website? Our answers likely include finding our contact information, learning more about our services, learning more about our experience, and perhaps reading some case studies or testimonial statements from satisfied clients. Those answers identify the big buckets or main categories of information.

Designers represent this work visually through a tool called a wire frame. It looks a lot like an organization chart. The wireframe for our example would start out looking like this. (Figure 5-1).

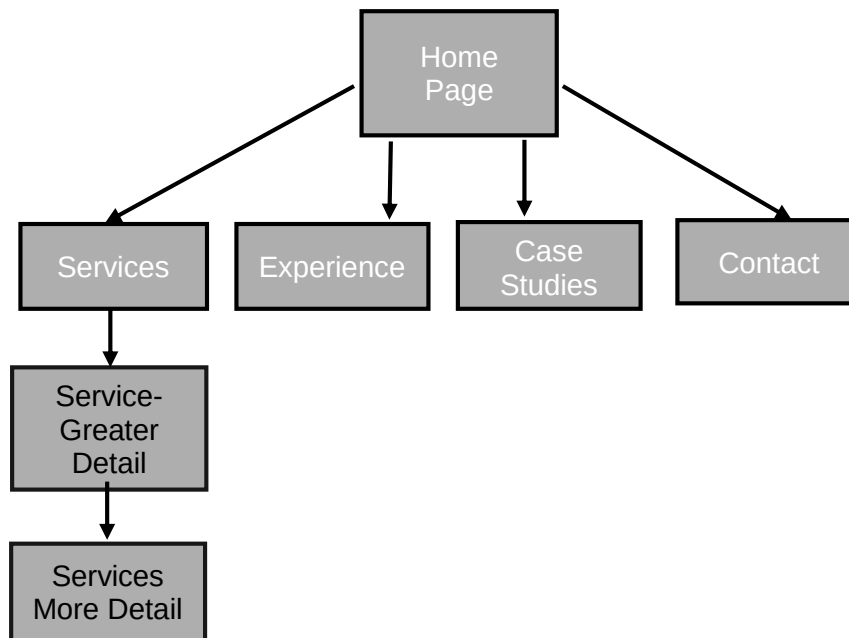


Now that we have defined our main information categories, we start on the next level of information. The wire frame is the second layer in the chart (below the home page) and represents the information the client wants to see if they click on one of our main categories. So, in the consulting firm example, let us say the client wants to learn more about the various services we offer. The second tier of information would include a list of services we provide, accompanied by brief descriptions.

The wireframe would look like this. (Figure 5-2)



At this point, our IA may reach its conclusion for the services information, or it may need to expand. If we have only a few services and can sufficiently and appealingly describe them within a paragraph or two, we may not need another tier in the wireframe. If we need to provide greater detail, we might need another tier after all. If you need a third tier, the wireframe would look like this. (Figure5-3)



To flesh out the wireframe for your entire site, we would follow this process through each main information category to its natural end.

5.3 Navigability

After completion of the wireframe, the next step is to design the navigation of our website. Simply stated, we want to design how a client moves through our site among the various pages of content.

Clients' web behaviour is inconsistent, and because of that, great navigation walks a fine line between simplicity and annoyance. There is a general belief within digital marketing circles that a client would not click through to another page within a website more than three times. This is only possible if they want to accomplish a specific task, such as contacting the firm. With each click, therefore, the content must be compelling and what the clients expect to see, or they may leave the site immediately. We should design navigation in such a way as to accommodate that uncertainty.

5.3.1 Use a Top or Left-Side Orientation

It is a fact that clients are accustomed to looking for the main navigation menu at the top or left side of the web page. We will notice that most of the popular templates, or themes have their main navigation in one of those areas. A few of the popular themes have images that dominate the top part of the page, with the navigation immediately below them. One thing we should keep in mind is that popular themes do not mean they are always producing the best results.

5.3.2 Use Descriptive Navigation

We should make our main navigation descriptive. In consulting services, it is better to use consulting services in education, in our main navigation. This level of specificity communicates directly to our clients and makes our site more visible to search engines. We may consider using highly targeted search terms or keywords as our main navigation headings. Google offers a free tool called Keyword Planner that is easy for us.

5.3.3 Order Navigation Cues Carefully

Finally, consider the order of the main navigation. Items that appear first or last on any list are most effective. This rule also applies to navigation as there is no exception. Psychological studies on the serial position effect show that attention and retention are highest for things that appear at the beginning and the end of lists. The middle gets lost in memory. Our navigation categories that are most important to our clients, and ultimately our system, should be listed first in our navigation.

5.4 Usability

When the navigation is in place, the usability of the website comes to the forefront. The more usable the website is, the easier is for the clients. It presents information concisely and in locations that seem logical. It lets the clients easily accomplish their goals.

Usability goes hand in hand with graphic design, so evaluating usability will run on a parallel path with the development of the website's graphics. The discipline of graphic design for the web is common with best practices, technological protocols, and design accommodations that other media do not require.

Usability relates to designing a digital experience to highlight its fundamental importance. Usability is where the rubber meets the road. All our effort with IA and navigation is for nothing if customers cannot easily use the resulting website.

5.5 Keys to a Functional Website

As the graphic designer creates a functional website, there are best practices to ensure a usable product. The following points are most critical to a website's effectiveness.

- Loading time for the site should be reasonable.
- If the site takes too long to load, the customer will give up.
- There should be a good contrast between text and background.
- The font selection and size should be proper for readability.
- Customers do not want to strain their eyes to read information.
- The logo should be placed prominently.

- Contact information should easily be found.
- The buttons, links, and drop-down menus should be reasonable.
- Thoughtfully guide customers through content.
- Do not make them leap around to find required the information.
- Content should be concise and clear and use emphasis sparingly.

The best way to determine the usability of your website is to test it. The best times to do this are early in the design process, when you can catch major flaws; when the design is complete but before the site is live; and any time you make major changes to the site. A good general approach to testing the usability of your site is to recruit five to ten individuals who best represent your primary customer demographically but who are not familiar with your website design. You might also consider participants who have varying levels of online experience. Generally, if you're testing early in the process, you need fewer participants to catch the big flaws. As the website gets more refined, you'll need more participants.

Don't let identifying and recruiting participants for testing overwhelm you. Much like recruiting participants for focus group research, start with the people you know in your professional and personal circles and expand from there. You probably won't have to look far to find amenable recruits. Once you have your testing cohort, it's time to evaluate your website.

Usability tests come in many different formats, and some agencies that specialize in digital design and development can make testing seem like an unwieldy beast to manage. It isn't. Usability tests can be simple. At the end of the day, you want to know if your website works the way it should. Design your test to deliver that information.

5.6 Designing Usability Test

To effectively design your usability test, outline what tasks you want the participant to do and the information you want to collect from that action. Then, draft directions and/or questions for the participants that will yield that information. For example, you might instruct them to locate a particular product or service, ask them where on the site they would find more information, or ask them to sign up for the newsletter.

Usability tests can be conducted in person by a moderator who guides the participants through the actions and observes the process. As with focus groups, you may want to record one or two participants, generally with the camera positioned over the participant's shoulder with their hands, the keyboard, and the computer screen captured in the frame. Usability tests can also be conducted remotely via a survey format, although this isn't as effective because you lose the

opportunity for observation. In either case, at the end of the test, ask your participants to write a summary of their experiences, sharing any observations they have about functionality, navigation, and design.

The website should be a prototype to discover new things that require site changes. After testing, review the data for its relevancy and determine what changes need to be made to remove any deficiencies. Certainly, you want to create the best possible online experience for your client, so don't jump at the idea of revisions.

5.7 The Mobile Experience

Smartphones and mobile applications have evolved into critical touch points in the client's digital experience. Because of that, systems of all sizes and kinds are struggling to get ahead of the client experience curve and find ways to drive brand engagement through mobile devices. Mobile technology puts Internet access, information, and social media in the hands of clients whenever they want it, wherever they are and that is an immediacy you cannot afford to ignore.

A system that capitalizes on the unique opportunities mobile devices present and purposefully design their digital client experience to accommodate this technology can get ahead of their competitors. The key is to accept that mobile technology is not simply a breeding ground for innovation. Rather, it is an important part of the system's overall client experience ecosystem and an ever-evolving one at that. The following list suggests some of the best practices for mobile design:

1. Put functionality first and visual design a distant second.
2. Performance is everything.
3. Keep it simple.
4. If a website works, then skip the app.
5. Balance function, performance, and visual design for the best outcome. Too much of one thing is not a good thing.

Designing for mobile technology often seems overwhelming. Ask for a mobile application and your designer/programmer will ask if it is for iPhone, Android, BlackBerry, iPad, or a netbook. (Each year there probably will be additional technology to add to that list!) Each device requires its design to accommodate its operating platform and screen dimension. Imagine the costs of designing and programming for each type of device. Now imagine the costs of losing clients because you just did not have the budget to develop an application for their type of device. Fortunately, there has been a shift in perspective among digital designers that is proving to be a huge benefit for businesses, especially those with limited resources for developing their digital presence.

Responsive Web design is the approach that suggests that design and development should respond to the user's behaviour and environment based on screen size, platform, and orientation. The practice consists of a mix of flexible grids and layouts, images, and an intelligent use of CSS media queries. As the user switches from their laptop to an iPad, the website should automatically switch to accommodate resolution, image size and scripting abilities. In other words, the website should have the technology to automatically respond to the user's preferences. This would eliminate the need for a different design and development phase for each new gadget on the market.

5.7 The Social Media Experience

The third aspect of the digital customer experience is social media, and it plays an important role in creating an experience that supports a brand as well as delivering value to your client in a way that resonates. Social media has also earned a reputation as a potential powder keg for a system, but frankly, that's not entirely accurate. Social media in and of itself is a powerful communication tool. It offers a means to nurture connections with existing clients and connect your system with thousands of potential clients with whom you might otherwise never be able to interact. The missteps of the system in their use of social media are what has given the medium its stigma, and that can be assuaged by understanding its role and place in the client experience landscape.

Some systems often see a great deal of success in using social media as a means not only to communicate key information to clients but also to help build a relationship with those clients and nurture loyalty. The franchisees respond to client questions and comments via social media, making use of the platform's two-way communication vehicles. Herein lies a critical point that the system understands that social media can and should be a way to speak and listen to their customers.

5.8 Reaching to Clients

Just as you can use social media to reach your clients and a wider audience of potential clients, so can your clients use social media to reach each other and that wider audience. Clients readily post their experiences and their opinions thereof in social media environments, most notably Facebook and Twitter. It is human nature to want to share one's experiences with others, especially when those experiences are emotionally charged. Social media gives them immediate outlets through which they can share, but that is not always a good thing.

Clients might praise the excellent service they received, describe a situation in which an employee went above and beyond to solve a problem and encourage their friends and followers to support the system. In the glow of the feel-good moment,

satisfied clients can post a message from their smartphone on the spot. It is a desirable response.

Clients may also rage about an experience they perceive as less than ideal, whether it involves customer service, product performance, or operating policies. In this situation, the immediacy of social media can be a powder keg. In the heat of the moment, an angry customer can post a message without the benefit of having thought through the comment or the potential effect of it.

In both situations, how the business responds will affect brand perception, client loyalty, and the system's reputation.

5.9 Managing the Reputation

Managing the client experience in social media is frequently referred to as reputation management. That means monitoring social media platforms and engaging with clients appropriately, whether that involves answering questions, solving problems, or simply thanking clients for their support. It also means thoroughly understanding that there is no such thing as anonymity in digital media. Your activity on social media needs to be genuine and transparent as to its source. So, whether you take on this responsibility, assign it to another team member, or contract with someone outside of your organization, reputation management is crucial to your system. The end goal is to ensure a positive digital experience for your clients.

Successful reputation management and positive client experiences hinge on the timeliness, tenor, and content in the order of your response to a client's comment, question, or complaint. For the most positive results, respond to any client communication within an hour during normal work hours. If a client praises you, thank them. If a client has a question, answer it directly if you can be brief. If the answer requires a longer explanation, you can either ask the client to email you or direct him or her to a specific page on your website where he or she can read the answer at length. Don't know the answer to the question? By all means, at least post a response along the lines of "Thank you for asking!"

Let me collect the accurate information, and I'll respond again soon."

5.10 Summary

If a client complains on social media, responding can be tricky and warrants greater care. The tenor and content of your response are crucial to resolving the situation to the client's satisfaction and retaining your system's reputation and goodwill. Make a misstep, and your response could not only alienate that client but also go viral and wreak havoc on your system's reputation. A client complaint calls for a prompt, professional, succinct but not rude, sincerely concerned response. Don't labour the point, don't make excuses, and don't be defensive even if you feel the complaint is unjustified or hateful. Provide your contact information and ask the client to contact you directly if they have any additional concerns or questions. If the complaint is specific to an employee, or if it requires additional action on your part to resolve, you will want to move this conversation out of the public eye.

5.11 Exercise

Answer the following questions in detail:

- 1: What is meant by digital customer experience?
- 2: Explain Information architecture.
- 3: What does Navigability and Usability mean?
- 4: What is the role of mobile in client experience?
- 5: What is the best way to manage reputation?

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Unit–6

DESIGNING SERVICES AND SERVICE DELIVERY IN EDUCATION SECTOR

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INTRODUCTION

The education sector provides services to educate and train human beings to cope with different challenges of life. Services are a common point in the education sector. On some level, almost everyone is qualified to start a service-based business, because everyone has some skill, knowledge, or experience for which others are willing to pay. Starting a service-based business is quite an egalitarian proposition; anyone with a decent work ethic and a desirable skill can sell a service as opposed to product-based businesses. There is a reduced financial commitment as compared to other businesses. By applying a design thinking approach and using the discipline's tools, we can be purposeful in designing services and service delivery in the education sector.

Although service delivery and client experience may seem like two sides of the same coin. But they are distinct aspects of the system and demand individual attention. To best design the way our organization delivers the service(s) it provides, acknowledge that the client is in the details. Focus on the mechanics of how our services are delivered, with emphasis on efficiency and effectiveness for us and our clients. It is a fact that well-delivered services produce great client experiences.

OBJECTIVES

After completing this unit, you will be able to:

- Define service and service delivery in the education sector.
- Explain services for problem-solving.
- Know the service delivery pathways.
- Avoid the risk of abandonment in service delivery.

6.1 Services for Problem Solving

Just as a product fulfils a customer's need, a service must provide a solution to a client's problem. For example, customers need fresh and ripe fruits, so they visit the Sunday bazaar. Their need is fulfilled in the bazaar. Furthermore, in-house people need help getting everyday tasks done, so a software-as-a-service company creates a web-based platform through which people can contact freelance assistants to accomplish those tasks. In this way, the company's service provides a solution. There is a conversation about products and services. It is thought that a product can provide a solution, and a service can fulfil a client's need. The software as a service is the solution to the people's house problem. It is the product that fulfills the customer's need for an assistant. With the use of design thinking in developing services, we can define services as solutions.

Successfully applying design thinking to a service business requires a solid understanding of the client's problem for which the service is to be the solution. If we do not have a clear understanding of the problem for which the client needs a solution, we simply cannot properly design a service to satisfy that problem. The research helps in eliminating assumptions, and design thinking research methods are affordable, accessible, and very user-friendly.

6.2 Six Whys

For service design, the 6 Whys is an effective design thinking tool. It is particularly important to understand the true root of the client's problem to best design the service solution. Let us use a virtual assistant service as an example. On the surface, the belief is that students need help getting general issues and personal tasks done. Why? Because they cannot do it by themselves. The answer to 'why?' may seem to be sufficient and a reasonable basis on which to design a service to solve the students' problems. By digging deeper, however, we can design a service that delivers a more precise and satisfactory solution.

With a surface-level understanding of the problem, we may have designed the virtual assistant service to provide task fulfilment in a wide variety of areas performed by assistants with generalized experience. Instead, with a deeper level of understanding, we would design the service to help provided by more specialized experts to fulfil highly specific tasks in targeted areas.

6.3 Intangible Services

The one distinct feature of a service is that services are intangible. Although services can be experienced and consumed, they cannot be physically touched, and their intangible nature produces some unique challenges.

Services are at a great disadvantage as compared to products when it comes to forming lasting impressions on others. Generally, services do not result in physical artefacts or tangible representations of the service that was provided. With product-based businesses, customers possess a physical thing that they can identify with the business transaction, for example, an air-conditioning system, a car, a dress, or a watch. The artefact serves as a sort of memory device, prompting the customers to remember the business and their experiences interacting with it.

Intangible services are much like memories: they can be described in detail, can be

What is the problem?	Who is involved?	Why is the problem important?	Where does the problem occur?	When did the problem begin?	How could this problem be an opportunity?
What would we like to know?	Who is affected by the situation?	Why does it occur?	Where was it already resolved before?	When do people want to see results?	How could it be solved?
What are the assumptions that are scrutinized?	Who decides?	Why was it not yet solved?	Where did similar situations exist?	When can the project be started?	What has already been tried to resolve the problem?

emotionally charged, and leave a lasting impression. Conversely, they can also be insignificant and transient. It is the quality and depth of meaning in what occurred that creates a lasting memory. It is also what gives a service its significance in the eyes and minds of others.

To illustrate this dichotomy: think of a vacation from which you brought home a souvenir, say, a seashell from the beach or a miniature Minar-e- Pakistan. When you see that souvenir, do you recall the details of your vacation and all that you experienced? Now, think of a vacation from which you didn't bring home a souvenir. How often do you recall the memories of that trip? Can you recall those memories in rich detail, or are the memories a bit vague?

A service business's lack of a physical artefact should not be seen as a deficiency but should be considered a ripe opportunity to engage design-thinking tools to ensure a service is delivered in such a meaningful way that it can be remembered in detail, over time, without the need of a visual prompt.

6.4 Service Delivery Pathways

Service delivery seems inextricably linked to the customer's experience, and it should be regarded as a distinct characteristic of our business and therefore planned and designed accordingly. The easiest way to view service delivery is to focus on the mechanisms through which our service is delivered. Let us go back to the virtual assistant service example to illustrate the difference.

A school has decided to use our service to help in new admissions. How will we provide that service? In other words, through what paths we can deliver our service?

The customer journey map in Chapter 4 is an excellent design thinking tool for mapping our service delivery process. If the CJM is completed, bring the flip-chart pages out of the file drawer, or print out the digital photos and use them for reference. To incorporate CJM into service design, we need to go a level deeper and add details of how our service is delivered to the customers.

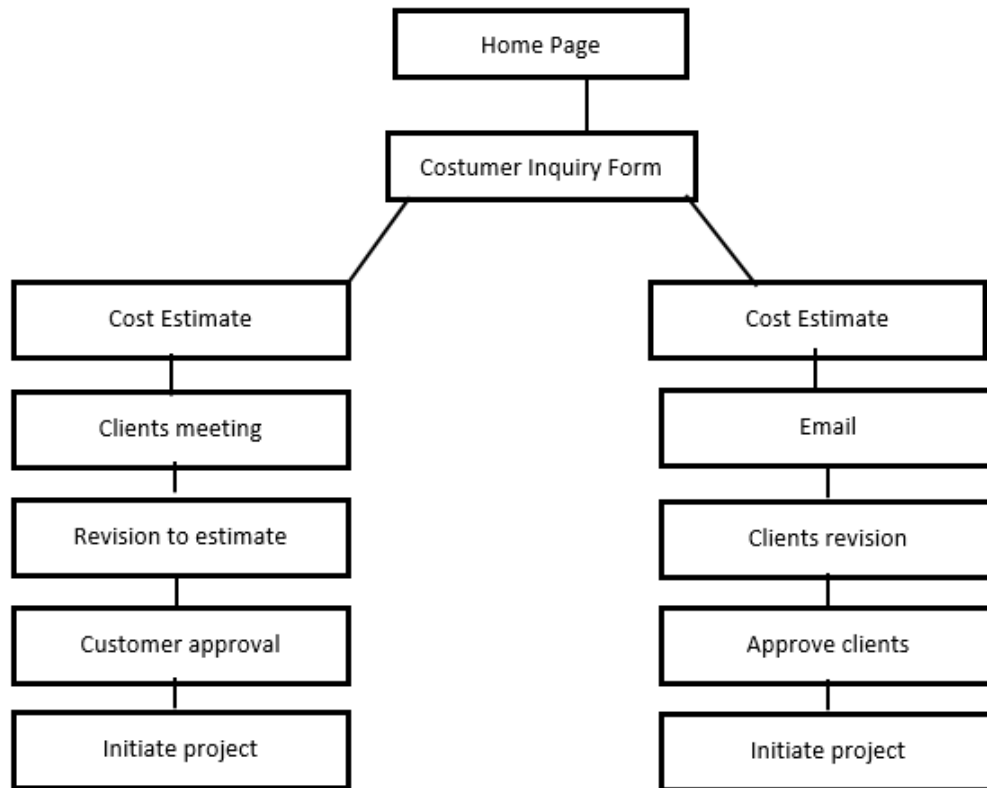
There can be multiple starting points and service delivery pathways with any business. In our scenario, we will compare two pathways. Both start online, and one remains online through the duration of the transaction, whereas the other goes offline to complete the service delivery in person.

Your entrepreneur customer goes online and reviews the content of your website. Again, focusing on the mechanisms of service delivery and its roots in efficiency and effectiveness, how well does our website perform? Do the pages load quickly? Is the information clear and easy to understand? Is it clear to the customer what the next step needs to be to engage our company?

In our example, the entrepreneur reads on our website that to receive further information and a cost estimate, the next step is to submit an inquiry about services, describing what type of assistance they need. The form the customer receives with defined fields is designed to make service delivery efficient. Prompting the customer to provide detail up front and in helpful way potentially minimises the amount of communication needed before providing a cost estimate, thus making the delivery of service at this point more effective.

Once we have received the customer's form, identify how we will deliver the next level of service: the cost quote and the solution to the customer's problem. At this point, the service delivery pathways can diverge into online-only and online/offline formats. As the service provider, we have a decision to make: how do our transactions need to happen? If research indicates that our customers prefer the efficiency of a completely online service experience, then that is the delivery pathway we design and provide. Alternatively, if research indicates that our customers are more likely to contract our services after meeting and conducting in person, then we design our delivery pathway to start online and then move offline to close the deal. What if we do not have any research that indicates a preference? We can offer both and evaluate which means of service delivery performs better, or we can offer the service delivery that we prefer and monitor it closely to ensure we can meet our goals efficiently.

In the virtual assistant services example, the steps along each pathway would have more differences than similarities (Figure 6.1). However, we design service delivery, and scrutinize the efficiency and effectiveness of each point along the path. Not only do we want to ensure that the process is cost-effective for our business, but we also want to minimize the risk of our customers abandoning the transaction altogether.



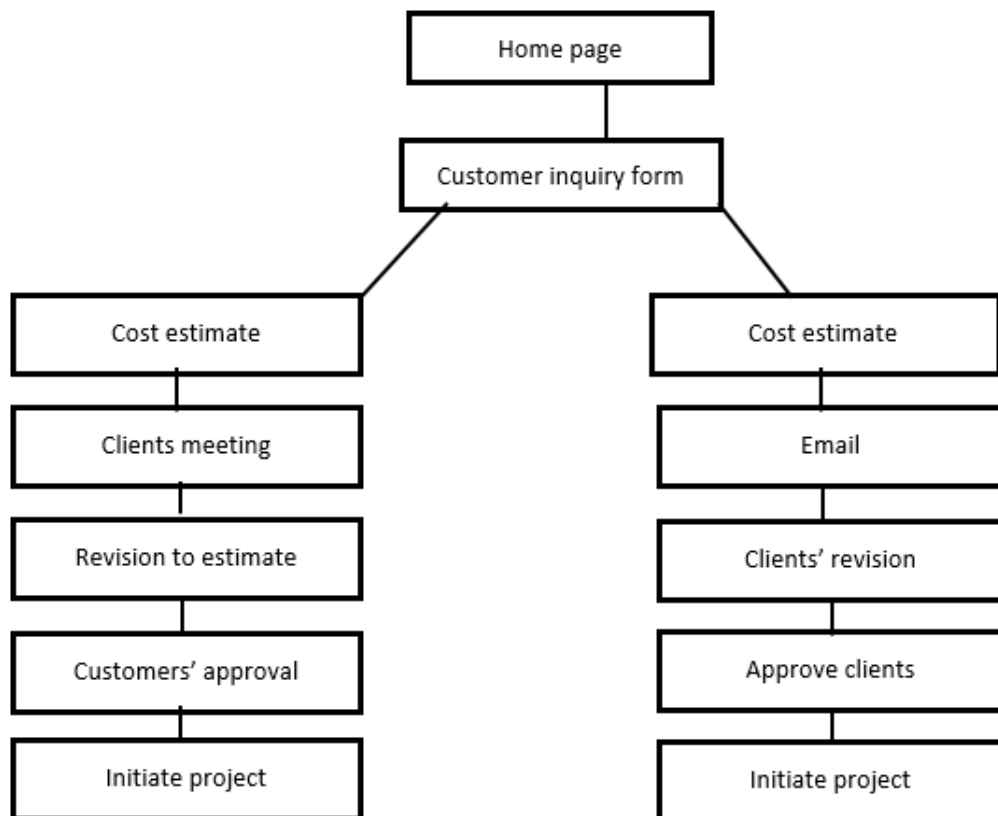
6.5 Risk of Abandonment

The phrase ‘abandon rate’ has infiltrated many e-commerce conversations over the past five years. It refers to how often an online client starts but does not complete the process. It is an alarming trend and online systems follow the data closely. Although it is well known that the death rate of clients by abandonment is high for product-based businesses as compared to services. Another point of view is that the rates are likely higher among service-based systems. Why? The answer is the matter points require a deeper level of engagement on the part of the client before he or she has committed to the purchase. The form requires detail so that the next deal is more effective. Providing that level of detail requires the client to spend more time and thought early in the process and thus elevates the risk of abandonment.

A service-based business by nature is more hands-on and generally it is harder to sell a service than a product. It would be better to spend on clients who are more engaged and by extension better prospects. A client who has completed a more detailed form as part of an inquiry about the services demonstrates deeper engagement.

Should we allow the risk of abandonment to influence us in how we design service delivery? Absolutely. It would be arrogant and irresponsible attitude to suggest that service-based systems do not need to be concerned about abandonment. The key here is to balance the system's need to work on potential clients with the need to operate effectively and successfully.

In the war on abandonment, how do we identify which battles are worth fighting? By using our CJM with the service delivery details and working with our team to identify points along the path at which clients may abandon the process. Any process point at which the client has to make a decision is a potential abandonment point (see Figure 6.2).



Returning to the virtual assistant service example, abandonment can occur at many points, the first of which is when the client reviews the website. If our pages load slowly, the information is not clear, or there is no clear indication of what a potential client should do to continue the deal, the potential client could bail. The detailed inquiry form could be an abandonment point. The cost estimate could also be an abandonment point. And so on.

6.6 Summary

We should evaluate the potential abandonment points and prioritize them. For example, do we feel that our prospective client wants to be able to choose his assistant from among the pool of resources we offer? Allow for that functionality. If our prospective client is more likely to hesitate at the cost and potentially abandon the deal at the cost estimate point, we can consider redesigning the way we deliver that part of our service presenting the estimate via a meeting with the potential client.

6.7 Exercise

Answer the following questions in detail:

- 1: Define and explain service and service delivery in the education sector.
- 2: Explain services for problem-solving.
- 3: What does Intangible service mean?
- 4: What are the service delivery pathways?
- 5: How to avoid the risk of abandonment in service delivery?

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Unit-7

DESIGNING MARKETING FOR EDUCATIONAL PRODUCTS

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INTRODUCTION

Education has become a business all over the world. Proper and purposeful marketing is an integral part of its success. It is also one of the most unstable, subjective, and misunderstood areas of business operations. Although largely considered the fun part of business with logos, tag lines, advertising, promotional items, letterhead, and so on. Marketing done well is much more than meets the eye.

The discipline of marketing encompasses much more than the promotional activities such as advertising, public relations, and graphic design that immediately come to mind. Marketing in its true form also includes fee/pricing strategy, product or service development, and product/service distribution. However, for our discussion, marketing refers only to the promotional aspects of the discipline and how design thinking can enhance our efforts in that area.

Marketing provides the opportunity to tell our brand story purposefully to the audiences who will most likely find the greatest meaning and relevance within it. Just as with other aspects, design thinking provides valuable perspective and guidance to achieve the best outcomes. From discovering and defining our brand's DNA through scoping to evaluating our brand's health with The Doctor Is In, design thinking tools can put us and our team in the much-desired position of market leader.

OBJECTIVES

After completing this unit, you will be able to:

- design marketing for educational products.
- define the DNA of a product or service.
- design a marketing plan.
- know the measuring of success.

7.1 Describing the DNA

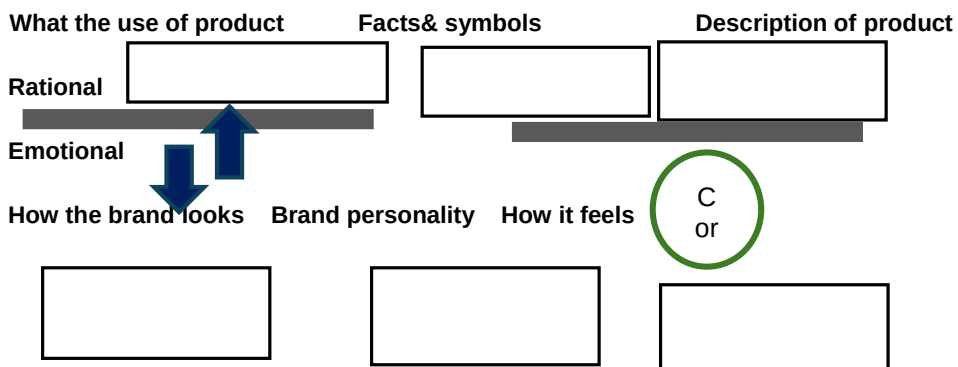
It is better to know and articulate the educational brand before spending a penny on advertising, logo design, or any other marketing tactic. Without a doubt, the cornerstone of solid, successful marketing is creating a well-defined brand. It should inform every marketing decision we make. To promote our educational courses without this cornerstone in place is a waste of money.

Contrary to popular belief, defining our brand doesn't have to take forever or cost a fortune. By using design thinking tools, we can produce results quickly and efficiently. Once our brand is defined and in place, design thinking can help us create and execute marketing plans for products and services successfully. Our system's brand is not a logo or a business card. Those are merely visual representations of our brand. Rather, our brand is our system's personality, the embodiment of what our organization stands for and is known for. Our brand is what distinguishes us from our competition. When we market our brand, we are promoting that distinction, emphasizing our advantages to the clients, and positioning our brand as the solution to the client's educational problems.

Accurately defining our brand can be accomplished using a design thinking activity called Micro scoping. This activity helps us uncover our brand's DNA by exploring both the rational and emotional sides of our brand, drilling down to inviolate philosophies that reside at the core of our brand and form its essence.

In the Micro scoping exercise, the first question is, 'Are we defining the brand as it is now, or as it should be?' That one question immediately reveals that a brand is not in prime health. If the brand is not the way it should be, there's no need to define it in its current state. Instead, define the brand as it needs to be.

The scoping exercise requires a whiteboard or flip charts, markers, and at least two hours of uninterrupted time with the team. Before gathering the group, draw the chart shown in Figure 7.1, which will be populated during the exercise.

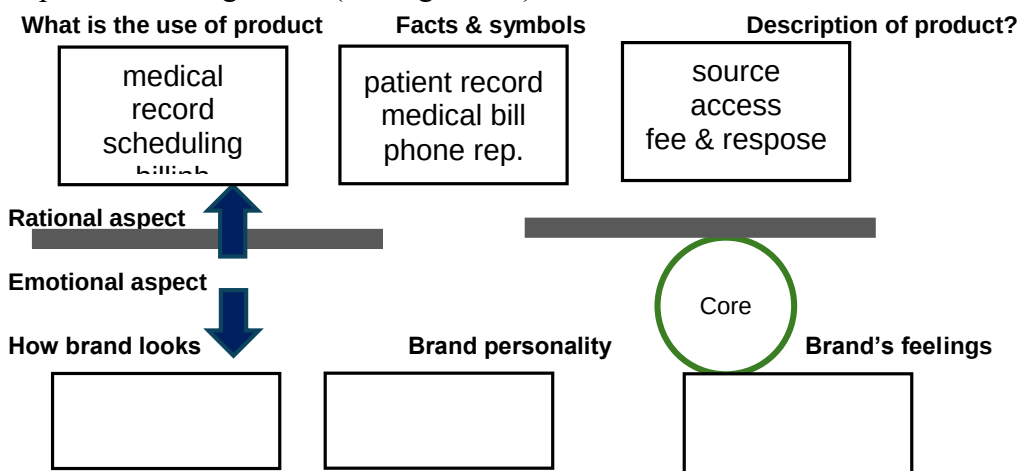


The top half of the chart focuses on the rational aspects of the brand: what it does, how it could be described, and the facts and symbols that support the rational aspects. The bottom half focuses on the emotional aspects of the brand: how the brand makes the client look, how it makes the client feel, and its personality. At the centre of the chart are three to five adjectives that describe the essence of the brand, critical aspects that are never compromised.

This exercise requires a precise workflow for the best results. Starting with the top half of the chart, begin in the upper left quadrant defines what the product or service does or provides in concrete, descriptive terms. To illustrate this process, we will use a healthcare services start-up as an example. This start-up provides portable digital medical records, physician referrals, scheduling, and billing intermediation directly to consumers who join the program via a paid annual subscription. Next, have your team define how the client would describe the product. The health care start-up might be described as:

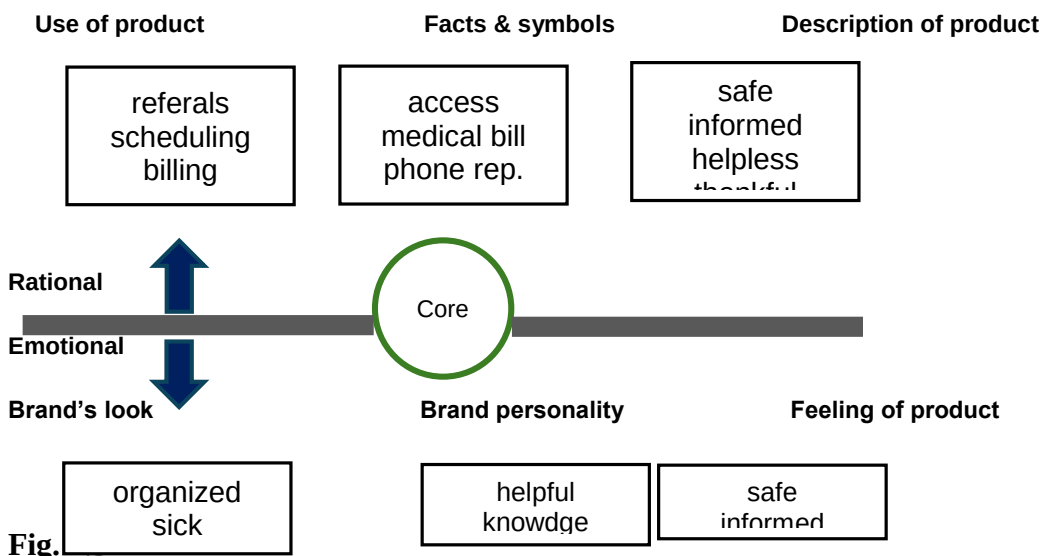
- a source of information,
- seems complicated but isn't,
- better access to physicians,
- worth the membership fee, and
- respond to questions.

Now, consider the contents of the upper segments. What symbols and facts support the statements made? For example, symbols might include a USB drive, a medical bill, and a company representative on the phone. Facts might include, 'patient access to all records,' and a '15 percent average reduction in patient out-of-pocket expenses,' among others (see Figure 7.2).



Moving to the bottom half of the chart and beginning with the lower left box (Figure 7.2), describe how the customer thinks they look when they are associated with the brand. With our healthcare start-up example, descriptors of the customer could include technology-savvy, organized, sick, and needing help. Next, describe how the customer feels when they are associated with the brand, and fill in the lower right segment. For our example, descriptors might include empowered, safe, thankful, informed, and helpless. Considering the content of the bottom segments, describe the personality of the brand. Our healthcare start-up's brand personality might be described as helpful, friendly, knowledgeable, and accessible.

With all the quadrants complete (Figure 7.3), and the facts, symbols, and personality described, the team moves to the center of the chart, where the core of the brand is defined. The discussion must focus on the aspects of the brand that must never abandon keeping itself distinct from its competition, relevant to its clients, and viable to its stakeholders.



At this point in the Micro scoping activity, the conversation gets more difficult. The team must examine the information in the boxes down into a core that contains an immune, bite-size conviction. This is no easy process. Teams inevitably lean toward defining the core too expansively. However, it is important to embrace the reality that the brand cannot be all things to all people. It is just to stick a stake in the ground and stand by it. The core of the brand is a stake in the ground.

To best define the brand's core, use keywords from the content in the graph. For longer statements and phrases, use words that succinctly capture their essence. Those keywords for our health care example could be helpful, knowledge, data,

access, technology, referrals, empowered and safe. However, eight words are too many. It becomes too large of a conviction to be able to support sustainably. The challenge is to narrow that list to no more than five, so the team ultimately asks themselves the hard question, “What is mandatory for our brand’s success?” The answers form the brand’s DNA.

Now that we have our brand’s DNA defined, use it as our touchstone for all communications, internal and external as well as product or service development. With our healthcare example, let us say we shaped the list down to these three: access, helpful and safe. (Figure 7.4). In advertising, staff newsletters, web content, and so on, the key messages the company conveys would always support at least one of the keywords. Furthermore, as the product development team fleshes out the offerings to the company’s members, they would measure their efforts against those keywords. For example, they might ask themselves in the process,

“Is this product designed to reinforce our brand’s core?”

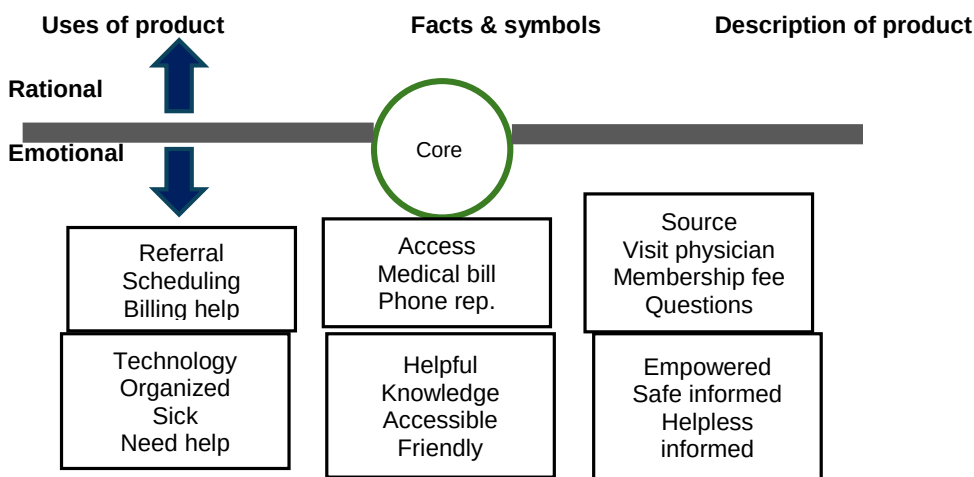


Fig. 7.4

7.2 System Expansion

Just because you operate a small system or at a start-up does not mean that you would not need to design and manage multiple brands. It is important to use the scoping exercise for each brand in your system’s portfolio. Do not take shortcuts and assume that because you defined your system’s brand DNA the new product you added or the competitor you acquired will share it.

To best illustrate this, let us look at an example of a much larger brand that operates on a global scale. All systems have a starting point focusing on value, innovation, and sustainability. When a system has a portfolio of more than one brand, you can

look at it as a family of brands, just as the parents of a family share genetic material with their children. Obviously, not all children in a family are identical replicas of the parents; each sibling is different, but they share some commonalities that indicate they are part of the same family and the same parents. The same applies to the parent system. Its brands share some commonalities, but each brand is different.

7.3 Marketing Plan

With your brand DNA defined and articulated for the entire world or at least your world to see, you can confidently design a marketing plan that will appropriately support your brand. Your brand DNA is your touchstone, and your marketing plan is your roadmap. Its entire purpose is to get you from point A, where your system and brand are now, to point B, where you want it to go/what you want to achieve.

Imagine heading off on a road trip with a destination in mind but only a general sense of how to get there and nothing to guide you. How many times might you take a wrong turn, must backtrack, end up taking a much longer and circuitous route, and arrive stressed and late to your destination? Contrast that experience with a road trip for which you have directions and landmarks, and an accurate determination of the length of your trip so that you arrive at your destination energized and ready to go.

It is better to follow a formulaic approach to designing a marketing plan. It keeps us on task and prevents overlooking key factors relevant to the plan. However, the resulting document can vary in length depending on the scope of the marketing effort and the level of detail put into the plan. Before you start designing a plan, consider your audience: for whom is this plan intended? A leadership team well versed in your brand's DNA, your target market, your marketing goal, your budget, and your key performance indicators may need less detail than a collaborative team comprised of leaders from different departments, vendors, or others not involved in your system's daily operations. Let your audience be your guide when determining the level of detail to include in the plan.

7.4 The System Case

The opening section of a well-designed marketing plan is pretty cut and dried: what is the system case for what you want to accomplish? Use data to support your case and answer the question, 'Why do we need to market this?' Particularly if you are marketing a specific product or service. Returning to our healthcare start-up example, the system case could centre on reducing the time and expense required to navigate the healthcare system.

7.5 Strategic Overview

Follow your system case with a description of your system, product, or service and why it effectively satisfies the system case. For example, the health care start-up's services are designed to intermediate on behalf of patients and give them access to resources to navigate the health care system more easily.

7.6 Marketing and Communication Objectives

Next, outline your marketing objectives. You can describe these or simply list them as bullet points. These objectives should illustrate the big picture you want to accomplish with this marketing plan. In the case of our example, the marketing objectives could be to increase awareness of the start-up's services among the target markets and position the start-up as the solution to the client's frustrations. Stating marketing objectives in terms that can be measured is important.

The communication objectives are more granular in detail than the marketing objectives. They focus on the tactical approach to communications that the system will take to satisfy the marketing objectives. You can describe these objectives or list them as bullet points. Our start-up example's communications objectives could include planning and launching a client-directed, highly targeted, direct-response campaign and implementing a public and media relations effort to increase awareness of their services.

7.7 Target Groups

Your business will probably have more than one target group. Remember, though, that you want the best return on your marketing investment, so you want to keep your marketing plan focused on the one or two groups that will provide you with the greatest opportunity for return. You provide a narrative description of the target audience, as well as any relevant demographic data. For our healthcare start-up, the primary target audience may be married women, ages twenty-five to fifty, employed outside of the home, with children under the age of eighteen, who have visited a physician, medical clinic, or hospital at least three times within the past twelve months.

7.8 Effective Strategies

Here the plan begins to show some greater detail with more specification as to how the team will go about accomplishing the marketing objectives. The marketing strategies you outline should be broad strokes of activity, such as designing the communications with a consistent theme that also drives client inquiries to a campaign-specific web address through which clients can access more detail and the system can capture client data. Notice that the details of what that theme entails, or the design of the communication devices are not included at this point. To provide that level of detail at this early stage of planning would be premature.

7.9 Intensive Messages

This section can be included in the marketing plan, or it can be omitted depending on the process you and/or your team went through in designing the plan. If, during the plan design phase, you hit on the key client message and any supporting messages to meet the plan's objectives, this section is where you would describe it and any specific word choices that should be used in client-directed communication. For example, with the health care start-up, that key message could be about providing confidential and helpful support to aid members in accessing needed healthcare resources.

7.10 Tactical Plan

Now it is time to outline the nitty-gritty details of your marketing plan. Whereas the previous sections of your plan serve as your overarching guide, this section gets granular in its detail. In your tactical plan, you articulate what you will do to follow your strategies and use your key messages to accomplish your objectives. Open your tactical plan by addressing all the planned resources you will use to fulfil the plan's objectives: advertising and promotional vehicles, community outreach activities, public and media relations efforts, and so on.

Include as much detail as possible. With our healthcare start-up example, we might list highly targeted direct mail, a search engine marketing campaign, and social media advertising as three vehicles through which the start-up will promote its services to its target audience. Although that list provides a nice overview of your promotional activities, try to add specifics. For example, about the direct mail tactic, the company might include details on the format of the direct mail piece itself like brochure, postcard, etc., the source of the mailing list like health care provider partners, etc., the mailing list parameters like the target audience demographics plus any behavioural qualifiers such as "active in outdoor sports", and the frequency planned for the mailing like three separate pieces mailed within eight weeks. Do this for each of the resources you listed as tactics.

To accompany the detailed outline of resources to be used, create a timeline to delineate what happens and when. Keep things simple and use a spreadsheet as a calendar, with each field representing one week. Continuing with the start-up's direct mail example, we would identify the dates on which we want the pieces to be sent and add the relevant dates for the other resources.

7.11 Measurement

The final section of your marketing plan should address how you will measure your efforts in all areas to determine their level of success. We all want more, but we need to be specific in our marketing plan. Marketing efforts alone cannot be responsible for generating new systems. There are too many other factors outside of the purview of marketing that influence a client's decision. Marketing can and should be accountable for increasing awareness, influencing brand perception, and activating client inquiries.

When you have multiple tactics supporting your marketing plan, as with our start-up example, you need to decide if you want to measure the performance of the marketing campaign as a whole or measure each tactic individually. For our start-up, measuring overall is as easy as tallying the number of new members acquired during the campaign and within thirty days after. If you want more detailed analysis and measurement, each of your resources needs to be measured in terms of key performance indicators (KPIs) that are relevant and realistic for that resource.

To illustrate, let us put this in terms of our start-up's direct mail tactic. As stated in the marketing objectives, the system wanted to enrol 200 new students. Can direct mail be solely responsible for producing those new students? No, that would be an unrealistic KPI. Direct mail might make a compelling case, but chances are good that only a small portion of recipients will become new students based on that one communication tactic. Probably more new students will originate through the other planned communication vehicles, as well as through inevitable phone inquiries for more information. Never overlook the power of a personal conversation with a potential client.

Can direct mail be expected to drive client inquiries, thus potentially generating new students? Absolutely, and that is a reasonable KPI for that tactic. Now that the KPI for direct mail is established, how do you determine the number of inquiries the direct mail should generate? Fortunately, there are standards and best-practices best practices expectations you can use as guidelines. For direct mail, the expected response rate, which is what yields your quantity of inquiries, is between 3 percent and 5 percent of the total number of pieces mailed. That translates into 30 to 50 responses per 1,000 pieces mailed. The more targeted your mailing list, the more likely the response rate will be higher.

As you assign KPIs to your tactics, make note of the expected performance. We often include this information on the tactical timeline/ calendar, updating it weekly, so we can visualize progress during the duration of the marketing campaign.

7.12 The Doctor Is In

It is important to understand your clients, their wants, and their needs so that you can design your system and its products or services as solutions. You need that same understanding for successful branding and marketing. You must understand your primary client to define your brand in terms that they will find resonant, which will lead to affinity and preference.

At some point in your system's life cycle, you will encounter an inevitable collapse in your success, and there could be any number of causes for this. Among all the introspection and analysis, you will deploy during slow times, be sure to include a health check-up for your brand. A healthy brand, that is, relevant, recognized, and profitable, is one of the many paths to success. A brand that is unhealthy can be your undoing even when all else is going well.

Determining your brand's health status requires some serious introspection, a willingness to inquire about and listen to others, and an open mind receptive to what is shared. The best way to undergo a brand health check-up is with an activity called The Doctor Is In. This activity requires you and your team to answer some hard-hitting questions in descriptive detail to best ascertain what "ails" your brand. The doctor asks questions to uncover the symptoms of the ailment. If the first round of answers does not provide sufficient detail, the doctor probes deeper with follow-up questions such as, 'Then what happens?' 'What changes did you see?' and 'Why or why not?' The following list consists of core questions for the doctor to pose to yourself and your team. It was born from my professional perspective and evaluation process, and feel free to modify it as you see best for your unique system. It is strongly recommended to use a moderator to serve as the doctor. (Figure 7.5).

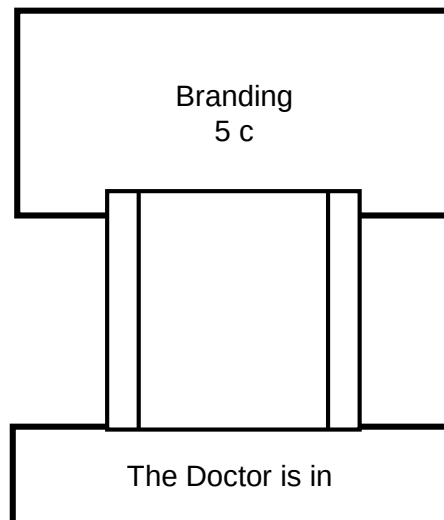


Fig. 7-5

The Doctor Is in Questionnaire

1. How is your system changing? Are you merging, changing your product or service offerings, or revising your strategic plan? Has client attrition been higher than normal?
2. How is your market changing? Are there changes that affect your clients' behaviour? Are you facing new or increased competition?
3. Is your system becoming commoditized?
4. Is your core client base changing? Do you have different clients now than you did five years ago?
5. If you ask ten people closely associated with your system, "What is our mission?" will you get ten different answers? Or worse, blank stares?
6. Do your communications (brochures, manuals, advertisements, promotional pieces) present consistent messaging? Or do they look like they could be from different systems?
7. Do you lack comprehensive brand and messaging guidelines that are consistently used by everyone internally and externally who is creating communications materials?
8. Can you tell your system's story in three minutes or less?

Notice that the first and second questions focus on how change is happening, not if it is. Change always takes place; it is the pace of it that changes. If your system or market is changing more rapidly than you can keep pace, you have some fundamental operations issues to address; put your brand on the back burner until that is resolved.

If the third and fourth questions give you cause to stop and think, you may not be paying close enough attention to the change that surrounds you, and your brand is suffering for it. You might consider reviewing and adjusting your system strategy as needed to accommodate the shifts and client base.

Questions five through eight are all communications-based and directly related to your brand's health on a micro level. Even if you have pressing macro issues that have been revealed with the first four questions, you can work immediately on a short-term remedy for your brand in this area.

The essence of marketing is the ability to tell a compelling story and tell it in a way that is relevant to clients and your team. As system owners, we often overlook the importance of telling our story internally. We often think that because our team is immersed in our system daily, they know the story and understand its meaning. That is not always the case. If others closely associated with your business

employees, leadership, and key vendors cannot share a synopsis of your story, you need to tell it to your internal audiences more frequently and more comprehensively.

If your communications materials are not presenting a consistent message and image, then not only are they not sufficiently supporting the story you and your team are telling, but they are also not telling an accurate story in the absence of the narrators. Communications materials absolutely must tell your story, emphasizing strengths, differentiators, and compelling facts, on their own. They also must present a visual image consistent with the attributes of your brand. This applies the clients as well as internal documents.

An easy and, sadly, prevalent example to point out is a system's email signature, because email is used both externally and internally. How many times have you seen variations of an email signature sent from a company-based email address? One may have the full-color logo and another with none. One sender may include the system's website address and no social media links, and another sender may leave the website but still include the social media links. Confusing, isn't it?

7.13. Summary

You must be able to tell your story to anyone of any background succinctly and effectively. Your short story, so to speak, will be a necessity for the life span of your system, and if you cannot nail it, you certainly cannot expect others to do so. Practice if you need to. Craft variations on a theme so you are prepared for any type of listener, from a barber to a businessman.

7.14 Exercise

Answer the following questions in detail

- 1: How to design marketing for educational products?
- 2: Define product or service.
- 3: What do you know about the market plan?
- 4: What is the marketing and communication objective?
- 5: Explain the Tactical plan.

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Unit-8

DESIGNING FOR CHANGE IN THE EDUCATION SECTOR

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INTRODUCTION

Change is the only permanent thing in this universe. It is inevitable. Even if we dig in our heels and fight it every step of the way, change still happens. It can seem perpetually slow, or faster than the speed of light. The sheer number of sayings and colloquialisms to describe change is an indication of its inevitability. We have grasped grammatical straws to come to terms with the flow of change. It is important to understand that change does not have to happen to us. We should use design thinking tools to make change happen for us and our system's success.

As human beings, we are surrounded by ongoing change whether we acknowledge it or not. Change cannot be stopped. Rather than be blocked by it, we can use design thinking principles and tools to help us meet head-on the challenges and opportunities produced by change, prepared and unafraid. From large-scale change that affects the entire system or smaller-scale change that affects only our units, designing our response to change enables us not only to tolerate it but also embrace it. The biggest driving force is the accelerated rate of change in the education sector and society caused by advances in technology. As the systems become more software-driven, and the rate of change increases, so does complexity.

OBJECTIVES

After completing this unit, you will be able to:

- Know the concept of change.
- Understand intuition and change.
- Be proactive to face change.
- Explain speed and change.

8.1 Our Intuition and Change

Many of us have a strong gut instinct, and most of us tend to follow it. It is one of the more distinctive qualities of people. They know that is a great idea and are willing to take a leap of faith to plan out of it. Successful educationists back up their gut instincts with smart and diligent planning.

Changes in our surroundings and functions do not have to leave us unaware and unprepared. Regardless of the scope of change, we can anticipate it, and stay attuned to its intricacies. We should take purposeful steps toward using it for our educational objectives and goals.

Up to this point, the opportunities to apply design thinking principles to the development of educational sector products, services, experiences, marketing, and physical spaces have been clear. Needs and challenges could be identified and articulated and uncovering potential solutions could be approached methodically. Facing change and designing for it is quite a different scenario. Change can be extensive with ambiguity, making it harder to pinpoint how we can intervene in its emergence and purposefully design our response to it. Even more reason to employ design thinking.

8.2 Proactive in Facing Change

We have discussed not seeing the forest for the trees. There is legitimacy in that idiom, as we have probably experienced. All too often, we are immersed in our daily ins and outs of operating our tasks. We focus only on what is within our immediate view, the ‘trees,’ next week’s payroll, next season’s futures, last month’s results, and next year’s goals. Meanwhile, we have little idea what might be happening in the forest because we are not looking. The ‘forest’ the bigger sector picture may be undergoing radical change that could yield either great opportunity or significant disaster.

How do you see the forest and not just the trees, then? Use the Forest and Trees design thinking activity.

At its root, the Forest and Trees activity is a sorting tool, though on a picture big-picture scale. Use it to distinguish between issues with shorter-term, more intimate ramifications and those issues that have the potential to have a more profound effect not only on our system but also on the education sector in which we operate.

For this we will do this activity, which can typically be completed in less than two hours. Using two flip charts, or a large whiteboard divided in half, label the left side ‘Trees’ and the right side ‘Forest’ (Figure 8.1). There will be stacks of

sticky notes and we list all the issues that consume most of our time, one per sticky note. This should not be a list of what we do each day, but a list of the challenges we face regularly that require our time and attention. The information contributed can vary widely, encompassing everything from human resources and team management to product development and operations. Assemble the sticky notes into themes. All the operations issues together, and so on and arrange them under the Trees heading.

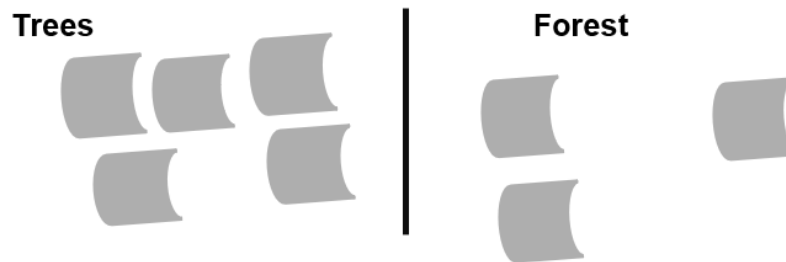


Figure 8-1. Forest and trees chart, in progress

Now it is time to view our trees in the context of the forest. Working through one theme at a time, have our team evaluate each issue for its relevance to the larger environment. For example, let us say a financial planning firm has identified trees and sorted them into the following themes: human resources, targets, and sector regulations. As the team works through the human resources theme, they are particularly vocal on the issue of talent acquisition and the increasingly difficult process of identifying and attracting the knowledgeable and skilled professionals they need to grow the education sector. The question to ask: “Is talent acquisition an issue beyond our sector?”

To determine the answer, we need to have some working knowledge of the education sector and developments in its specific fields. Is the topic of talent acquisition in relevant news sources? Is it a topic of conversation and sector-related events? Within the past year, have they found themselves in a bidding war for talent with a competitor outside their market? Positive responses to these types of questions likely indicate that the issue is affecting the forest, so a sticky note with Talent Acquisition would then be posted to the Forest side of the board.

Keep working through each theme on the Trees side until we have all been evaluated and duplicated for the Forest side of our board as needed. Once we are finished with the trees, it is time to expand our perspective and evaluate the forest by asking us, ‘What issues are we seeing or hearing about that have not affected us yet?’ Again, working knowledge of the education sector is necessary for effectiveness. As we did with the trees section, list each forest issue on sticky

notes, one per note, and sort them by theme on the Forest side of our board (Figure 8.2).

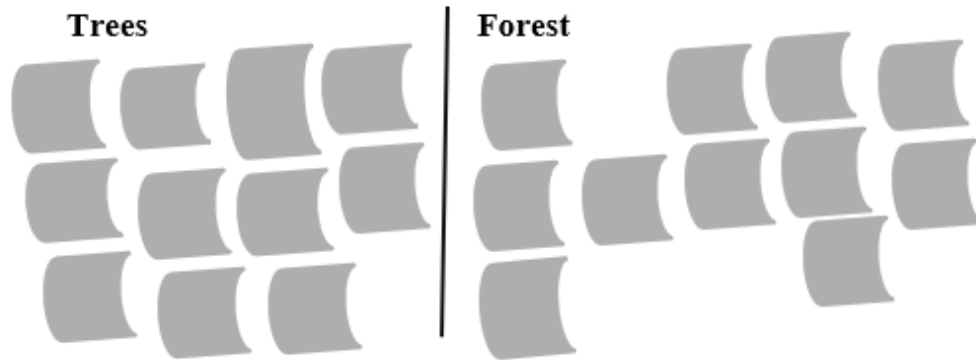


Figure 8-2. Forest and trees chart, completed.

Once our forest issues have been identified, it is time to evaluate them in the context of the trees. The next step is to write the policy issue on another sticky note and post it on the dividing line between forest and trees.

After the Forest and Trees activity, we will have a map of sorts that will help us visualize the larger ‘forest’ issues. That is an impending change, which could have complications for the education sector. It will help us to take the next steps toward designing for that change.

8.3 The Need for Speed

The Forest and Trees activity can be somewhat intense because you and your team are immersed in a lot of deep, evaluative thought. You have seen the forest and the changes approaching the horizon. Seeing is not enough, though. Your team needs to be able to respond to that approaching change. To do that, and to enjoy an exercise that provides some mental and emotional balance to the intensity of Forest and Trees, follow with a faster-paced design thinking exercise called 3-12-3.

The 3-12-3 exercise is a three-part activity in which strict timekeeping is the main rule, and the numbers refer to the amount of time allotted for each part: three minutes for generating ideas, twelve minutes for combining those ideas into rough concepts, and three minutes again for presenting the concepts to a group. The process is all brainstorming, but the approach to it is focused and fast, forcing the participants to generate ideas quickly without a lot of overthinking.

To start the activity, identify the problem, opportunity, or issue for which you need some potential solutions and state it in no more than two words. Although

you could identify the issue with a descriptive sentence or phrase, resist this temptation. Keeping it limited to just two words supports the brevity of the activity. Referring to our financial planning firm example, let's say that the issue at hand is 'talent acquisition.' On a whiteboard or flip chart, write 'Talent Acquisition' as the heading. If you have more than five team members participating in this exercise, divide them into equal-size groups, but do not have more than three groups total.

Next, give each of your participants a marker and a stack of sticky notes, along with directions to generate as many ideas as possible in three minutes for how they might be able to solve the issue of talent acquisition. Once those three minutes are up, be firm about stopping brainstorming. Remember, speed is important in this activity. For our financial planning firm example, some of those ideas could include developing a proprietary training program, partnering with a local college or university to ensure its curriculum aligns with current industry needs, or hiring a full-time recruiter in the human resources office.

Following the three-minute brainstorming, give participants twelve minutes to organize their ideas and group them into themes. Our financial planning firm example may group its ideas into themes like education, staffing needs, or internal training (Figure 8.3). As participants sort their ideas into themes, they can sketch, draw, or otherwise visualize their ideas to better communicate the concepts, to be able to communicate them clearly to the larger group in the last part of this exercise.

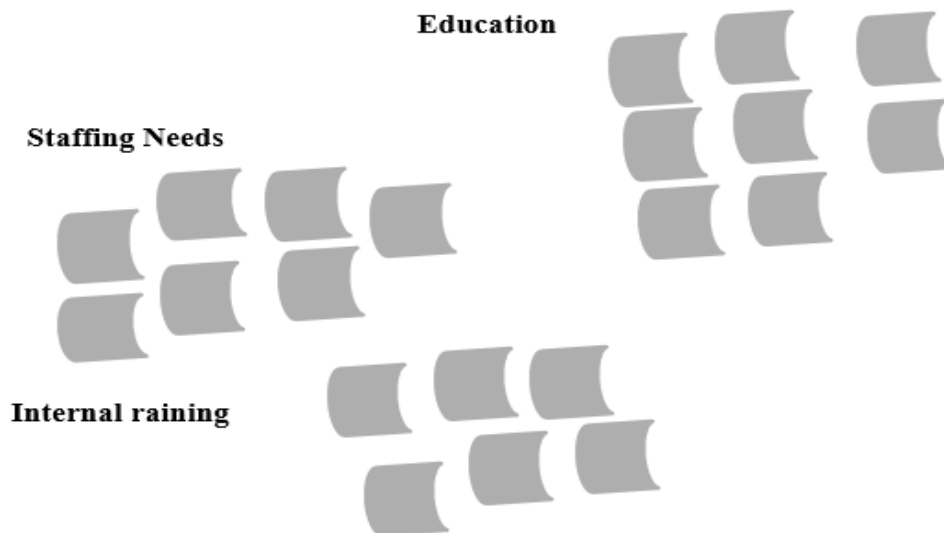


Figure 8-3. 3-12-3 activity chart

Furthermore, as they work through the sorting process, they will discover how the ideas may be interrelated and may see additional opportunities. If the sorting portion of the 3-12-3 exercise spurs new ideas, have your participants capture those ideas but keep them separate for later consideration. If you see your participants starting to brainstorm during these twelve minutes, redirect them back to sorting the ideas that have already been generated.

The last three-minute section of the exercise can take one of two paths. If your group of participants was large enough to be divided into separate smaller groups, then the smaller groups each had three minutes to report on their ideas and how their thought process worked quickly and succinctly. Again, each group has only three minutes for this part. If your team is smaller and they all worked together as one unit, these three minutes can be spent synthesizing the themes or summarizing the conclusions drawn during the sorting segment of the activity.

To conclude the 3-12-3 activity, collectively reflect and discuss what ideas were shared, but do not be satisfied with just reflection. Take the opportunity to make the effort that went into the activity actionable. Save the sticky notes from 3-12-3 and use them in the next design thinking exercise.

8.4 The Matrix Holds the Answers

If you have gone through the previous two design thinking activities, you and your team have seen the approaching changes and generated ideas of how to best respond. To make your efforts actionable, you need to evaluate your concepts and select those in which the system should invest more time and resources. The Impact and Effort Matrix is an excellent design thinking tool for helping teams choose among their options.

The Impact and Effort Matrix is a decision-making exercise in which possible actions are evaluated and mapped based on two qualities: the effort required to implement the action, and the action's potential effect on the group's issue, opportunity, or challenge. Some actions may be inexpensive and easy to implement but may have very little impact. Others may be expensive but have a sizable long-term payoff that justifies the expense. Categorizing actions in this manner helps decisions get made, because participants must balance and evaluate potential actions reasonably before committing to them.

On a whiteboard or large flip chart, draw a large square. Label the left line of the large square 'Impact,' and label the bottom line 'Effort.' Place a minus sign at the intersection of these two lines. At the opposite end of each line, place a plus sign (Figure 8.4).

Impact and Effort Matrix



Figure 8-4. Impact and Effort Matrix chart, in progress

Now divide the large square into four smaller squares. In the upper left quadrant, draw a happy face. In the lower right square, draw a sad face. In the upper right and lower left quadrants, draw questioning faces. Now, the matrix is ready to accommodate mapping the team's ideas (Figure 8.5).

Impact and Effort Matrix

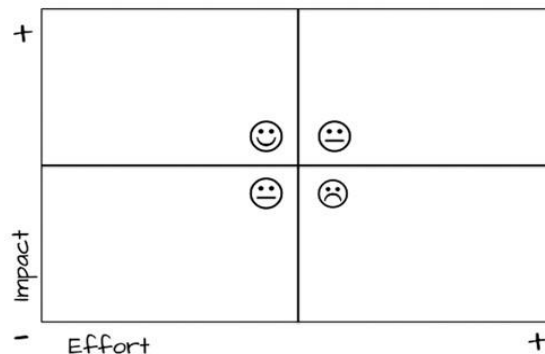


Figure 8-5. Impact and Effort Matrix chart, ready for input

To open the exercise, ask the group a question, which can be as simple as “What do we need to reach our goal?” For the financial planning firm and its challenge with talent acquisition, the question might be “How do we find the talent we need?” Ask the group to generate ideas individually on sticky notes and add those to the notes you saved from the 3-12-3 activity, discarding any duplicates.

Ask the group to present their ideas and place them within the Impact and Effort Matrix according to their perception of the amount of effort required to implement the ideas and the degree of impact those ideas are likely to have (Figure 8.6).

Impact and Effort Matrix

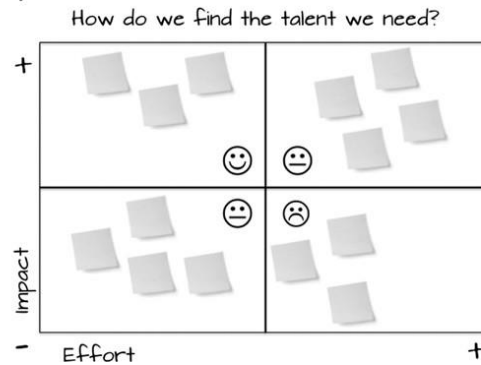


Fig. 8.5

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Ask the group to present their ideas and place them within the Impact and Effort Matrix according to their perception of the amount of effort required to implement the ideas and the degree of impact those ideas are likely to have.

As participants place their ideas into the matrix, they may and should openly discuss the position of the ideas. The group might strengthen an idea and therefore move it up in impact or down in effort. An idea might also be degraded and moved up in effort or down in impact. Ultimately, the collective wisdom, experience, and opinion of the group will direct the idea to its proper position within the matrix. In this respect, the high-impact/low-effort square will house the ideas to which the group is most committed, and those ideas should be considered the most actionable.

Returning to our financial planning firm and its talent acquisition example, ideas that could reside in the high-impact/low-effort square could include such things as an internal training program, a more rigorous evaluation of skills during the interviewing process and developing a list of educational institutions whose curricula align best with the firm’s skill set needs.

In the context of innovation, co-creation, inspiring teams, facilitation, and the like, design thinking still has not been comprehensively integrated into the education sector. Design thinking initiatives often run in especially dedicated organizations.

Agility could be boosted, and the number of possible solutions increased with design thinking. Most educational administrators have so far neither learned the necessary skills nor received instructions on new solutions. In addition, a clear vision is lacking in many sectors and the same goes for the use of strategic foresight or systems thinking, for instance, in combination with design thinking for an improved mapping of a possible future.

8.5 Summary

Change takes time as well as strong personalities with a clear vision. However, we hope that a mindset can also spread on a bottom-up and transversal basis in an organization. When we look after our day-to-day tasks tomorrow morning, we should try to live the new mindset or think about which mindset might fit our system. We have noticed that the training and the application of design thinking at universities and colleges are spreading very fast. Problem-based learning is an important experience for many participants and students not only in a design thinking course, but it is also as a contemporary way of conveying learning content in general. They learn how agile and radically agile teams work and network with other participants while actively processing the problem statements. Often, this gives rise to connections that help to find suitable co-founders for problem-solving. Design thinking is our best tool for sense-making meaning-making, simplifying processes, and improving client experiences. Additionally, design thinking minimizes risk, reduces costs, improves speed, and energizes employees. Design thinking provides leaders with a framework for addressing complex human-centred challenges and making the best possible decisions concerning complex societal challenges such as health, education, food, water, and climate change

8.6 Exercise

Answer the following questions in detail

- 1: What is the concept of change?
- 2: Explain speed and change
- 3: How can we be proactive in facing change?
- 4: What does Intuition mean?

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Unit-9

DESIGNING FOR GROWTH IN THE EDUCATION SECTOR

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INTRODUCTION

The growth of any kind is not pain-free. It is not a reasonable expectation to think that could be possible without hard work. We can think back to our childhood when our arms and legs would occasionally and seemingly randomly feel ache for no apparent reason. The wise mothers described those aches as growing pains. We were powerless to prevent the ache.

When it comes to the education sector, growing is accompanied by occasional aches and pains, just like in childhood. But with forethought and the purposeful application of design thinking tools that accommodate and embrace growth, we can minimize the growing pains and put the education sector in a position to capitalize on every opportunity that comes our way.

Growth is an integral part of any sector, whether it is incremental, monumental, or somewhere in between. It can take on a wide variety of forms, be localized in specific departments or sweep through the entire sector, leaving no area unaffected. Quite plainly, growth happens. With design thinking tools, we will be equipped to anticipate opportunities, embrace growth, and purposefully direct our efforts and resources in a way that will best benefit our organization in the long run.

OBJECTIVES

After completing this unit, you will be able to:

- understand the importance of growth in the education sector.
- know growing gracefully.
- manage new staff.
- perform design thinking activities.

9.1 Growth in Education Sector

The growth and development in the education sector have always been an overwhelming, intimidating, and challenging task. It can be exhilarating and rewarding. It should also be a constant. Many of us are not satisfied with the present fractured system of education operating in the country. Reaching a point of satisfaction is a milestone that can just be dreamed of. However, without some continuing degree of growth, that system could turn into a gravestone. Growth is one of the key factors that can keep the education sector alive and thriving.

It is imperative to understand that the opposite of growth is not stability. It is not even stagnation. The opposite of growth is loss. We do not live in a static world; change is a constant and it surrounds us all the time. If the education sector is not growing continually, we will experience a huge loss. Let us use a forest as an example.

A forest is composed of many trees, all of which grow at varying rates. Is there a point at which all the trees decide that they are tall enough and just stop growing? No. Their growth is constant. Imagine, though, that one tree, we will call him Nadeem, decides that enough is enough, and he is through with this growing stuff. He has worked hard over the past few decades to get where he is today, an admirably tall tree with well-formed, lush branches that attract many birds to nest there. It is the very definition of a successful tree. Nadeem is satisfied and happy and is ready to rest easy and enjoy the results of his growth.

Meanwhile, Nadeem's neighbour trees keep growing. Nadeem notices small changes over the years as the other trees grow while he stays the same. Some of the birds did not return to their nest, and he did not seem to be getting as much sunlight as before. As more time passes, those changes become more profound. Less and less sunlight reaches through the branches above him on the trees that kept growing, making it very difficult to maintain his leafy, lush branches. His only wildlife residents are a pair of squirrels; the birds left for other trees and branches where the sun is brighter. Nadeem is not thriving as he once was. He has lost his successful place in the forest.

Nadeem realizes that to regain his previous success, he needs to grow, although now he will have to catch up to the neighbouring trees. He notices that even the neighbour tree which seemed to be going nowhere is still taller and lusher than he because it kept growing.

Will Nadeem be able to grow and catch up to the forest that surrounds him? Maybe, maybe not. What if he had kept growing? Even at a small rate, he would have continued to grow enough to at least keep up with the neighbour trees and not have lost his access to the resources he needed to sustain himself.

It is crystal clear from the above story that a degree of growth is mandatory for sustainable success in the education sector. If we choose not to grow, we also choose to tolerate the inevitable loss.

For the implementation of design thinking leadership plays a key role. It links design thinking initiatives to strategic goals. It also provides direction, resources, and commitment. Then comes the people, who enable champions to lead the change through successful lighthouse projects. They build up an internal design thinking community where best practices are shared. The process is to use the generic design thinking framework but evolve the method and tools, so they support the system's objectives. The environment develops and creates collaborative workspaces for the workforce. It co-innovates with the customers and partners.

9.2 Growing Gracefully

Here are several design thinking activities geared toward embracing growth and growing our education sector at a modest rate. We believe that this is where the greater challenge lies. The rapid growth that of the start-up variety is an entirely different dynamic and probably one with which we are familiar.

We should always look back at our history and sort out that information for what has worked and made us successful in the past. That is a great starting point when designing for growth.

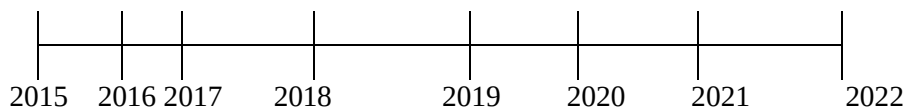
Even if our education sector is growing in and developing in its current operating capacity, the reviewing and documenting of past events and successes as well as failures and missteps becomes an important process for charting effective growth. Visualizing that history aids in discovering, recognizing, articulating, appreciating, and potentially replicating the key components of what got the education sector to where it is today. This exercise guides us in mapping those components and using them as a roadmap for future growth.

9.3 Designing Thinking Activities

We can conduct design thinking exercises with as few as five people or as many as fifty. It is an accommodating format for larger groups, which is a rather uncommon feature among design thinking activities. Gather what we now know to be the requisite whiteboard or flip charts, the appropriate marker type, and several stacks of sticky notes. This exercise does not require an outside moderator, so we can lead it ourselves. We start by drawing a continuous horizontal line across the width of the whiteboard. If we are using flip-chart paper, we will hang several pieces end-to-end horizontally to accommodate our line. This is our timeline. Several factors affect how we label. If ours is a young school, we might label the left endpoint with the year we started the school, and then mark the rest in one-year increments. If ours is a more established school, we might label the left endpoint with the date of

a key moment, like the year we launched a new branch, and mark the rest of the timeline in five-year increments. There is no rule to follow other than to label our timeline in a way that is relevant to our sector.

Since we started illustrating the concept of growth with a forest, let us use a plant nursery that has been in business for six years as our example for this activity. As with other activities, we should consider recording the session. The nursery's timeline would start with the year it launched, say, 2005, with one-year increments (Figure 9.1). Be sure to leave plenty of space above and below the timeline and between each labeled increment, to allow for notes and written comments.



9.4 Nursery

Next, ask each participant to write his or her name and one or two words about their first impressions of the school on a sticky note, and post it on the timeline below the year that person joined the school (Figure 9.2). If the group of fewer than twelve, ask each person to share a brief story about joining the school as they post. Additionally, if the group includes staff that has been with the school since the beginning, pay especially close attention to their stories. Their historical perspective is invaluable to this process.

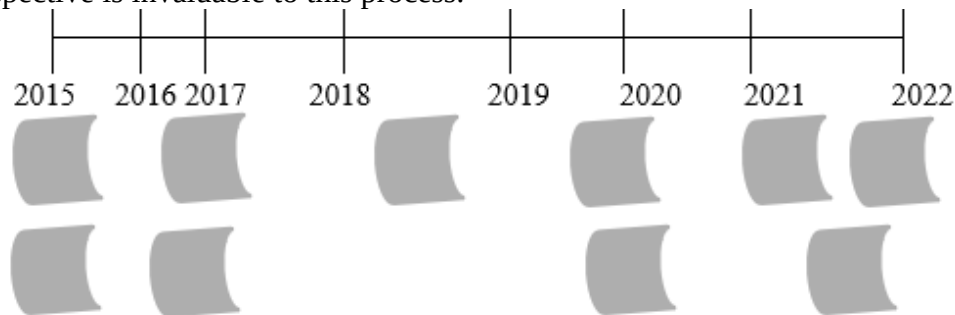
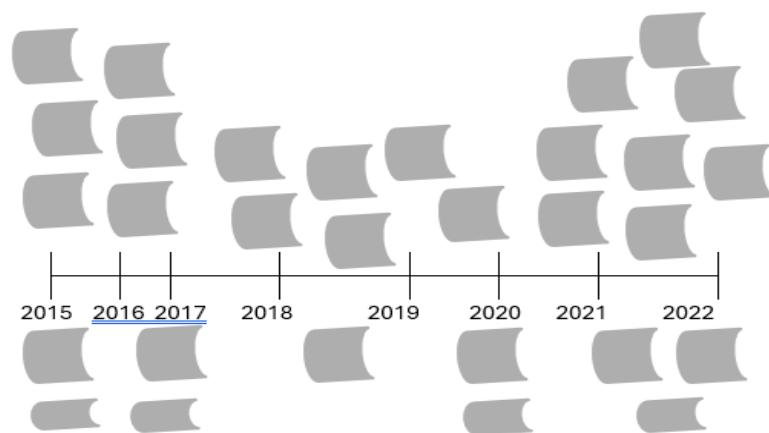


Fig. 9-2.

Now ask questions from the team and flesh out the map by capturing their answers using text and images on sticky notes and placing them at the appropriate points along the timeline (Figure 9.3). Encourage the team to provide as many answers as they can, but remember, just one answer or response per note. Potential topics could include the following:

1. School successes
2. School missteps
3. Lessons learned
4. Changes in leadership

5. Changes in mission, vision, or values
6. Changes in service offerings
7. Market trends
8. Competitive shifts
9. Major client acquisitions or losses
10. Shifts in revenue
11. Shifts in staff size
12. Major clients
13. Internal reorganizations
14. Technology developments
15. Regulatory or legal changes



Nursery

Fig. 9-3

If we want to be organized for this activity, consider assigning specific colours of sticky notes to represent categories of answers. For example, internal topics could be yellow, external topics could be blue, and lessons learned could be pink.

As we add sticky notes to the timeline, ask open-ended questions to stimulate thinking and keep the conversation going. Encourage storytelling and honesty, even during the hard times. If the process stalls, try reenergizing it with observations.

Once we have captured the group's answers, summarize the information on the timeline and ask the group to identify patterns, share what they have learned, and say how they can leverage this information and perspective for the school's continued growth. We may need to ask questions to prompt the conversation. Some of those could be:

- How have these patterns influenced the development of the school?
- What is the most important lesson we have learned?
- At what point was the school most successful, and why?

To conclude this activity, ask the team to think about the school's next steps moving forward. What is the most important thing the school can do next to capitalize on its

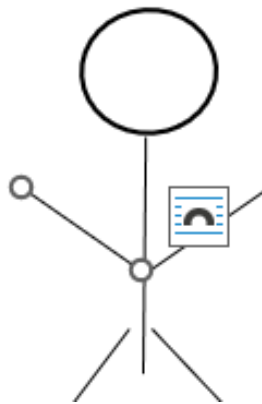
history and leverage it for future success? Leave the timeline posted and have each participant post a response to our question at the far-right end during the remainder of the day and reconvene briefly at the end of the day to review them. Be sure to take photos of the final, completed timeline so we can refer to it as needed.

9.5 Managing New Staff

It is a fact that ambiguity comes side by side with growth. Leadership has a general idea of what they want and/or need as the system grows. Often it is difficult to define and articulate. This applies to the growth of system operations, including product and service development, and the growth of its staff. During a growth phase, you might know you need a new vice principal, but what does that mean to you? Sure, you can draft a job description that uses all the key terms that a recruit would expect to see, but is that the best approach to sourcing the right person? As powerful as design thinking is, its tools and activities are predominantly geared toward solving problems and meeting challenges in all aspects of the system except those that are human. Because of this, staffing deserves a little design thinking love. To that end, we have adapted the Design the Box activity to address a system's needs to grow its staff. Normally, Design the Box is focused on developing new services for a system from the perspective of first designing the box in which the metaphorical box for a service is delivered. The premise of the exercise is that if you design the box first, you can better articulate the features, benefits, and unique services that need to be embodied in the system.

For applying design thinking to staffing needs, let us call this exercise Design the VP because we need a new vice principal.

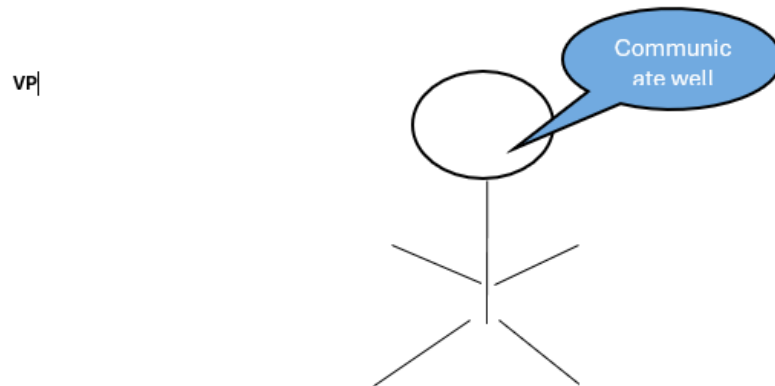
Start the Design the VP activity by defining what is “in” the VP. On a whiteboard or flip chart, draw the shape of a person in the centre. At the top of the page, write the title of the position for which you are designing (Figure 9.4).



Nursery

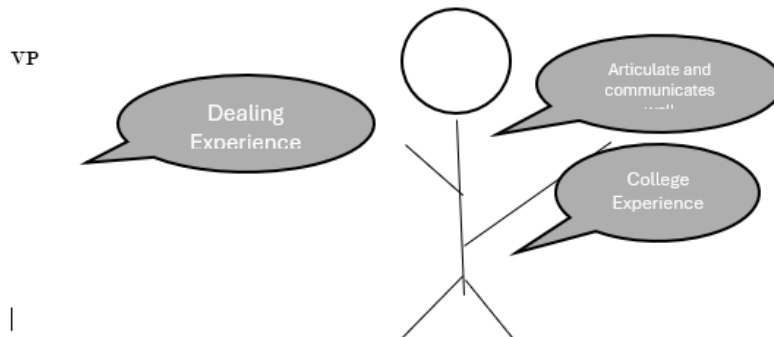
Fig. 9-4

For hiring the VP, we determine the qualities that need to be in the VP and list those near the corresponding area of the stick figure. For example, we might determine that the VP needs to be articulate and communicate well, so we draw a speech bubble near the figure's head and include those descriptors (Figure 9-5).



Nursery
Fig. 9-5

We might decide that the VP needs to have a college degree and previous school experience, so we add those features to the figure. We might decide that our VP needs to have experience with administration, so add that feature, too. (Figure 9.6).



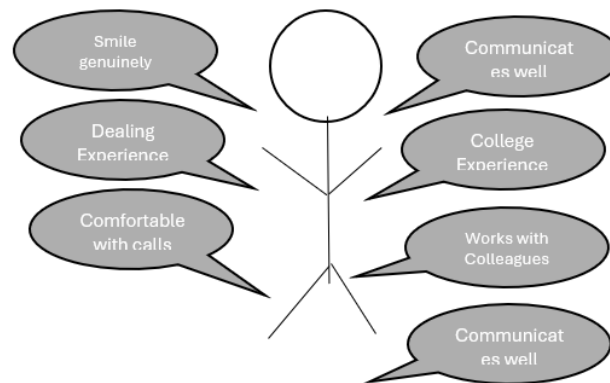
Nursery

Fig. 9-6

Once we've defined what we need "in" our VP, we need to design the VP itself. We will articulate what about the person's personality and presence we want and need for a VP. Imagine the process of interviewing live candidates for this position:

what would influence you to choose one candidate over another beyond what is on his or her résumé?

For the VP of school, we might decide that we want someone who smiles easily and genuinely, so we add that to the stick figure. We may decide also that the person needs to be able to make cold calls comfortably and can work equally well with clients, so we add those features, too (Figure 9.7).



Nursery
Fig. 9-7

Now we have a visual representation of the type of person with the skill set and attributes we want for the position. We can use that as a touchstone as we recruit and interview candidates, ensuring that they meet the requirements we designed. Did we design a man or a woman? A blonde or a redhead? Single or married? None of those attributes matter, nor can they legally guide hiring practices.

9.6 Cross-Pollinating Ideas

One of the more common areas of system growth, and perhaps one of the most fun, is expanding the services your system offers. Ideation alone generates a lot of interest among and participation from staff. However, the process of expanding a service line closely mirrors the overall design thinking process, and you must perform due diligence to understand and define the need and potential opportunity before you jump into ideation. Assuming you have done that and are ready to start brainstorming ways to innovate and expand on what your system offers. The team should adopt a design thinking technique called heuristic ideation.

Heuristic ideation is a rather fancy way of saying ‘rapid brainstorming.’ The technique speeds up the process of generating ideas by associating concepts disparate to one another but still relevant to the bigger picture. And it is a lot of fun.

As with all design thinking activities, you need a whiteboard or flip chart and markers. Sticky notes are optional for this one. The first step is to determine what you want to brainstorm about and two descriptive attributes that you can use to define the matrix. Once you have generated as many cross-pollinated ideas as possible, have the group assess which two are the most viable and explore how to prototype those ideas. At that point, you will be on the path to determining if your growth plan can include those new ideas. .

9.7 Summary

Growth is an integral part of any system, whether it is incremental, monumental, or somewhere in between. It can take on a wide variety of forms, be localized in specific departments, or sweep through the entire organization, leaving no area unaffected. Quite plainly, growth happens. With design thinking tools, we will be equipped to anticipate opportunities, embrace growth, and purposefully direct our efforts and resources in a way that will best benefit us in the long run. People need their interactions with technologies and other complex systems to be simple, intuitive, and pleasurable. When done well, the human-centered design enhances the user experience at every touch point and fuels the creation of products and services that deeply resonate with societal needs. Design is empathic, and thus implicitly drives a more thoughtful, human approach to growth in the education sector.

9.8 Exercise

Answer the following questions in detail

- 1: What is the importance of growth in the educational sector?
- 2: What does growing gracefully mean?
- 3: What are the different ways to manage new staff?
- 4: How to perform design thinking activities?
- 5: What is meant by the Heuristic Ideation Technique?

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Design Thinking Terminology

Co-creation: The development of a product, service, or process by more than one stakeholder.

Collaborative: Two or more stakeholders combine inputs, ideas, and insights to create a product, service, or process.

Context: The circumstances in which an idea, event, or decision exists.

Client Engagement: The act of connecting a client to a system.

Client Experience: Whether online or in person, the experience a customer has when interacting with a system.

Design Strategy: The process of applying design thinking principles to a system.

Empathy: Understanding another's feelings, thoughts, or attitudes; a requirement for developing communications, experiences, and interactions with target audiences.

Experience Design: The process of applying design thinking principles to create a meaningful experience for clients, employees, or other pertinent stakeholders.

Feedback Loop: A system through which customers, employees, and other pertinent stakeholders can share insights, opinions, thoughts, and criticisms directly to a system; a process through which information flows forward as well as feeds back on itself.

Futurists: consultants, organizational leaders, strategists, and others who use design thinking, systems thinking, and other interdisciplinary approaches to anticipate economic, social, and political changes that could affect the system.

Ideation: The fourth step in the design thinking process; is the act of generating ideas rapidly without regard for constraints.

Ideograph: A symbol or picture used to represent an idea, concept, or thing in place of a word, or when there is not a word to use accurately in the symbol's place.

Integrated Thinking: An approach to thinking that balances multiple constraints and evaluates the potential effect of those constraints as the balance shifts.

Iterate: To repeat a process or action, making modifications along the way, to reach a desired outcome.

Key Performance Indicators (KPIs): A defined and specific metric by which performance is measured; also called benchmarks or milestones.

Mind Map: A nonlinear diagram used to visually outline information; often centred on a word or short phrase that represents a concept, challenge, or opportunity; associated words, ideas, and concepts are then added around the centre.

Prototype: A sample, model, or work-in-progress of a product, service, or process used for testing viability and gathering stakeholder input.

Radical Innovation: Innovation on such a grand or unpredicted scale that it disrupts an entire system; often driven by an idea instead of client need.

Roadmap: An outline that often uses visuals to depict how a system will proceed from a starting point to reach a defined objective.

Scenario Planning: A flexible means of strategic planning that accommodates two or more “if-then” situations that allow a system to anticipate and prepare for varying versions of the future.

Social Innovation: The act of using innovation processes to help solve social challenges; can also refer to specific innovations that have a social purpose.

Stakeholders: Groups that have some degree of interest in the general operations, successes, and failures of a business, such as clients, employees, and so on.

User-Centered Research: Research to determine the needs and wants of the end users.

User Experience: Refers to the quality of the interaction between a person and technology.

Visual Thinking: A means of communicating thoughts and ideas through symbols and imagery.