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## **Using the Improved Performance Research Integration Tool (IMPRINT) Pro Software to Study the Impact of Cognitive Workload on Performance**

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**Abstract:** Cognitive workload can be attributed to a lot of things that people do in everyday life, but too much of it can be a bad thing. This is because, it requires so much focus and thought process. Reducing cognitive workload is a goal for many companies, since it can help make the lives easier for the users who have to do these tasks, and with the help of simulation software, a reduction of cognitive workload can be achieved. The project will be entitled “Using the Improved Performance Research Integration Tool (IMPRINT) Pro Software to Study the Impact of Cognitive Workload on Performance”, and the purpose of this project is to monitor cognitive workload in a three user designed mission scenario using two cellular devices, so that changes and recommendations could be suggested (if necessary) to help reduce the overall cognitive workload associated with the cellular devices used. The simulation software Improved Performance Research Integration Tool (IMPRINT) is the main tool that will be used to measure the cognitive workload of the system and run the simulation. By assigning cognitive workload values such as auditory and fine motor on the task level to the user interfaces (i.e., cellular devices) involved in the mission scenario, the simulation was achieved, and data was generated in an excel spreadsheet to be analyzed.

*Keywords:* IMPRINT, Cognitive Workload, Workload Evaluation