



Information Technology Solutions for Seamless Networks IPRO 350 - Project Abstract

Background: This project began as a business plan in the first Kaplan Fellows class focusing on the development of wireless networks that offer seamless, high rate data transfers on mobile devices as well as bridging the last mile to the consumer in un-served areas. In the past semesters the team has conducted considerable research into various internet service providers as well as implementation models ranging from transportation companies to office buildings and personal devices. Market research shown considerable demand for internet connectivity on trains at a consumer level, and initial Metra and RTA contacts have exhibited enthusiasm for the potential of our services.

Goals/Tasks: Based on last semester's groundwork, this semester began with strategic planning as to the business model to develop a feasible and profitable solution to the problems that we have identified. Most of the work this past term focused on demonstrating that the company would be successful. Our ability to present this proof exists within the following goals:

- Validating market existence
- Developing a sensible business model
- Creating/ verifying the technical solution
- Generating financial projections

Achievements: In line with the goals that were set for this semester, the team can boast of the following achievements:

- *Value-Added Solution Manager Model:* There are hardware solutions to mobility in train environments, however, these hardware solutions are not being utilized on train systems in the US because there exists no solid distribution channel, the capital risk is too great for a train system to go it alone, and rail systems in the United States are less heavily subsidized than in other parts of the world. Wildfire wireless takes advantage of these opportunities by taking the capital risk to implement hardware solutions and deliver connectivity to the train line and the business commuter. Wildfire Wireless will then own and operate the train system networks. A typical hot-spot sales model has been demonstrated to be only remotely profitable and only after large investment and we have developed the *Business Class* model, which would allow passengers to pay an additional fare to sit in a free Wi-Fi car to attain a cleaner, more professional appeal as well as sustainability, both technologically and financially.
- *Initial contact with Metra:* The Company has spoken with and gotten positive feedback from senior executives of the Metra and RTA. Discussion of what will be needed from both parties has been initiated.
- *Technical Solution/Manufacturer Relationship:* Wildfire Wireless recently received a outline of hardware that could be used to for provide internet access on the train from Proxim, a hardware manufacturing company that has an existing relationship with Air2Access and the IIT Wireless Research Group. Proxim is an example of the manufacturers described in the business model who provide solutions that are not yet implemented in the United States. Proxim has worked hand-in-hand with us to date and our ability to work with them throughout the implementation of our solution will prove a vital key to our success.
- *Market Validation:* Surveys were conducted during the course of semester. The surveys proved that:
 1. Typical daily commutes range between 30 and 90minutes
 2. A large percentage of commuters are business professionals traveling daily with wireless devices.
 3. Approximately 5% of the population indicated that our service would sway them from driving to commuting via the Metra
 4. Wireless internet availability would enhance productivity during passengers commutes.
 5. Most of the population indicated that they would pay monthly for access to wireless internet.
- *Similar Models:* A majority of this semester's decisions are the result of insightful discussions with, or studies of, other companies in similar spaces, including Air2Access and Concourse Communications. Air2Access implements networks in marinas allowing boaters access to the internet and Concourse sets up internet hotspots and cellular service in airports to connect business travelers. An understanding of the business models of those two companies has helped us to understand our own core competencies, what we should strive for and what we should watch out for, as well as serving as a demonstration of the validity and potential for success of our own model.

Path Forward: Over the summer and until the end of the current year, Wildfire Wireless will work to:

- Solidify relationship with Metra - Summer Project/Airspace Agreement/Implementation Strategy
- Obtain seed funding needed to finance a demonstration of our solution
- Summer Demo – Proof of concept through small scale implementation
- Develop a logistic plan for implementation on the first train line
- Set up a Fall semester IPRO that will oversee the exploration of future services