

CREATIVITY & FEASIBILITY FINAL

Sustainability of WinstonNet

Typically I find that I shy from pessimism. However, thought of the sustainability of WinstonNet strikes me with pure negativity. Though certainly socially beneficial, the WinstonNet initiative faces countless challenges both present and future. Firstly, the project demands catastrophic capital commitment to a choice of technology that may fail to become standard and will almost certainly become quickly outdated. In addition, current competition to WinstonNet abounds while future unforeseen competitors will surely rise strong. Thus, it is my opinion that progress on a free community wireless network in Winston-Salem be temporarily, if not permanently, withdrawn.

Technology is by nature fickle. Numerous rival technologies are often developed simultaneously to serve the same or very similar purpose. Thus, intense competition develops. In many such cases the government is forced to intervene and deem one standard. This situation occurred in the United States during the mid-nineties with the cellular phone industry. Contrary to countless other countries, the United States adopted the CDMA digital standard. This instantly rendered large capital investments of several cellular corporations in other technologies sunk. There is nothing to prevent a similar situation from occurring with the WinstonNet choice of wireless technology. In fact, there is debate between usage of WLAN, WLL, and WMAN even now.ⁱ

ⁱ Technical information taken from Dr. Ron Thompson IT Management class notes 20 February 2007

The situation is certain to show more bleak as current technologies, including the cellular and satellite industries, extend their services to wireless internet connectivity. Furthermore, technological development is positive to overcome current offerings likely even before the implementation of WinstonNet. The pace of high-tech progress is widely known to double within the period of merely eighteen months. Depending on the speed of implementation, the WinstonNet wireless offering could be outdated, obsolete, and investment sunk even prior to completion. Though certainly a bleak view, it is indisputable that the technology will fall out of date at least at some point in the relatively near future and demand further investment in updates in addition to regular maintenance. The current state of the WinstonNet partnership stipulates provision of very little future cash flow following the initial investment in implementation. Unfortunately, such small capital flow will doubtlessly be insufficient for continuous updating of the wireless network to future technologies. Consequently, without continuous improvement the WinstonNet wireless network will be rendered obsolete in the not so distant future. Due to the extremely high risk of catastrophic capital commitment to implementation of technologies that may not be adopted as standard and may likely become quickly outdated requiring costly updating for which there is no planned capital provision, the WinstonNet initiative appears unsustainable.

Furthermore, incredible competition may prove severe enough to render WinstonNet unsustainable alone. Competitors may appear in the form of profit driven corporations, similar socially motivated organizations, or future hybrids that are yet to be formed. Firstly, the response of current telecom providers will certainly not show purely amicable. Telecom internet providers have practical monopolies on local internet access

based on large capital commitment to cable and are not likely to willingly lie down and die. Though the Winston-Salem provider has appeared agreeable, response is likely to change as WinstonNet nears implementation and additional cities consider similar programs as well. Backlash from the Telecom industry would not be easily endured as they hold extremely large cash deposits, are able to stay pace with technological advancement, and hold great influence on federal and state governments through lobbying.

Similarly, Satellite and Cellular providers are currently beginning profit motivated encroachment into wireless internet provision. Like the Telecom industry, such corporations hold large cash deposits enabling extensive R&D and government lobbying. In addition, provision of wireless internet through Satellite or Cellular networks would provide incredible economies of scale to said corporations not accessible through Telecom or current WinstonNet technologies. Hence, future competition from Satellite and Cellular companies is likely and unlikely to be withstood by WinstonNet or even Telecom.

As previously mentioned, the US federal government occasionally intercedes in industrial matters to declare a single technology offering standard. Not only does this place risk on the capital commitment to technology of WinstonNet, but socially motivated expansion of this ability could present a form of competition. As WinstonNet is closely tied with the city government, it would not be implausible for the federal government to pursue a community wireless initiative throughout the country. Obviously this competition would land far in the future, but would instantaneously render

WinstonNet obsolete. The risk would be that federal implementation would occur close enough to that of WinstonNet to make sunk capital poorly spent.

Finally, it seems that hybrids of profit motivated and altruistic organizations may be on the forefront. In spite of the obvious risk of future competitors not now recognized, BusinessWeek recently published an article that stated internet giant Google was considering providing free wireless internet access to several communities.ⁱⁱ This unforeseen competitor intends to pursue socially motivated means to a profit driven end. Gaining revenue from click rates through ads on their search site, Google stands to profit from a larger number of individuals accessing the internet at greater frequency. As a for-profit organization also with great cash deposits, Google may pose a serious threat. However, it must be recognized that their subsequent initiative for free community wireless internet access is consistent with that of WinstonNet. Therefore, sustainability may possibly be achieved through partnership with corporations similar to Google, which have capital flow in order to keep pace with innovation, influence to protect prior investment in technology, and, most importantly, complimentary objectives.

Without proposed partnership, the sustainability of the WinstonNet initiative is highly doubtful. Capital investment in technology will likely be rendered sunk through government intervention or future development with which WinstonNet cash flows are unable to keep pace. Also, competition from current providers, companies expanding to the internet access industry, social organizations, as well as possible future hybrids will in all probability prove insurmountable. Therefore, in spite of the socially motivated appeal, I must suggest that the WinstonNet initiative be foregone.

ⁱⁱ http://www.businessweek.com/magazine/content/07_15/b4029001.htm?chan=search