

WinHacks: COVID-19 Challenge

WinHacks is inviting tech talent from across North America to participate in an important and timely challenge seeking innovative and technological ideas and solutions to reduce the impact of COVID-19 (coronavirus) with mobility in mind!

In preparation for the unprecedented demands and pressures on the Canadian health care system due to the COVID-19 (coronavirus) pandemic, the Automotive Parts Manufacturers' Association of Canada (APMA) and members are working directly with governments and the private sector partners to take action. APMA, with support from Ontario's Autonomous Vehicle Innovation Network (AVIN), is leading efforts to develop a domestic response and solution to produce critical emergency medical supplies to combat COVID-19. The Canadian auto sector has a history of being innovative and resourcefulness, and these attributes are necessary to re-tool and manufacture those products that have been identified as those in greatest need:

- **Rapidly manufactured ventilator systems and ventilator components**
- **Disposable N95 masks**
- Disposable surgical masks
- Nitrile gloves
- Vinyl gloves
- Gowns
- Bottles of hand sanitizer
- Other prevention products

One of the challenges is understanding the capabilities, available resources and know-how that exist which could identify these re-tooling resources from the auto supply sector that could be leveraged to assist in this crisis. There are numerous tools and databases, all designed to help, but these are not well known, nor connected, and thus the lack of coordinated databases may lead to a failure to fully leverage the skills and resources of Canada's auto supply sector to respond to COVID-19 needs. **This is where your help is needed.**

We need a solution that does the following:

1. Serves as a notification system that:
 - a. Identifies what databases or repositories exist that hold information regarding the inventory/supply of key items needed to produce "rapidly manufactured ventilator systems and ventilator components" and "disposable N95 masks" and other essential components required to combat and minimize the impact of COVID-19. For example, the

Government of Canada has a “buy and sell” site that it is using as a dedicated space for COVID-19 requirements (<https://buyandsell.gc.ca/>). Other organizations have also offered their databases, such as the Canadian Tooling and Machining’s Outsourcing Portal, WindsorEssex Economic Development Corporation’s buywindsoressex.com site, NGen’s Collaboration Corner, or the [Ontario Government](#).

2. Connects-the-dots: using data analytics algorithms or a method of your choice, bring all these pieces together to best sort the data into a form that aligns with the Government of Canada’s buyandsell.gc.ca submission form (<https://buyandsell.gc.ca/forms/help-canada-combat-covid-19-submission-form>)
 - a. After the data is compiled, an email would be sent to the person who submits on one of the external databases, identifying that their company has indicated their willingness to contribute to combat COVID-19.
 - b. The email would contain a link to the form and the data would be formatted in a way that resembles the form so users could simply copy and paste the necessary fields on the buyandsell.gc.ca website.
 - i. **Note:** it is vitally important that suppliers enter their ability to assist on the buyandsell.gc.ca rather than the database they have already submitted it on. The email should reflect this.
 - c. The email should also contain buttons that recipients can click asking whether they have already submitted their information on buyandsell.gc.ca.
 - i. If they have, they should receive a follow-up email thanking them and directing them to additional resources/an opportunity to revise their submission.
 - ii. **EXTENSION:** If they have not, a follow-up email should go out in three days directing them to do so.

The team with the most innovative idea and/or solution that helps us understand, visualize, and flatten the curve of COVID-19 by procuring information about these key supplies will earn \$1000 CAD and be featured/introduced to prominent resources that could assist with furthering your idea! Solutions for this project will be judged by APMA, WEtech Alliance, and WE EDC.