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**Advanced Tools for User-Adaptive Visualization (ATUAV):**

**Towards interactive and adaptive visualizations for preferential choices and public engagement**

**Debriefing form**

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Visualization is a field that deals with the problem of creating visual representation (images, diagrams, animations, etc.) to communicate abstarct and concrete objects. Information visualization has a wide range of applications in things like architecture, education, medicine, biology, cheistry, geography, engineering, etc. The use information visualization tools is increasingly important for professionals seeking to excel in their disciplines. However, learning and using certain information visualizations can be challenging for some users. There is a strong correlation with perceptual abilities and performance for basic information visualization tasks; the better the perceptual abilities, the better performance. Our goal is to study a novel, adaptive information visualization tool for making preferencial choices, that can be senstitive to the context of different users based on their cognitive abilites and preferences. To this end, we have deployed a user study to test a visualization to compare three rapid transit scenarios from and to UBC.

The tool designed for this study allows users to rank their priorities (such as cost, travel time, reduction in auto trips…), learn about the transit scenarios thanks to a deviation chart and a map, and rate the scenarios. This visualization was created and is commercialised by Envision Sustainability Tools Inc (http://metroquest.com), a company based in Vancouver. The context of the study – rapid transit to UBC – has been chosen to increase UBC students’ engagement, as this may be one of the most significant infrastructure investments for Vancouver’s future.

In this study you were also adminsitered a set of tests aiming to measure your cognitive abilities (working memory, perceptual speed, spatial memory, visual scanning, visual literacy) and personnality traits (locus of control, need for cognition). Your attention patterns have been recorded thanks to an eye tracker.

We expect to find that the map and the chart are likely to be prefered by distinct groups of people depending of their cognitive abilities and personnality traits. We will use your gaze data and your input on the survey about your experience with the information visualization to enhance further our study goals.

If you have any further questions, please feel free to ask the experimenter or use the contact information provided below to contact a member of the research team at a later time.

**Contact information about the study**

This study is being conducted by Dr. Cristina Conati, the principal investigator, Dr. Giuseppe Carenini and Dr. Sébastien Lallé as the co-investigators. Please contact any one of them if you have any questions about this study. Dr. Conati may be reached at (604) 822-4632 or conati@cs.ubc.ca.

**Contact for concerns about the Rights of Research Subjects**

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598.