Abstract

Customer discovery is critical for entrepreneurs to identify customers and their needs successfully. It is an essential piece of the lean startup methodology for discovering and confirming customers, their needs, value propositions, business models, and minimum viable products. This effort requires that the entrepreneur develop practical and successful interviewing skills and processes.

This paper focuses on several essential aspects involved with the strategy to set up a productive customer discovery and interview process. It addresses upfront planning requirements, including the selection of the right customers and defining the optimal approach. The discussion then delves into a four-part approach to the strategic planning around the key objectives and questions to address, the methods to use, the gathering of data, and final the communication of results. Following this discussion, the paper examines the “FUNNEL” and “SPEECH” techniques. These are two approaches that the entrepreneur can use with screening customers and guiding one’s interviewees through the “Painful Interview.”

In the end, discovery needs to focus on the customer and needs. It is not about one’s company and its products. When used correctly, effective questioning and interviewing strategies lead to valuable insights that guide a data-driven decision, instead of one based on assumptions or guesses. These will focus on the right customers and their needs. Such will provide insights to create a compelling value proposition. This way the entrepreneur can mitigate risk, “nail” one’s product and business model, and scale-up the venture with greater confidence.

Keywords: Business model search; Customer discovery; Entrepreneurs; Interview; Interview strategies; Lean startup; Startup

Introduction

What is the top mistake that startups make? According to Daniel Garplid, who collects such data, the #1 issue is that of building something that no one wants [1]. When considering that out of over six hundred thousand new businesses each year, the fall off is sobering, with only ~.05% obtain venture funding and less than 50% remain in business within five years [2-5].

The entrepreneur’s product mentality might be the root cause for these dismal startup statistics. Many times, these individuals believe they have a great idea, to which they are tied. Then, they build their products and businesses without completely understanding their customers, marketplace, and competition. Because these individuals are product-focused, they forget about an essential component to the enterprise, the customer. To this end, they fail to gather valuable information from their potential customers who can make or break the success of the product and firm. Some may obtain information from secondary sources and other primary sources (e.g., conducting surveys). However, these approaches limit these entrepreneurs in gathering valuable insights directly from the customer to identify the real needs and motivators that their ideas or products could address successfully.
Even if they conduct customer interviews, the interpretation of what the customer wanted could be significantly misinterpreted, misconstrued, and misconstrued to other firm members (e.g., engineering, design), who may misinterpret the data [6]. Many times, they are trying to use this information to figure out how to fit an established product into a particular market or to find a specific segment for the product. As a result, the product falls short of addressing what the customer desires. This result is due to poor customer discovery skills and processes, to which proper interviewing techniques are essential.

Customer discovery is critical for entrepreneurs to identify customers and their needs successfully. It is an essential piece of the lean startup methodology for discovering and confirming customers, their needs, value propositions, business models, and minimum viable products. Blank and Ries, the developers, promote this methodology and the National Science Foundation Innovation CORPS™ (I-CORPS™) program uses it extensively with science and engineering-based entrepreneurs [7-10]. In many ways, the process of customer discovery aids entrepreneurs in their learning and decision-making processes. With such efforts, these individuals can hone in on the essential parameters that their products and business models can address effectively.

Productive customer discovery starts with proper planning and strategy. This paper examines several strategic frameworks for interviewing customers to optimize customer discovery. It begins by introducing several essential steps, followed by a discussion of the four-quadrant planning framework. The discussion then examines the “FUNNEL” and the “SPEECH” techniques for planning and conducting interviews.

**Essential Steps to Establishing a Strategic Framework**

In conducting interviews, there are six essential steps to follow. These include the following: (1) define the objectives for the research; (2) conduct background research and prepare for the interviews; (3) develop a few key topics and a hundred questions; (4) identify the essential people to interview; (5) gain stakeholder input; (6) engage the interviewee; (7) analyze and synthesize the data; and (8) communicate the results [11].

**The Four-Quadrant Planning Framework**

According to Scott Worthge, a market research executive and instructor at the University of California, Berkeley, the interview process starts with a strategy and planning process [12]. He advocates using a useful circular framework comprised of four quadrants (Figure 1). The planning effort with this “magic circle” starts in the upper right-hand corner. It is in this quadrant that he highlights the need to design one’s efforts around the needs of the stakeholders (e.g., market research clients, senior executives, investors). This quadrant focuses on what are the essential objectives and critical questions to address with this research. In essence, one needs to understand the problem. This approach is what a good consultant, market research, and entrepreneur does.

Thus, they are looking at what is the critical question to address and what objectives to accomplish through this research or discovery effort. In working within this initial quadrant, the entrepreneur, manager, or consultant needs to engage various stakeholders involved to focus and prioritize these items. During this phase, the interviewer develops a working set of topics and questions to which the stakeholders can respond. In developing these initial strategic pieces, one needs to confirm what they are, why they are critical, and who cares about them. This effort is paramount since it provides the direction for the next three phases to fulfill.

![Figure 1: Worthge’s “Magic Circle” Defining the Strategy and Execution of Market Research and Interviews [12].](image-url)

The second quadrant (lower right) focuses on research implementation planning. In this phase, the entrepreneur, manager, or consultant will look to identify the target audience to interview, the data source, the design, and methodology. For discovery, interviews will be the method of choice.

For other types of market research, there may be other methods, such as surveys, for capturing primary data [11,12]. Many entrepreneurs tend to default to using questionnaires because they can access a large data response set and provide quantitative data. However, the use of a survey by entrepreneurs is a common trap into which many do land. Ideally, for customer discovery, the interview is primary, as it allows for greater flexibility in the areas to cover based on feedback gained during the discussion.

Moreover, it goes beyond the quantitative aspects of data collection and seeks essential qualitative insights. The interview can get beyond the surface of a response, as the interviewer can evaluate various nonverbal signals (e.g., body language, facial expressions), which can offer valuable insights. Once the interviewer selects a method, one will need to develop the proper questions and measurements, and then proceed to test a particular survey methodology and instrument.
To enhance one’s efforts within the first two quadrants, Worthge advocates that the entrepreneur, manager, or consultant conduct secondary research first [12]. In many ways, secondary research can be instrumental in gathering information already available that one does not need to obtained and can set the frame for where the research needs to proceed. Furthermore, the findings from the secondary research can guide the questions and objectives to address, along with perhaps offering a methodology that can make one’s efforts more robust.

Once the interviewer settles on a methodology in the second quadrant, this individual can focus on the execution in quadrant three (lower left). This phase involves the actual “Getting Out of the Building” and conducting the interviews and analyzing the information and insights gained. In using such data, one might modify the research problem, objectives, or design. Ultimately, it is during this phase that one seeks to gather, analyze, synthesize, and understand these data so that one can make appropriate conclusions.

The fourth quadrant (upper left) involves one’s communication of the findings and insights. Worthge notes that this section is critical since many individuals conducting the research cannot communicate the essential learnings [12]. In many ways, he suggests that the interviewer considers at the beginning of the process, what one is going to present at the end of the research process. This approach is one that Andreasen advocates in his article “Backward Market Research” [13]. By thinking backward, the individual considers what is critical when beginning to conduct one’s discovery process. However, the only concern with this strategy is that it may establish a preset conformational bias, which might limit feedback that is not consistent with the entrepreneur’s original hypothesis. The best way to approach this issue is to use a pyramid-style approach to communication as advocated by Barbara Minto of McKinsey [14]. Why this quadrant is important is that many times the individuals conducting this research get caught up with presenting so much data. As a result, they lose the main recommendations, takeaways, and messages that the research has provided.

The “FUNNEL” Technique for Planning and Implementing Interviews

Worthge also advocates another strategy, called the “FUNNEL” technique [12]. The purpose of using “FUNNELS,” is to understand who is in the target audience, what are their attitudes and experiences, how are they doing things, what is their “Jobs-to-Do,” and what requirements might be helpful towards developing a “Minimum Viable Product” (“MVP”).

The technique involves setting up several “FUNNELS” that one will use to move an interviewee through during an interview [12]. These “FUNNELS” are several defined high-level topic areas, in which an interviewer can organize major and minor questions to gather data from the interview. The technique allows for flexibility to screen, build rapport, and then delve deeper into attitudes, experiences, needs, and proposed solutions. It provides the interviewer a way to organize the interview sections within one’s head. This approach allows for the interviewer to engage in a more conversational approach in the interview without a formal discussion guide, rather than more of a survey-like interrogative approach. It offers the flexibility to explore other topics within a significant area or develop the areas further. One can use the “FUNNELS” with an interview guide (both short and long versions) for more formal interviews to guide the discussion at the high level or to refer for back up or “Drill Down” questions. Alternatively, one can use the “FUNNELS” without a guide just as a mental framework to organize more ad hoc engagements with customers.

The “FUNNELS” can help move a conversation in a specific direction (Figure 2) [12]. First, the interviewer frames the interview, particularly as to why one is conducting the interview and how the firm might use the data. Then, one can move into the opening “FUNNEL” to qualify whether the person is within one’s target audience or not. If not, it provides the option to close the interview and gain referrals for other interviewees who might be more suitable. If appropriate, then the data gathered can identify critical customer demographic or personal characteristics. For example, one question might ask the interviewee to tell the interviewer a little about oneself and one’s background as related to this topic. The second funnel functions as an “Ice Breaker.” The purpose is to gather attitudes about a topic. For example, why is one so interested in a particular topic or area, such as entrepreneurship? It allows one to ask the interviewee to tell his/her story related to the topic and lets the interviewer understand who the interviewee is. This “FUNNEL” is critical because people like to talk about themselves. When one puts interviewee on the pedestal to talk about oneself, this individual becomes more open to further questions and dialogue.
Then one moves the interviewee into the third “FUNNEL,” which delves into one’s experience in the domain [12]. It allows for the interviewee to tell stories about what has worked and what has not. It also can facilitate insights into how the interviewee has gone through the experience, done a particular job, and guide the interviewer through the process. This dialogue can then help to segue to the fourth “FUNNEL,” which focuses on the “Pain,” “Gain,” or “Job-to-Do.” In this “FUNNEL,” the interviewer can get the interviewee to walk through the process and the problems one engaged. Then, the interviewer can get the interviewee to discuss what skills or resources one needed to address the problem. During this discussion, the interviewer should try to get the interviewee to identify how big of an issue the “Pain” was (i.e., was it in the “Top 5” or “Top 2”) and whether others have had the same experience or pain. In particular, the interviewer should be following up here with “Why” types of questions?

The fifth “FUNNEL” focuses on whether the interviewee has used a current solution or created a new one [12]. The point of this “FUNNEL” is to identify motivations, potential solutions, and early adopters. Naturally one can tie with questions including: (1) Why does the interviewee bother?; (2) How the interviewee arrived at the solution?; (3) What solutions the individual find that worked or not, and why?; (4)How did the situation make the interviewee feel?; and (5) How much time and money did the individual need to create this solution?

The sixth “FUNNEL” focuses on having the individual identify features that would define the ideal needs for a solution [12]. Life science specialists call these requirements a Target Product Profile or a “TPP.” A key question can be if the interviewee had a “Magic Wand” or could design the ideal solution, how would it look. Another technique could involve using a blank piece of paper or wireframe to draw out a potential solution (e.g., an iPhone app). These are useful aids to enhance what the customer is trying to describe. The interviewer might also probe on how would the interviewee use it to gain a sense of utility and ownership. Here, through this “FUNNEL,” the interviewer is gaining valuable insight into motivation and requirements for an “MVP.” Compiling this feedback with that from other interviews can lead to a pattern of feature requirements that can lead to the “MVP.” When moving through this “FUNNEL,” the interviewer does not share anything about the firm’s product.

Interestingly, many entrepreneurs who are interviewing feel that they need to ask about pricing during an initial interview [12]. This approach is premature. In general, discovery interviews do not delve into pricing, as this area is one for later in the
commercialization process and involves much more sophisticated testing (e.g., conjoint analysis, price benefit modeling, and price sensitivity curves) to set forth a more accurate price or value relationship. One is still developing the product and performing competitive market research.

However, the interview may ask about how one would value the solution identified during the sixth “FUNNEL,” but never provide an anchor price. For instance, one could easily ask about a range of prices. First, one could probe the upper boundary to determine what might be too high that would turn off or preclude the interviewee from engaging it as it would be way too expensive. One can then probe the lower boundary that the interviewee might question the quality of the value proposition [12]. From that discussion, the interviewer could pivot to ask about what the interviewee is spending in time and money for a solution to address the problem. Some of these data can provide initial assumptions for building and testing a revenue model that could be tested in future interviews or via an “MVP” test.

In closing out the “FUNNELS” of the interview, the interviewer can summarize critical observations and any next steps to decrease the risk [12]. One might also ask about other interviewees to recommend or questions that the interviewer should have asked but did not. The interviewer needs to recognize that this interview is just one interview. The firm needs many more to establish patterns. In local I-CORPS™ programs or college-level entrepreneurship classes, this target might involve anywhere between 20 to 30 interviews over several weeks [15]. At the NSF National I-CORPS™ program, the total goes over 100 interviews [16].

The “FUNNEL” technique allows for making the dialogue more natural, which opens up the interviewee more effectively [12]. It provides for a flexible framework depending on the interview and time frame of the conversation and conducts it in a more naturalistic way. The attractive aspect of the “FUNNEL” technique is that one can move through the topic areas quickly make a natural conversation. It is flexible enough to use in a 10- to 15-minute interview because people’s time is valuable, or in a more structured interview, which may take up to 45 minutes. The framework allows the interviewer to get at the crucial issues in a short timeframe.

The “SPEECH” Technique for Planning and Implementing Interviews

Riccardo Alverez, DBA at Centro de Enseñanza Técnica y Superior (CETYS) in Baja, Mexico outlines a similar approach for empathetic interviewing [17]. He calls it the “SPEECH” technique. He bases it off the “SPIN Selling” (Situation, Problem, Implication, Need, and Payoff) sales technique [17,18]. It is a tool to help entrepreneurs to become adept and comfortable in planning and conducting interviews. In many ways, it draws on elements of the “FUNNELS” technique. The “SPEECH” technique involves building several “FUNNELS” that guide a customer through the interview. The framework allows the interviewer to transition from one topic to another in a smooth fashion. It can allow for the interviewee to address the issues personally, but also to project out the situation to other individuals. Lastly, it allows for the interviewer to stay away from presuppositions, biases, and the product.

The opening “S” involves questions related to the customer’s present situation and status concerning a specific domain that the entrepreneur is exploring [17]. For example, this domain might include the handling of funeral services and burial insurance, which can be a difficult discussion for an individual or a family. These questions try to hone in the individual’s, or an associate’s, issues and experiences around this service need. In this case, what do the interviewees think about relative to the end of life internment services for their families or themselves, and how to address such needs.

The second area is “P,” which delves into the pains and problems [17]. These areas delve into such issues related to the experience and the strains involved with handling the experience and the customer journey in addressing the pain.

Following these questions are those that explore the two “E’s” [17]. The first “E” explores events and expectations. Here, the interviewer probes about past events and how the customer might have met expectations (or not), or to project out to the future and what expectations the individual might have. The second “E” represents the effects and implications of the previous “E” of the past event and whether it did or did not meet the expectation. Finally, the “CH” represents changes and challenges [17]. These questions delve into what the interviewee did in the past and what would be an ideal solution. Furthermore, it explores what challenges exist concerning the interviewee’s ability to identify ideas and solutions.

Conclusions

Customer discovery is an essential part of the lean startup methodology process. It requires entrepreneurs to “Get out of the Building” and employ effective interviewing strategies. To be successful, the interviewer needs to plan to one’s interviews up front strategically. The use of the four-quadrant strategy provides a strategic framework for defining the key objectives and questions, along with methods, data collection, and communication of the results. The “FUNNEL” and “SPEECH” techniques are two strategies to help the entrepreneur with screening customers and guide the interviewee through the “Painful Interview.” Both allow for a more natural conversation that will allow for valuable insights and truths to emerge. By using these approaches, the interviewer can hone in on important issues specific to one’s customers and
discover insights and data that will guide the product and business model development process.

References