DESIGN CHALLENGE TOOLKIT

1. INTRODUCTION

2. EVENT PREP

Welcome!

Welcome to the design challenge toolkit, we'll walk you through every step of running an incredible event! From planning, to ensuring your guests generate meaningful connections and nurture their new relationships; we've got it all. Relax and trust in the toolkit.

Questions, comments, or concerns? We're just an email away at letstalk@nemontario.ca

What's in the toolkit?

Running a design challenge should be fun, to help things run smoothly, we developed resources and tools to help you along the way, including:

1. Introduction
- Start with why

2. Event prep
- Problem finding
- Facilitator Guide
- Problem framing
- Defining success
- Planning your event
- Inviting participants
- Volunteers and mentors

3. At the event
- Agenda template
- Video & Photo Release
- Slide template

4.After the event
- Thank-you Notes

What's a design challenge?

A design challenge connects people from diverse backgrounds of knowledge and experience to work collaboratively in a team-based environment to solve real-world challenges. Design challenges are exciting opportunities to explore problems that bring new awareness to the value of improved practices of ethics and EDI in engineering and technology. For example: How might we design smart cities to be more inclusive to all ages and abilities? Or, how might we eliminate bias in the design of artificial intelligence?

Start with why

The key to organizing a great networking event is to start with an objective, or your "why". Check out leadership expert Simon Sinek's TED Talk: How great leaders inspire action to learn more about his "Find your Why" model.

Before any planning begins, think through why you're organizing a networking event. What do you want to accomplish? What do you want guests to get out of the experience?

Get clear on your 'Why' first, and use that clarity of purpose to help you make decisions throughout the planning process.

Problem finding

Get those gears rolling, now that you're clear on the overall purpose of your design challenge, it's time to choose a problem to solve!

Think about topics you and your team are inspired by, what's something you're genuinely curious about? Consider your audience, what are their interests? For example: if your audience is mainly software engineers, they might have an interest in designing for an AI challenge.

Possible challenge frame: how might we design processes or frameworks to eliminate bias in AI?

Why?: Ethical considerations of design on society is SUCH A COOL challenge area, becoming increasingly relevant in an age of technological revolution and is being strongly supported in the industry. Here's a few more....

Smart Cities: How might we design smart cities so they are more inclusive to all ages and abilities? Artificial Intelligence: How might we eliminate bias in the design of artificial intelligence systems? BIG IDeA

Circular Design: How might we get products to people without generating plastic waste? OpenIDEO

Framing your chosen problem as a "how might we…" question invites creativity and opportunities to explore multiple solutions.
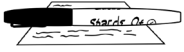
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2. EVENT PREP

Inspo!
SheHacks
Inclusive Design Challenges
25 Creative Hackathon Ideas

Problem Framing
After finding a topic, you might be a bit of an expert, but your participants likely aren't. The best way to get everyone on the same page is by mindfully framing your chosen problem. We suggest providing a brief description of the problem or challenge in simple and accessible language. If you can't put it simply, you might not fully understand it yourself.

Provide links to resources for participants to find more information. Resources can include news articles, academic papers, blog stories, or any other source you think is relevant to your audience.

Keep it brief, what's essential? Too much information can be overwhelming.

Send prep documents 1-2 weeks before the design challenge to give your participants time to get familiar with the topic. In the same email you can also send **logistical information** like the location of your event, parking, what to bring, and the agenda.

Inspo!
How to frame your design challenge

Defining Success
What does success look like for you? Link your definition of success to your original "why" statement and set reachable goals. While it's valuable to plan for reaching these goals, stay flexible and leave room for things you hadn't anticipated.

There are different ways to measure success, for example the number of participants, volume of ideas, and event publicity are straightforward and fairly simple to capture. If you want to understand the deeper impact of your event on participants, key stakeholders and your team, consider having quick interviews with people, or asking for reflections. For example, you could have a group discussion with your team at the end of the event to debrief their experience, what worked? What could have been better?

Focusing on participant impact, you could ask for a 'Fist to Five'. It's simple, all you have to do is ask the audience to hold up fingers based on how they felt about the event. A fist means it was not valuable; they should have stayed at home. Five means it was outstanding! Look around the room at all the hands, and ask anyone holding up three or fewer fingers to explain why, and how the experience could have been a five for them.

Planning the Event
Now that you have your event's strategic components in place, it's time to coordinate the logistics. Not sure where to start? Don't worry, we've put together key things to consider in our Event Planning Spreadsheet

1. Planning takes time
Depending on the scope and size of your event, you need anywhere from three to ten weeks to adequately prepare for your design challenge. Consider how many attendees you'll have, the number of activities, and the general scale of your vision. No matter how long you think it will take to plan, we recommend adding an extra week for good measure.

2. Get inspired
Attend a variety of design challenges before organizing your own, especially if you've never organized one before. This will help you think about what you might want to replicate or avoid.

3. Food, food, glorious food
(and other essentials): Venues, food and refreshments can be donated through in-kind sponsorships

Space matters, think about your estimated group size, venue location, the accessibility of the space and the overall atmosphere. Be mindful of your participant's comfort, a group of 100 probably isn't suitable for a small cafe.

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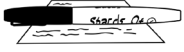
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2. EVENT PREP

Get creative and leverage the engineering community, approach a medium-size tech start-up for their intimate but modern lobby. A University gymnasium can be great for accommodating large groups.

We love to eat! Chances are, so do your participants. They'll need fuel throughout the day to keep their brilliant minds running. Consider asking about dietary restrictions in advance. Provide enough (and tasty) snacks and water -- this can be crucial to maintaining energy levels throughout the day.

4. Participation
You've thought about your target audience a bit as you framed your challenge. Continue to reflect on your target audience as you make planning decisions.
- Will your venue accommodate enough people?
- Do you have enough facilitators and volunteers to make the event run smoothly?
- Will it be an internal, company-wide or public event?
- **Are you aiming to invite particular groups, like underrepresented groups or communities who are underrepresented in engineering and technology?**

- Remember: The magic of a design challenge is that it brings together diverse perspectives and people.

5. Click, click, it's me!
You're creating an awesome event, make it easy for participants to access information and register. Build an online presence to make engaging with you and your team easy and inviting. Psst.. it doesn't have to break the bank, a thoughtful one-page site will do! You can use tools like GitHub Pages or Smore to create something that's easy, quick and effective.

Not sure what to include? Get people excited by sharing the theme of the event, where it will be located, and when it will take place. Need an easy and quick way for participants to sign up and to keep track of RSVPs? Check out Eventbrite, it's free and easy to use! Eventbrite can also help you set up a payment option and will send a calendar invite to participants so they won't miss the date.

6. There's no "I" in team
You're great, but you can't do this on your own. Think about the help you'll need:
- How many facilitators do you need?

- What other team members will you need?
- What's your recruitment plan?

7. Tech
What kind of equipment do you need to run a smooth event? Are you are using a powerpoint (we recommend you do), will you need a projector? What about audio equipment? If you have more than 50 participants, it's a good idea to use microphones so everyone can hear your instructions.

8. What's the plan?
Create a project management plan to keep you and your team on track. Write out important logistical details to make sure you don't miss anything leading up to the big day. We know this can be stressful, so we created this spreadsheet template to help you out. This is a 'view only' copy - you can make a copy and can fill in your own dates!

9. You gotta' get the answers:
How will solutions be shared at the end of the design challenge? Will a representative from each group present the solution on stage? Will there be live feedback after each presentation? Will groups have to create a powerpoint presentation?

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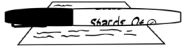
2. EVENT PREP

You can plan the best event in the world, but it'll fall flat without participants.

Start participant recruitment early! At least 6 weeks before the design challenge. When your participants are confirmed 1-2 weeks before the challenge get them excited by sending out research package with a description of the challenge, background, context of the problem, agenda for the day, and logistical details (directions, parking, accessibility, etc.).

Participant recruitment can be challenging, keep in mind that one of the main benefits of a design challenge is in the diversity of participants. Solutions will be more innovative if you have a diverse range of knowledge, industry, experience, age, gender, culture, and ethnicity represented.

Consider inviting participants from outside of the engineering community, extend invitations to the philosophy and anthropology disciplines or the department of fices and faculty at your university or college; reaching out to the human resources and marketing departments at your workplace; or connecting with local interest groups in your area.

Tips for recruitment

Eventbrite: Explore different payment methods, for example charging $20 and reimbursing participants when they arrive at the event, giving participants an incentive to show up. Or, ask participants to pay $10 to cover food and refreshments, consider donating profit to a charity and/or non profit.

Meetup.com: Find groups in your area who align with your event topic. You can search for groups based on location and topic. If you find one that relates to your event, reach out with your details!

Social Media
Start by setting up a communications schedule to organize your posts in one place. CoSchedule has some amazing free templates that you can download.

Recruiting Facilitators
Working with a new team can be tough, especially when you're solving wicked challenges. Great facilitators can make all the difference.

How many do you need? Depends on how many participants you have. A good rule of thumb is to have one facilitator per group, so if you have 5 groups of 10 participants, you will need 5 facilitators.

When recruiting facilitator volunteers, consider the kind of experience and knowledge you want them to gain from the experience. The power of a good facilitator is a person who helps groups get unstuck, communicate and listen better.

Once you've identified your facilitation dream team, start by reaching out to your network of friends and colleagues. If they're unavailable, ask them to tap into their networks and (pretty please) recommend someone.

Know someone who sends out newsletters? Consider creating a Google form to easily attract and connect with volunteers, then share, share, share!

Training Facilitators
Design challenge facilitators will need to support teams through the design challenge. Use our facilitator workbook to guide a one-hour session with facilitators a few days before the challenge.

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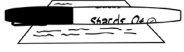
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3. EVENT DAY!

This is when the magic happens! Teams work together to understand the challenge, align their ideas, brainstorm solutions, execute, reflect, iterate and share. This is the most exciting and creative part of the design challenge where participants forget their formal roles and titles and self-organize focusing on their mission of creating something novel and impactful that addresses the given design challenge. And… to have fun, of course!

You may want to register folks at the door and use this video and photo release for permission to use their image. Here's a slide template in case you plan on making a presentation.

The sample agenda has suggestions on how to structure the day. The document also has a detailed description of the design thinking process which will be the core of the design challenge. You will need to adjust the template based on how long your event runs -- anywhere from four hours to two full days! Our example is for a typical one-day design challenge event.

The main components are:
1. Introduction and framing the challenge
2. Introduction to design thinking
3. Teams embark on the design process
4. Idea shareback
5. Process reflection

4. AFTER

Thank you notes
After your event, celebrate and show appreciation! Send thank-you notes within 24- 48 hours after the event to your facilitators, organizing team, guest speakers, partners, sponsors and anyone who supported the event. It's a great way to show gratitude and maintain relationships.

Participant Surveys
It's a best practice to follow up with your guests and ask them to reflect on the experience and give you feedback. This gives them the opportunity to digest why the event was valuable or how it could have been better. This will help you gauge what could be done differently next time and what worked really well.

As part of National Engineering Month Ontario, we have created a standard survey used in 300+ events happening across the province. Sending this survey to your participants will help us collect consistent information across the events and identify patterns and insights.

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