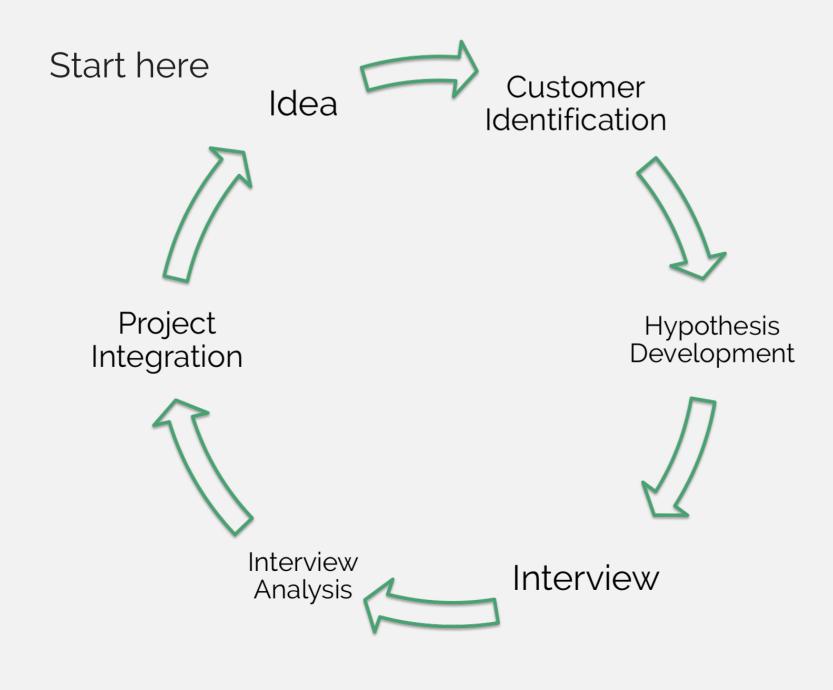


### Customer Discovery: What is it and why should it be used?

Customer discovery is a framework for indentifying a market for your ideas, and for building a product that solves your customers' problems. This customer discovery toolkit is an adaption of known customer discovery methods we have specifically designed for iGEM teams. In order to successfully identify applications for your project, as well potentially issues, the Macquarie University iGEM team has created a customer discovery toolkit for teams to apply while conducting interviews.

This approach allows information to be gathered, while withholding project details until the end of an interview in order to eliminated the possibility of bias in the interviewees response. This offers broader feedback towards potential applications and limitations of the project. In order to accomplish this, the following method can be used.







## Starting off with Customer Discovery: Generating Hypotheses

One of the key components of customer discovery is the creation of hypotheses which can be tested during the interview process. Start with an idea, how do you think your project should be developed? performing background research and form some ideas of your own. Discuss applications of your project with the community and key stakeholders to refine these initial hypotheses.

#### The Best Approach to Hypothesis Creation

- What could your project achieve?
- Is it the best way to solve a real world problem? Why?
- What is the customer base for your project?
- What are the major issues facing your customer and/or industry?
- Could your project help solve any of these issues?





#### Finding Interviewees

As an iGEM team working at a university, you'll have the benefit of a number of academic contacts. Chances are, there will be multiple academics at your home university that are working in relevant research areas. Ask them if they know any relevant experts outside your university and start building your network. Make a list of people you'll need to interview. This could include people in industry, academic researchers, and potential consumers. As an iGEM project, chances are your idea will be relevant to other iGEM teams. Try contacting other teams for interviews, or to see if any academics at their university are experts in your projects area. Use word of mouth and your connections to get further contacts and expand you list of potentially interviewees as you go. You never know where it will lead you! Once you gain confidence, cold calls become an avenue for obtaining interviews. Similarly, utilising personal linkedin connections or using search engines can be used to find interviewees.

To increase the chance of a positive response when contacting your potential interviewees, make sure you contact them in appropriate mediums such as email. Don't forget to write professionally and use their official name and title, explain who you are (i.e undergraduate research), your aim for the interview, and how you got their contact details.







#### Interview Preperation

#### Tips to Ensure your Interview is a Success

- Once an interview is confirmed, fully prepare by familiarising yourself with the interviewees' work and writing a list of questions.
- Withhold key information about your project to get a better understanding of the issues of the industry (this will help when it comes to integration of human practices into your project).
  Immediately detailing your project may lead to response bias
- Be careful with your posture sit up straight, give eye contact, speak clearly and dress professionally.
- Reflect back on previous knowledge and experience to think of more questions to ask

The main aim for these interviews is to gather information that supports or contradict your hypotheses and in turn, helps you understand the main points and problems the people you are interviewing are experiencing. Ultimately, this will help you improve your project. To ensure the success of your interviews, there are 2 main things to consider:

First, try to get an interview in person. This enables you to ask questions as you go and gain more information, conduct interviews in pairs, so one person can take notes and the other can ask questions. This also makes the interview process less daunting. If the interviewee is unable to meet in person, try to interview via Skype or telephone. However, if all else fails, send your questions via email in a word document with a given time frame for the interviewee to respond.





Secondly, tailor your questions to the interviewee to maximise the value of the information gained. It is important that your questions are open ended so that you can gain new insight into the interviewees field, and potential applications for your project. One of the key aspects of customer discovery is initially keeping details of your idea from your interviewees. This is to decrease interviewee bias or prevent your interviewee from taking the interview in a particular direction. Withholding information will give you broad insight into issues that your project could potentially solve. Wait until the end of the interview to explain your teams project. Within the context of what you've just discussed, the interviewee may identify specific issues associated with your project and give you feedback.

#### Potential questions for interviews can be;

"What are your current research areas and what are the processes behind it?"

"What's the most difficult aspect in your line of work?"

"What would a hypothetical solution be to these problems look like?"

"How do you see [something vaguely similar to your project] interacting with their line of work?" End the interview with..." Is there anyone else you recommend for us to interview?"



### 

# Analysis and Integration of Responses

Throughout the interview and testing phase of your customer discovery, you should be recording responses and comparing these to your hypotheses. This will form the basis of incorporating results into your project. The most important part of customer discovery is the quantity of interviews you conduct, since this will give you a large database to draw conclusions from and increase the validity of your results.

As a team, split up and independently rank your hypotheses. Order them into 3 main categories to allow for critical hypothesis identification.

- Critical Hypotheses- Encompass the most crucial aspects of your project. Without these, your project will not proceed.
- Non-critical Hypotheses- These aid the outcome of your project but are not crucial for the success of your project.
- Superfluous Hypotheses- Have no effect on project success but may play a minor role in future applications.

Example tabulation of a variety of hypotheses for analysis

	For	Neutral	Against
Hypothesis 1	70	15	15
Hypothesis 2	40	50	10
Hypothesis 3	10	70	20





A key point in this integration step is that the hypotheses ranked as critical hold precedence over the others. They may suggest changes in the direction of your project to better align your work with the market demands. Once hypotheses have been analysed, the trends you find can not only be integrated back into your project, but also allow you to broaden the scope of the future applications of the project. Potential limitations and market readiness of your products can also be identified through this process. To find out more information about how this Toolkit helps us with our project, please visit our Integrated human practices page

(http://2018.igem.org/Team:Macquarie\_Australia/IntergratedHumanPractices).





# Brought to you by the Macquarie University iGEM team 2018











