

Creating a New Solution to Enhance the Rider's Experience

Problem:

Many motorcycles have sensors that enable them to gather data about the motorcycle's performance but not about the rider's performance. In addition, many of these riders fail to seek any additional training and continue riding with bad habits.

Background:

Motorcycle riders feel comfortable with their riding skills and are unaware that their riding performance can be improved. Even if the motorcycles are equipped with sensors, the data from them is not always made available to the rider in a useful context.

Objectives & Methodology:



- Gain insight and understanding of motorcycles and those who ride



- Through interviews, discover the needs of the motorcycle community



- Investigate available technologies



- Experiment with existing technologies



- Begin prototyping

I^{PRO} 308



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- Hand off for further development

Results:

- Gain knowledge of the motorcycle community
- Discover the community's needs and desires
- Researched current technologies which may enhance the rider's performance
- Collected manufacturers' specifications on items which we are attempting to monitor
- Uncovered the complexity of gathering, analyzing, and interpreting the data

Conclusions:

- While I PRO 308 has not yet conducted enough research for statistical analysis, valuable insights have been gathered from interviewing riders and other people connected to the motorcycling community.
- The team has discovered several electronic sensing elements that are likely candidates for the motoPro suite.
- Through these elements, a rider profile can be created.
- Although the elements of the rider profile are already available through existing technology, they are not necessarily presented in a useful context. The rider profile will remedy this through being user-friendly and easy to understand. MotoPro will not automatically improve riders, but will allow them to observe their own habits and riding performance via the rider profile.
- I PRO 308 still has lots of work to complete in the upcoming semesters and several key positions have been identified as necessary to create a captivating story for the purpose of garnering interest in the project and achieving a sponsorship in the future.

Future Work:

The information gathered thus far will lay the groundwork for future semesters of I PRO 308. We need to...

- Conduct more interviews
- Gather more data
- Continue to develop prototype
- By analyzing the data collected, create tools and software to help educate the rider
- Translate the data gathered into useful information
- Develop a presentation targeted for potential sponsors

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