Is our technology fit-for-purpose for international development?

“Our team was like a small company, working together to achieve a common goal.”

“i-Teams is one of the most entertaining and inspiring projects I have ever worked on. It has helped to reshape and direct my future career towards entrepreneurship”

<table>
<thead>
<tr>
<th>Instructors:</th>
<th>Amy Weatherup, i-Teams Programme Director, IfM Dr. Lara Allen, Centre for Global Equality</th>
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<tbody>
<tr>
<td>Time:</td>
<td>Tuesday, 7-10pm Meet in the IfM common room for pizza from 6.30pm</td>
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<tr>
<td>Location:</td>
<td>Seminar Room 3 Institute for Manufacturing, West Cambridge site</td>
</tr>
<tr>
<td>Contact:</td>
<td>Amy Weatherup, <a href="mailto:am678@cam.ac.uk">am678@cam.ac.uk</a></td>
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Overview

Development i-Teams brings together teams of students with real university inventions, and asks what should be done to maximise their impact in the developing world.

Teams consist of 7 participants, selected to have diverse backgrounds and skillsets. i-Teams participants can be PhDs, PostDocs, MPhils, undergraduates or Cambridge residents, from any discipline – the goal is to bring in as many different viewpoints and experiences as possible.

Teams will work for 5 weeks with an experienced mentor and an existing technology, learning about the realities of development, and making a recommendation to the inventor about how to make use of their technology in a development context.

Questions that the team will consider include:

- What is the development need that this technology or product aims to address?
- Is this appropriate for use in a development context, and if so, how, and in what geographies?
- Can it be used to create or enhance good-quality low-cost products, that are affordable for ordinary people?
- What are the best routes to market, and how does pricing affect these?
- What is the best way to generate sustainable long-term impact? For example, via commercial organisations, social enterprises, international or local NGOs, charities or a combination of these?
- Does the technology lend itself to a mixed approach, with customers in both the developed and the developing world?

A key part of the project will involve finding relevant knowledgeable contacts and gathering real-world feedback on your ideas and on the usefulness of your technology. This will build and extend your existing network of contacts, as well as helping you to develop hands-on experience in talking to new people with a range of different backgrounds about your project. You will also gain experience in working in a team of people with different skills and experience to yourself.

Each team will present their findings to a broader audience at the end of the course, and will have the opportunity to present their results as a poster at the annual International Development Conference.
**Deliverables**

**Initial Presentation:**

At the beginning of the second session, each team will make an informal verbal presentation to the other teams, summarising their project and their ideas about it so far.

**Weekly team meetings:**

Teams will have weekly team meetings to report to their fellow team members on progress and agree priorities and task allocation for the following week. Time is available for these after each week’s lecture.

**Expert Interviews and Analysis:**

The most critical aspect of the project will be identifying the markets that hold the most potential for the technology. To that end, contacting and interviewing relevant experts in that market to determine their level of need for/interest in the product is a key requirement. Each team will be expected to conduct a minimum of 10 interviews, which will be summarised in a pack of supporting materials for the final presentation.

**Verbal Updates:**

At each i-Teams session, teams will update the group on their progress so far, including:

- Important or interesting findings (from market analysis or customer feedback)
  - Findings of direct relevance to the technology, eg key needs for a particular market as relayed by a customer,
  - Findings of more general applicability, eg we found interviewees were more forthcoming under the following circumstances
- Any roadblocks or hurdles that need to be resolved

These updates will usually be around 5 minutes long

**Final Presentation:**

The final presentation should be designed for an audience with no prior exposure to the technology. It will need to be short and to-the-point, covering in 10-12 minutes the following key aspects:

- Brief introduction to the technology and its key differentiators
- Review of markets analysed, including any competitive products
- Summary of results from different markets
- Recommendations and next steps

Each presentation will be followed by Q&A to defend the conclusions reached.
Information Pack, Handover meeting and Poster:

In addition to the final presentations, teams will hold a final handover meeting with their inventor and Cambridge Enterprise representative (where relevant) to go through their findings and recommendations in more detail.

Teams must also compile their detailed findings (including summaries of discussions and contact details for industry contacts) for them to use going forward.

Teams are also asked to present their final results in poster format so that they can be shared at a future in-person i-Teams presentation session.

Platforms

i-Teams uses several cloud-based platforms – you will receive invitations to join each of these.

Distributing slides and lectures via Moodle:
Slidedecks and videos of each session will be shared via Moodle. There will be a weekly message giving ideas and suggestions to help with your projects.

Online meetings via Zoom:
Zoom links are set up for anyone who cannot join an evening session in person. This is also used if we cannot hold a session in-person.

File sharing via Google Drive:
Each team will have a designated Google Drive workspace set up for their project.

Team communications via Slack:
Teams need to communicate regularly between sessions to share progress updates as they happen. We will set up a Slack channel for each team.

Online whiteboard via Miro:
If you need an online whiteboard application for brainstorming or organizing your thoughts as a team, then miro.com is the best we have found so far.
**Schedule**

Each session will consist of a talk or presentation at 7pm, followed by inter-team discussion and updates on the status of the projects, focusing in particular on problems experienced and how to address those.

Pizza will be provided at 6.30pm in the IfM tea room.

After the weekly lecture the teams will have time for their weekly team meetings with the support of their project mentor, Lara Allen and Amy Weatherup.

| i-Teams week 1 | Introduction to i-Teams  
| October 25th  
| 7pm-10pm  
| Inventors from 8pm | Getting started:  
|  | Assessing target markets and finding relevant contacts – this session provides the tools to get started on your projects  
| Meet the inventors:  
|  | Teams meet each other and their researchers, and brainstorm the issues their technology might face in a development context, and what questions they need to answer  
| Actions:  
|  | Each team member should carry out background research into their technology and application areas before the next session  

| i-Teams week 2 | Best practice in international development  
| November 1st  
| 7pm-10pm | Dr. Lara Allen, Director of the Centre for Global Equality  
|  | Some guidelines on what works and what doesn’t, based on real-world examples and case studies  
| Verbal updates from teams  
|  | Working time for teams  

| i-Teams week 3 | Guest Expert Speaker tbc  
| November 8th  
| 7pm-10pm | The realities of working in international development, and how technology can be used to improve the lives of the world’s poorest 50%  
| Verbal updates from teams  
|  | Working time for teams  
| Discussion of how to get good feedback from external contacts  

| i-Teams week 4 | Market selection approach for i-Teams projects  
| November 15th  
| 7pm-10pm | * Selecting the best market for a technology  
|  | * What features can be compared  
|  | * What are the routes to market for each application  
| Verbal updates from teams  
|  | Working time for teams  

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*Syllabus, Michaelmas term 2022*
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<tr>
<th>i-Teams week 5</th>
<th>Working time for teams (online session)</th>
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<tr>
<td><strong>November 22nd</strong>&lt;br&gt;7pm-10pm</td>
<td><strong>Online via Zoom</strong></td>
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<td><strong>i-Teams week 6</strong>&lt;br&gt;<strong>November 29th</strong>&lt;br&gt;7pm-9pm</td>
<td><strong>Final presentations:</strong>&lt;br&gt;Teams present their results and recommend next steps for their projects</td>
</tr>
<tr>
<td><strong>In-person at the Maxwell Centre, West Cambridge site</strong>&lt;br&gt;<strong>To be attended by an external audience</strong></td>
<td><strong>Team members, mentors, inventors and a number of invited guests from the University and local development and business communities will attend this presentation</strong></td>
</tr>
<tr>
<td><strong>Posters at IDC conference 2022</strong></td>
<td>Teams will be invited to present posters at the annual IDC conference</td>
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Acknowledgements

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Thanks to support from Ken Zolot and Ken Morse of the MIT Entrepreneurship Center, Krisztina Holly of the MIT Deshpande Center, the Cambridge-MIT Institute, the Institute for Manufacturing at Cambridge University and CUTEC.

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