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Conducting Insightful Market Research

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Published on: Sep 30, 2019

DOI: <https://doi.org/10.21428/b2e239dc.97c68540>

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Topic Relevance by Timeline

Summary

- Market research can complement early design work, assist with fine-tuning features and pricing, help attract investors, and suggest new directions to explore.
- It is critical to know where a startup is in the design process, from whom it wants feedback, and what it intends to do with the data gathered.
- As a general framework, it is useful to think in terms of three main blocks of the product development life cycle—early stage, middle stage, and late stage.
- Consider seeking help from research professionals whenever possible. There are many measurement-oriented and other practical considerations to account for, and a number of good resources a startup can turn to for help.
- Good research answers key objectives, and is customized to fit within a startup's very real time and budget constraints. Addressing key questions up front will lead to more actionable results.

Introduction

The benefits of a rigorous and repeatable process for developing new products have long been recognized for organizations both big and small. Having such a process in place is particularly important given that a sizable minority of products in development fail, and that the investment required to obtain feedback is typically a fraction of the overall development costs ([Hauser and Dahan](#)). Thoughtful market research should be an integral part of a startup's efforts to develop and launch any new product or service and fits nicely into the many existing models and frameworks developed to guide new product development efforts ([Bhuiyan; Cooper](#)). Early on, it can be a useful complement to the more free-flowing components of design thinking (see the chapter "[Design Theory: Understanding Customer Needs Through Discovery and Interviewing](#)"). Further down the road, it can be a valuable tool for fine-tuning features or components and determining how to price the product, and a way to put hard data in front of investors, potential partners, or other important stakeholder groups. A good market assessment also can point a startup in a different direction, to a market that they had not previously considered, and, if not viable, to correct course before too much time and money is committed.

Wherever the startup is in the process, it is helpful to gain familiarity with some best practices and resources as the team considers how best to invest time and money in formal consumer feedback.

Defining Market Research

Market research can be a catch-all term for many forms of investigation, from informal discussions with stakeholder groups to the gathering and review of secondary data. For the purposes of this chapter, we are referring to research that has the following three key attributes: (a) primary data collection that is (b) generally but not exclusively quantitative in nature and most typically performed via a survey instrument or via some other formal platform that blends closed-ended and open-ended data and (c) employed to capture feedback specific to the new product or service concept.

Some Keys to Success

Define the target population

Ideally, the research should be conducted among people who would consider the idea relevant. Getting to that group can prove challenging, however, especially if third-party providers will survey such individuals. Be generous at first with the definition of “target”—especially early in the development cycle. Narrow things too soon in the process and the team could miss important markets or sources of feedback. And, as a practical concern, the more the intended feedback targets represent a needle in a haystack, the more expensive it can become to find and survey them.

Know where the product is in the process

Early on, market research is often best used to vet the idea in terms of the big picture or to help narrow down alternatives that surfaced in the exploratory work. Mid-stream, it is often a good way to take many possible product features or functions and narrow them down to a best-bet few. Common late-cycle research studies tend to involve far more detailed concept descriptions and evaluations and to measure interest with regard to price.

Even more importantly, know what to do with the data

The best research studies are tailored to particular needs, and may not follow the general guidelines above in terms of objectives and the development life cycle. The most critical thing by far is to have a clear understanding of what the team wants or needs to do with stakeholder feedback before jumping into any study. If time allows, it is often a great idea to gather key stakeholders together as part of the research design process—as a way to build consensus around why the startup is investing in this research, brainstorm around the range of possible results that might emerge, and imagine how the company will act upon the information once it is in hand. Absent such shared understandings, projects can veer off course, be well received by some parties and dismissed by others, or end up serving multiple end goals without adequately addressing any of them.

In some cases, mentors or other experts can help the team frame the questions and interpret the data. It is particularly important to avoid “vanity metrics”—that is, questions or data that are intended to make the team

feel good about the product, or present the product in a favorable light, while glossing over major weaknesses or obscuring key details ([Reis](#)).

When and How to Use Market Research

There are many points in time during the product development life cycle where it can be valuable to invest in primary market research customized to the particular product and the most pressing questions. As a general framework, it is useful to think in terms of three main blocks: early stage, middle stage, and late stage.

Early stage

In the early stage, the team has a vision for the new product or service and are likely able to communicate its main purpose(s) in a simple concept statement. Many specifics, however, are up in the air, and the team probably knows more about all of the features or benefits they *can* deliver on, as opposed to the ones they *should* deliver on. Market research during this period tends toward more open-ended feedback to complement design processes, or toward survey-based efforts to assess the attractiveness of the core concept statement and prioritize the many possible features and functions based on what the target audience finds most compelling.

Key at this point in the development cycle is not to assume that the target audience understands the product or that everything that can be built should be. Use market research as a highly structured form of listening. These data can be valuable when approaching investors: venture capitalists (VCs) often give a go/no-go verdict, and while no one wants to hear a negative response, it is important to come to this decision before too much time and money are invested (see the chapter [“Seeking Venture Capital Investment”](#)).

Click on this interactive video and mouse pointers to test your intuition on market research in Early Stage Development. Then read a case study.

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Tales from the early stage: Developing a new product roadmap

The research need: A provider of health information was developing new software intended to help hospital systems optimize their formulary processes. They had many potential features and functions on their drawing board but wanted to channel their precious internal development resources toward those meant to address the buyers' most pressing needs and salient pain points. They also wished to more generally confirm their sense that this new product would be attractive, given the time and effort it would take to move from concept to market.

Target audience: Senior level and relatively hard to reach—hospital chiefs of pharmacy or pharmacy directors involved in the process of evaluating and purchasing new software solutions.

Characteristic	Comment
Length of session/survey	45 minutes—sufficient time to cover four or five topics in depth, with about three to five inquiries per topic.
Q&A structure	A topic guide, created in collaboration between the moderator/researcher and the startup stakeholders. The intent is to foster an open-ended conversation, and so information gathered often ranges beyond topics included in the guide.
Overall length of project from kickoff to results	Five–seven weeks, inclusive of time to recruit and schedule.
Key deliverables	Transcripts of all conversations and a summary report of key learnings.
Compensation/incentive	\$100 to \$300 for medical practitioners and senior administrators, with the amount depending on how far up they are within the hierarchy or how common or uncommon a practitioner type they are.
Cost ballpark:	\$20,000 to \$40,000.

Figure 1
Characteristics of this early stage study.

Approach: Given the rarity and seniority of their target audience, this firm opted for rich and intimate one-on-one feedback over the larger sample sizes and routinized questions of a survey. Thirty qualified recruits participated in one-on-one discussions with a trained moderator, via a virtual sharing platform that allowed for webcam discussions and the ability to display stimuli illustrating the overall product concept and its key (potential) capabilities. Refer to [Figure 1](#) for more details on the characteristics of this early stage study.

Key insights: From these conversations, the company was able to validate their sense that this product would be of value, and to better understand current practices and work-around solutions being used that their product might displace. They got a firmer idea of pain points and process needs. And they captured direct feedback across all features on their roadmap—allowing them to prioritize development based on attractiveness and ease of execution.

Middle stage

In the middle stage, the startup has likely moved from an initial value proposition to a more refined offering, and the team is thinking more about how to launch. They have probably zeroed in on best-bet features and benefits, but are not yet sure which subset of those will help market the product most effectively. Research at this juncture often focuses on determining how customers trade off features and overall performance against costs, and is meant to both finalize key aspects of the product and provide the team with firm data on how to most efficiently talk about key benefits and narrow in on a pricing strategy.

Key for this stage is to quantify results as often as possible in an effort to avoid making gut-feel decisions drawn from early feedback or an internal sense of what the market really wants.

Click on this interactive video and mouse pointers to test your intuition on market research in Middle Stage Development. Then read a case study.

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Tales from the middle stage: Fine-tuning the next generation of blood pressure monitors

The research need: A manufacturer of medical equipment wanted to create its next generation of continuous, non-invasive blood pressure (CNIBP) monitors. Core features were well established. The design (and research) challenge was how to optimize improvement around these features. Which enhancements to existing CNIBP machines would be worth paying for?

Target audience: U.S.-based professionals in relevant specialties—anesthesiologists and certified registered nurse anesthetists (CRNAs).

Approach: These target end users were reachable in sufficient numbers to support a survey effort of 200 qualified professionals in total—100 each among anesthesiologists and CRNAs. More specifically, this company invested in a powerful approach—called “conjoint analysis”—to understanding what most drives product interest. Conjoint studies ask participants to review sets of differing product profiles and choose the one they would most likely buy based on benefits and budget realities. Refer to [Figure 2](#) for more details on the characteristics of this middle stage study.

Characteristic	Comment
Length of session/survey	15–20 minutes, which amounts to approximately 40 to 60 closed-ended questions comprising the series of choice tasks and other one-off questions of interest.
Q&A structure	Web-based survey.
Overall length of project from kickoff to results	Six–eight weeks, inclusive of time to design an effective choice exercise in an iterative manner.
Key deliverables	A summary report of key insights, comprehensive cross-tabulations, and a “what-if” simulator that allows end users to explore the relative attractiveness of different price/product configurations.
Compensation/incentive	Using an online panel sample source means that incentives are handled by the third-party provider and folded into overall costs per completed survey. Given the approximate length of the interview, expect \$75 to \$125 per respondent. Shorter interviews or easier-to-reach physician targets may cost less.
Cost ballpark:	\$75,000 - \$100,000.

Figure 2
Characteristics of this middle stage study.

Key insights: Advanced choice modeling helped this company to both quantify the importance of each key monitor benefit and determine where it would be best to enhance existing capabilities in its next-generation monitor. Results were incorporated within a “what-if” simulator that allowed the manufacturer to create and compare different product profiles in an effort to optimize its development process.

Late Stage

In the late stage, research efforts tend to be more focused and are often simplified. The team has formulated the final (or near-final) product and is on the cusp of launching. They want to settle on a pricing strategy, and to understand how the marketplace will react to the product across various price points.

Key at this stage is to be wary of forecasts based on survey results or any single source of data. Purchase interest often does not translate into actual purchases; it is very difficult to identify directly comparable existing products; and markets are vibrant and dynamic competitive environments.

Click on this interactive video and mouse pointers to test your intuition on market research in Late Stage Development. Then read a case study.

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Tales from the late stage: Pricing a new surgical procedure

The research need: A device manufacturer had developed a proprietary procedure and set of tools for a mass-market, minimally invasive, and office-based surgical procedure, and was ready to encourage its usage. Its pressing need? Provide doctors with guidance as to how they might price this elective procedure not covered by conventional health insurance.

Target audience: U.S. consumers aged 18 or older who reported an issue/problem addressable by this new surgical procedure.

Characteristic	Comment
Length of session/survey	10 minutes, which amounts to approximately 20 to 30 closed-ended questions and a rich description of the procedure.
Q&A structure	Web-based survey.
Overall length of project from kickoff to results	Four–six weeks, including an iterative questionnaire design process focused on clearly and effectively educating participants to the task at hand.
Key deliverables	A summary report of key insights focused on price-demand curves, and a comprehensive set of cross-tabulations.
Compensation/incentive	Sourcing consumers from online panels is far cheaper than finding medical professionals or other b2b populations—often in the range of \$5 to \$15 per participant.
Cost ballpark:	\$15,000 to \$25,000.

Figure 3
Characteristics of this late stage study.

Approach: A straightforward information need was matched with a simple but powerful approach—a brief monadic design survey wherein all qualified participants are presented with rich, multimedia information on the procedure and asked how willing they would be to pay for it at one of three distinct price points. Refer to [Figure 3](#) for more details on the characteristics of this late stage study.

Key insights: A demand curve indicating the drop-off in purchase interest as price increases, paired with an estimate of total revenue associated with each combination of price and purchase interest, is essential for making an optimal decision about pricing.

Obtaining Expert Counsel

Effective market research combines the principles of good design and thoughtful analysis with the practical considerations of efficient project management. It is always good to consult with associations such as the Insights Association or the American Association for Public Opinion Research about detailed information on best practices, though, as with any custom effort, these more pragmatic issues can be idiosyncratic, and too numerous to catalog in any one article. The following tips, however, should be helpful regardless of what stage the startup is at or what particular questions one needs to answer.

- *Online methods are generally the most practical and powerful way to go.* Product development research is increasingly conducted online, from surveys to flexible interaction platforms that allow for the combination of open-ended feedback and detailed evaluations. In-person work can be prohibitively expensive, and phone-based surveys no longer provide reliably random samples, particularly of hard-to-reach groups. In contrast, online methods tend to be lower in cost and excel at pairing qualified participants with research initiatives. More importantly, online surveys and other platforms allow one to thoughtfully present the product or service using text, images, or video—a key to gathering detailed and relevant feedback from people who likely have never even considered the new product before.
- *Consider third-party providers to target particular populations.* As research has shifted online, the universe of panel sample providers has proliferated. Today there are many reputable companies out there whose primary function is to efficiently connect teams with qualified respondents ready to evaluate a new product or service. Many product development studies rely upon these panels, but as a rule, the rarer the population, the more expensive it will be to source them. Therefore...
- *Do not hesitate to leverage existing lists of prospects and customers in market research.* If the team has ready access to customer lists or potential customer lists that are double opt-in (i.e., user first opts in by providing email address, then confirms their wish to be included in the list via a separate email), by all means use them. Email invites do not typically produce very high response rates, but it costs pennies to send them and every bit of feedback counts.
- *Leverage DIY research tools.* Most times the team will know the basic questions that need to be answered and can author them. If that is the case, take advantage of the numerous companies that provide tools for creating and administering online surveys and discussion experiences that are quite powerful as well as user-friendly. A quick search of “online survey tools” or a visit to greenbook.org is a good place to start.
- *Use university/accelerator resources.* Many university business schools conduct class projects with graduate students who can do basic market research at early stages. If the team is working with an accelerator, the

accelerator will likely have marketing experts whom they work with; VCs will do this routinely (see the chapters [“Accelerators and Incubators”](#) and [“Seeking Venture Capital Investment”](#)).

- *Seek professional support for more complex challenges.* The team may find itself grappling with a more complex set of research objectives or with a study that by its nature requires more complex analytics or intensive project management resources. Or they might simply value the perspective of a party with no dog in the hunt. There are many full-service firms that specialize in product development research and are experts in question formation, the gathering and proper cleaning of data, and the analysis of those data. They too can be found with a bit of internet searching, or by referencing the GreenBook Directory. Technology transfer offices and/or university entrepreneurship centers should be able to refer the team to professionals with whom they have worked and find credible as well (see the chapter [“Working with the University Technology Transfer Office”](#)).

Questions a Market Research Consultant Might Ask (or a Startup Should Ask Itself)

In the end, effective market research should address a startup’s main objectives and be appropriate to the constraints that it will inevitably face. Whether working with experienced research professionals or attempting to execute the work internally, be sure to address the following questions up front:

- Where is the organization in its product development process?
- What information is most needed, right now?
- What is already known?
- What are the most important things that need to be done with this information once it is in hand? And who within the organization will need to act on it?
- Who is the target audience?
- Are there particular subgroups of importance within that overall target audience?
- What is the budget for market research?
- Are there email lists, telephone numbers, or some other means of contacting a pool of individuals available to the startup, or will it need to tap third-party sources for sample audiences?
- Who are the key stakeholders for these data, and how will they likely want to receive the information (e.g., will they want the raw data or will they need more formal reporting or insights curation)?
- What is the timeframe needed to get the data and take critical next steps?

Conclusion

Thoughtfully designed and executed market research should be a part of every product development process. With it, an organization can ensure its product is delivering real benefits to interested end users and convince potential investors of this fact. Without it, a team might waste time on less desirable features, or miss out on opportunities to correct course.

Organizations should think carefully about where they are in the process, what they most need to know, and what they intend to do with any information gathered. They should seek help from research experts whenever possible. And they should avoid the impulse to follow preexisting research templates in the face of their particular information needs and unique constraints. Do so and a startup will be well on its way to building a better and more market-savvy offering.

Resources

[The Insights Association](#) provides resources and networking for the marketing research and data analytics community.

[The American Association for Public Opinion Research](#) is a professional organization of public opinion and survey research professionals in the U.S.

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[The Best Online Survey Tools for 2019](#) is PC Magazine's ranking of survey platforms.

[GreenBook Directory](#) is a long-established directory of research companies and insights professionals.

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