Theme for Academic Year 2018-2019:

Mobility in Montréal

Overview

The "Mobility in Montreal" theme for the academic year 2018-2019 aims at stimulating social innovation's potential to provide solutions to the critical challenges of an urban transport system. The reproducible solutions and ideas proposed by the students will tackle the specific angles of the urban mobility challenges and foster a sustainable and inclusive growth not only in Montreal, but on a global scale - thanks to the open source formation of the competition.

The annual challenge

"How to deal with Montreal's mobility challenges caused by rapid urbanization, climate change and population growth?"

Background

In recent years, Montreal has seen a tremendous growth in its economy, and as a result, the city has experienced rapid urbanization, population growth and change in its environment. These changes have also affected transport in Montreal, increasing commuting times, having a negative impact on health, increasing the probability of road accidents, and overcharging the public transportation system. On a human level, urban existence is becoming more and more stressful and overwhelming for Montrealers.

Known as a leading Artificial Intelligence (AI) hub in the world, Montreal's future economy looks bright with a high growth potential. Correspondingly, the urbanization, further growth in its population, and climate change call for an alternative transport system that enables the efficient mobility of residents, travellers, goods and services. As a matter of fact, cities are in part defined by their distinct urban transport systems. Efficient urban mobility provides a foundation for economic growth by connecting students, workers, industries and ideas. If cities aren't mobile, education, commerce and productivity are disrupted, and city competitiveness is reduced. The contribution from the student communities towards an improved and sustainable urban transport system of Montreal will further enhance the city's productivity, attractiveness and improve the overall quality of life of Montrealers.

The student competition

The 2018-2019 Défi Urbain – Urban Living Challenge Student Competition calls for the most innovative products, services, business models and collaborations that aim to improve the critical components of the transport system of Montreal. Teams are encouraged to identify the different components of the broad Mobility topic, and re-define their problem statement that focus on specific angles of the urban transport system. Therefore, the solutions and ideas proposed should focus on the re-defined, simple problem topic. Such ideas proposed by the students should be based on providing a long-term sustainable impact at the different urban community levels.

All ideas focusing on different components of the mobility challenge are welcome; even if they are not mature yet. The exclusive partnership of Défi Urbain with the Smart City Office of Montreal - also known as Laboratoire de l'innovation urbaine de Montréal (LIUM) - aims to induce new solutions and help them reach the stage of prototyping and implementation. Teams qualifying past the second phase of the competition, are therefore, highly encouraged to take advantage of the vast data and other resources available through LIUM.

Some examples of the ideas could include:

- Convenient, safe and inexpensive commute;
- Initiatives that promote harmony between cyclists and motorists;
- The use of technologies that aims to reduce congestion for road users;
- Solutions that increase resilience during road works or constructions;
- Initiatives that encourage more usage of city's transportation system;
- Ideas that focus on quick commute into the city;
- Initiatives that promote dynamic carpooling.

Quick facts and statistics about Montreal's mobility

1. **69%:** Workers commute to work by car
2. **7%:** Workers use bicycle or walk to work
3. **36%:** Road networks with exclusive bike paths
4. **1 million:** Number of Montrealers who ride bikes at least once a week
5. **87 minutes:** Average amount of time people spend riding public transport
6. **14 minutes:** Average amount of time people wait at a station each day for public transport
7. **4.8 million:** Number of trips taken on a bike-sharing service in 2017
8. **700:** Average number of bike accidents annually

EVALUATION CRITERIA : MONTREAL URBAN LIVING CHALLENGE | DÉFI URBAIN MONTRÉAL

		DEFINITION
PROBLEM DEFINITION (40%)		• The problem shows a deep understanding of an urban mobility problem; • The problem highlights a challenge that is clearly defined and integrates the dimensions of diversity and inclusion; • The problem reflects an understanding of the target users' needs (Montreal market communities); • The problem is understood as part of the ecosystem in which the proposed challenge fits.
PROPOSED SOLUTION (50%)	**INNOVATION**	• The proposed solution is distinct or fundamentally different from existing approaches; • The proposed solution comes from an interdisciplinary approach; • The proposed solution presents a strong value proposition.
	SOCIAL IMPACT	• The proposed solution demonstrates potential for large scale application; • The proposed solution improves the lives of the target users (Montréal tenant communities); • The proposed solution helps Montreal communities to be resilient, to develop their ability to adapt to current social and ecological conditions.
	VIABILITY	• A detailed plan for the deployment and sustainability of the proposed solution, particularly in economic terms; • The proposed solution is technologically viable; • The proposed solution can be quickly and easily implemented with limited investments; • The proposed solution is viable within the regulation framework of the Ville de Montréal.

	DEFINITION
TEAM DYNAMISM (10%)	• The team is composed of students from different disciplines (interdisciplinary team); • The team has identified or is engaged in some form of cooperation with potential partners; • The team has validated its assumptions with the target users.