

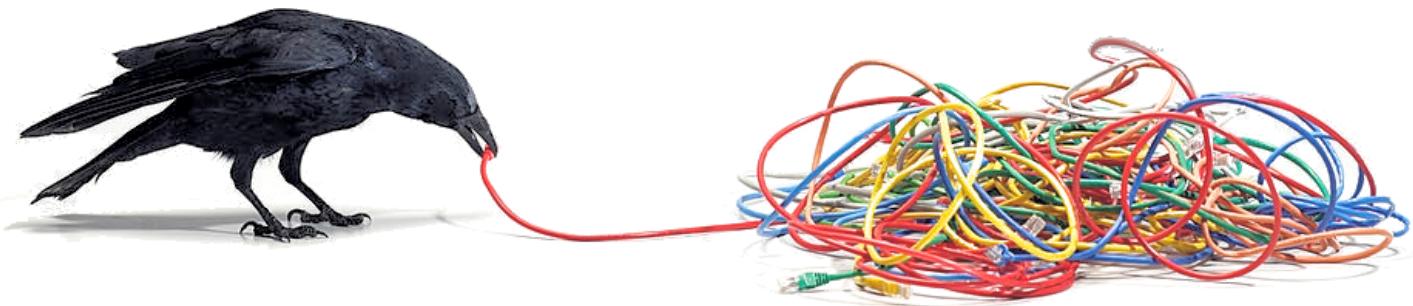
Christian Kramer
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Executive Summary

Modern Internet access is expensive and slow, because providers enjoy an utter lack of competition. ExcelsiorNet believes there is a substantial market for change. By replacing the incumbent outdated methods of delivery-coaxial cable and DSL- with a state-of-the-art and completely wireless infrastructure, ExcelsiorNet is able to offer speeds at prices that traditional providers will have difficulty competing against.

In most cases, Internet prices exceed the value of the service provided. Additionally, the current providers are operating a legacy infrastructure that is too costly to compete effectively. Our objective is to leverage the emerging wireless technologies to provide superior value to at least 30% of Internet access customers in any market we enter.

The idea of a new technology replacing the old is not recent. In 1985, conventional modems were the primary means of digital access and they topped out at 2.4kb/s. Over the next few years, modem manufacturers pushed this technology to its absolute limit of 56kb/s. However, the market was not willing to stall its insatiable hunger for more bandwidth. Consumer bandwidth demand continued to grow, paving the way for 700kb/s DSL which enjoyed market dominance for several years. DSL more or less topped out at 307.2kb/s, which created an opportunity for 10mb/s “broadband” cable modems in 2000. Cable modems are now in a similar predicament, where they have pushed the technology to its absolute limit, opening up an opportunity for the wireless technology of ExcelsiorNet.



Wireless has many advantages over DSL, cable and even fiber. The most significant is the virtual absence of construction. A single mile of cable costs providers between \$31,000 and \$174,000 and can take as many as 30 days to lay, whereas a one mile wireless link can be deployed in an afternoon for about \$3,500. Wireless also has the added benefit of low maintenance costs. Cables are susceptible to breakage, and, because many wires run below ground, repairs are slow and expensive. Wireless has

much lower maintenance costs because connections only have equipment at either end, allowing a fault to be traced and fixed relatively easily.

Wireless Internet Service Providers (WISPs) are somewhat common in rural areas, but the cost savings from using this technology are offset by the low population density and lack of existing infrastructure. Their method is to individually link customers to ad hoc towers, inevitably creating a tangled mesh of connections. This method is inefficient and leads to large telecommunications companies discrediting WISPs as a whole.

What they haven't considered is that it simply has never been properly implemented at-scale. The key to properly implementing a scalable WISP is to structure the network like a tree. ExcelsiorNet's upstream provider is comparable to the root system of the tree, feeding all the information from the Internet to a single location: the trunk. The central office is the trunk, managing that stream of information and providing a foundation on which to build our infrastructure. Our distribution towers act as branches, routing information more and more specifically as the data progresses towards the end user. The central office - the trunk - may only offshoot to a few individual distribution towers -the branches - but those towers can then branch out to other towers and reach a much larger area than the central office ever could. These numerous intermediary towers would be equipped with 360 degree radial antennas, each blanketing an area of roughly a third of a square mile, effectively creating what would be considered to be the canopy of the tree. Any house that lies within this canopy would be able to receive service and feed the tree with the energy it needs to grow. This "tree" does not have to be built from the ground-up, by exploiting existing infrastructure such as water towers for backhaul and power line poles for distribution, network expansion becomes comparatively unimpeded. Even the antenna assembly installed on homes utilizes existing infrastructure. This assembly would communicate through the existing coaxial cables, installed by the original cable provider to an ordinary-looking ExcelsiorNet modem inside the house.



ExcelsiorNet will also enjoy the benefit of not needing a large workforce to sustain operations. Our expected staff in month 12 includes 5 customer service technicians (to ensure positive first impressions of early adopters), 2 installation specialists, a CEO, a COO, a Network Architect, a Junior Network Admin, and finally a

Sysadmin. Customer service technicians and installers will be paid \$30,000 annually, CEO and COO will be paid \$40,000, our Network Architect will be paid \$125,000, the Junior Network Admin will be paid \$75,000, and the Sysadmin will be paid \$90,000. To provide sufficient compensation, both the CEO and COO would receive an annual bonus of \$1000 per market entered, with an additional bonus of \$1 per customer per year. Given M is the number of markets and S is the number of subscribers, CEO = $\$40,000 + 1000M + 1S$. To ensure profitability, all bonuses would be paid from 1/2 of

profits. For example, if annual profits are \$2000, they would get a maximum bonus of \$500 each. This ensures that all incentives are result-driven, instead of metric-driven.

Americans have only recently been made aware of the telecommunications industry's inefficiencies as revealed by experiments like Google Fiber. Because of this, the push by consumers for a better and cheaper home Internet solution is as forceful as ever.

Consumers are eagerly awaiting relief from the status quo and are looking for an alternative, allowing a service like ExcelsiorNet to take the industry by storm.

The founders of ExcelsiorNet have spent the better part of two years meticulously developing this concept. Now that the initial plan has been completed, and the technology and market timing is ideal, ExcelsiorNet is seeking \$2.25 million in seed capital in order to launch service in late 2017. Our break-even point is 2,000 subscribers paying an average of \$50 per month, which we plan to hit late 2018.



Financial Details

▼ Annual Expenditures

Month	1	2	3	4	5	6	7	8	9	10	11	12	Total
Marketing & Promotion	0	0	0	0	0	1,000	2,000	4,000	6,000	3,000	2,000	2,000	20,000
Bank Charges	0	0	200	200	200	200	200	200	200	200	200	200	2,000
Dues & Subscriptions	0	0	0	40	40	80	80	120	120	120	160	160	920
Insurance	0	120	140	160	180	200	200	200	200	200	200	200	2,000
Cost of Goods Sold	0	0	0	0	5,297	5,297	5,297	5,297	5,297	5,297	5,297	5,297	42,376
Licenses & Fees	0	0	0	0	0	900	900	900	900	900	900	900	6,300
Meals & Entertainment	0	0	200	400	400	400	300	200	400	300	200	200	3,000
Office Expense	0	2,000	1,000	2,000	2,000	2,000	2,000	2,000	1,000	1,000	1,000	1,000	17,000
Office Supplies	0	1,000	1,500	50	0	0	0	100	100	100	100	100	3,050
Outside Services	83	83	83	83	83	83	83	83	83	83	83	83	1,000
Salaries & Wages	8,333	8,333	16,667	25,000	33,333	40,000	45,455	50,000	50,000	50,000	50,000	50,000	427,121
Payroll Taxes	804	804	1,608	2,413	3,217	3,860	4,386	4,825	4,825	4,825	4,825	4,825	41,217
Rent	0	667	667	667	667	667	667	667	667	667	667	667	7,333
Repairs & Maintenance	0	0	0	0	0	0	0	0	0	900	1,200	1,800	3,900
Telephone	0	100	100	100	100	100	100	100	100	100	100	100	1,100
Training & Development	0	0	0	0	2,500	0	0	0	0	3,500	0	0	6,000
Travel	0	0	800	0	1,000	0	0	800	0	1,500	800	800	5,700
Utilities	0	0	200	300	400	400	500	500	600	700	800	800	5,200
Vehicle	0	0	0	0	500	500	500	500	500	500	500	500	4,000
											First Year		\$599,218
											Second Year		\$749,022

Fixed Expenditures

▼ Central Office

Quantity	Equipment	Unit	Ext
2	Cisco Nexus 7702	\$242,000	\$484,000
6	Cisco Nexus 5672UP	\$18,500	\$111,000
2	Cisco FPR-C9300-AC	\$21,500	\$43,000
4	Nutanix NX-1065S-G5	\$71,500	\$286,000
1	Misc Equipment, Cabling, Adapters, Peripherals	\$100,000	\$100,000
2	Liebert Cooling Systems	\$105,000	\$210,000
2	APC UPS/Power Conditioners	\$87,500	\$175,000
Total			\$1,409,000

▼ Backhaul Tower

Quantity	Equipment	Unit	Ext
2	AF24HD	\$3,000	\$6,000.00
2	ToughSwitch POE Pro	\$170	\$340.00
1	Ubiquiti Security Appliance	\$105	\$105.00
1	Peripherals	\$500	\$500.00
6	Labor	\$200	\$1,200.00
Total			\$8,145.00

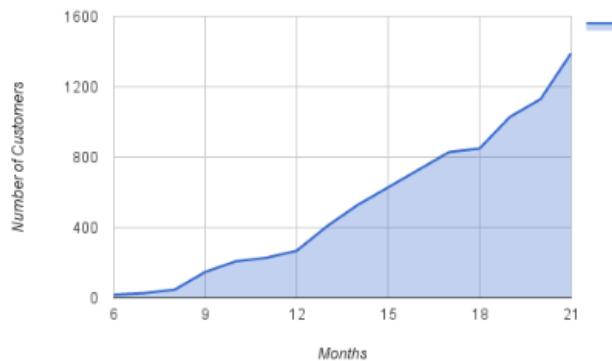
▼ Distribution Tower

Quantity	Equipment	Unit	Ext
2	AF5U	\$1,000	\$2,000.00
1	ToughSwitch POE Carrier	\$380	\$380.00
12	R5AC-PRISM	\$215	\$2,580.00
4	AP-5AC-90-HD	\$430	\$1,720.00
1	Peripherals	\$500	\$500.00
6	Labor	\$200	\$1,200.00
Total			\$8,380.00

▼ Customer Equipment

Quantity	Equipment	Unit	Ext
1	R5AC-PRISM	\$215	\$215.00
1	AMO-5G13	\$160	\$160.00
1	WCB6200Q02	\$150	\$150.00
1	POE-24-12W	\$10	\$10.00
1	Peripherals	\$20	\$20.00
Total			\$555.00

▼ Customer Adoption & Attrition



Month	Subscribers	Revenue
6	18	\$900.00
7	27	\$1,350.00
8	47	\$2,352.21
9	147	\$7,363.24
10	207	\$10,369.85
11	227	\$11,372.06
12	268	\$13,376.47
13	408	\$20,391.91
14	528	\$26,405.15
15	628	\$31,416.18
16	729	\$36,427.21
17	829	\$41,438.24
18	849	\$42,440.44
19	1029	\$51,460.29
20	1129	\$56,471.32
21	1390	\$69,500.00



A higher technical standard for the city of Excelsior

Excelsior provides a haven for local commerce with a citywide network built around ExcelsiorNet technology.

"After ExcelsiorNet launched their service, we saw a dramatic increase in the engagement between businesses and residents."

- Laura Hotvet, Executive Director: Excelsior Chamber of Commerce

Imagine a service that rivals fiber in speed, but charges almost 5 times less than cable. By implementing a completely wireless network, ExcelsiorNet is making this a reality in the city of Excelsior.

Challenges

- Architect a competitively cost-effective network
- Persuade potential customers to switch providers
- Deploy equipment capable of serving demand

Founded in 1853 with an area of about 1 square mile, Excelsior was the first community established on Lake Minnetonka. Many of the original settlers in Excelsior came from the New England area, which is apparent in some New England features such as its grid-like city layout and Commons along the lake shore. Throughout the years, Excelsior has been the home to many businesses including hotels, restaurants, and merchants. Excelsior works hard to maintain its historical identity while still renewing various elements of the downtown area. However, one aspect of the town is not keeping up with the times: Internet access. Two years ago, the founders of ExcelsiorNet developed a visionary concept to revitalize this critical piece of infrastructure that had become stagnant and antiquated; rewire Excelsior... Without any wires.

"There are wireless distribution points located on 4 different telephone poles spaced evenly around Excelsior. This creates a blanket of coverage that extends over the entire city. Because the equipment communicates wirelessly with both customers and the relay on the water tower, installation was fast and daily activities went unimpeded during the process."

Already exceeding standard speeds provided in the area by up to 25 times, ExcelsiorNet is determined to continue leading in telecommunications services by expanding its network to the entire Lake Minnetonka area and beyond.

Population Servicing: 2,245

Location: Excelsior, MN

Type of Business:
Wireless Internet Service Provider



Through faster and cheaper Internet, we've put Excelsior on the map as a business and innovation hub.

Solutions

- Connected residents of Excelsior through a powerful and efficient system of wireless antennas
- Installed additional preliminary equipment in preparation for later expansion

Understanding the Competition

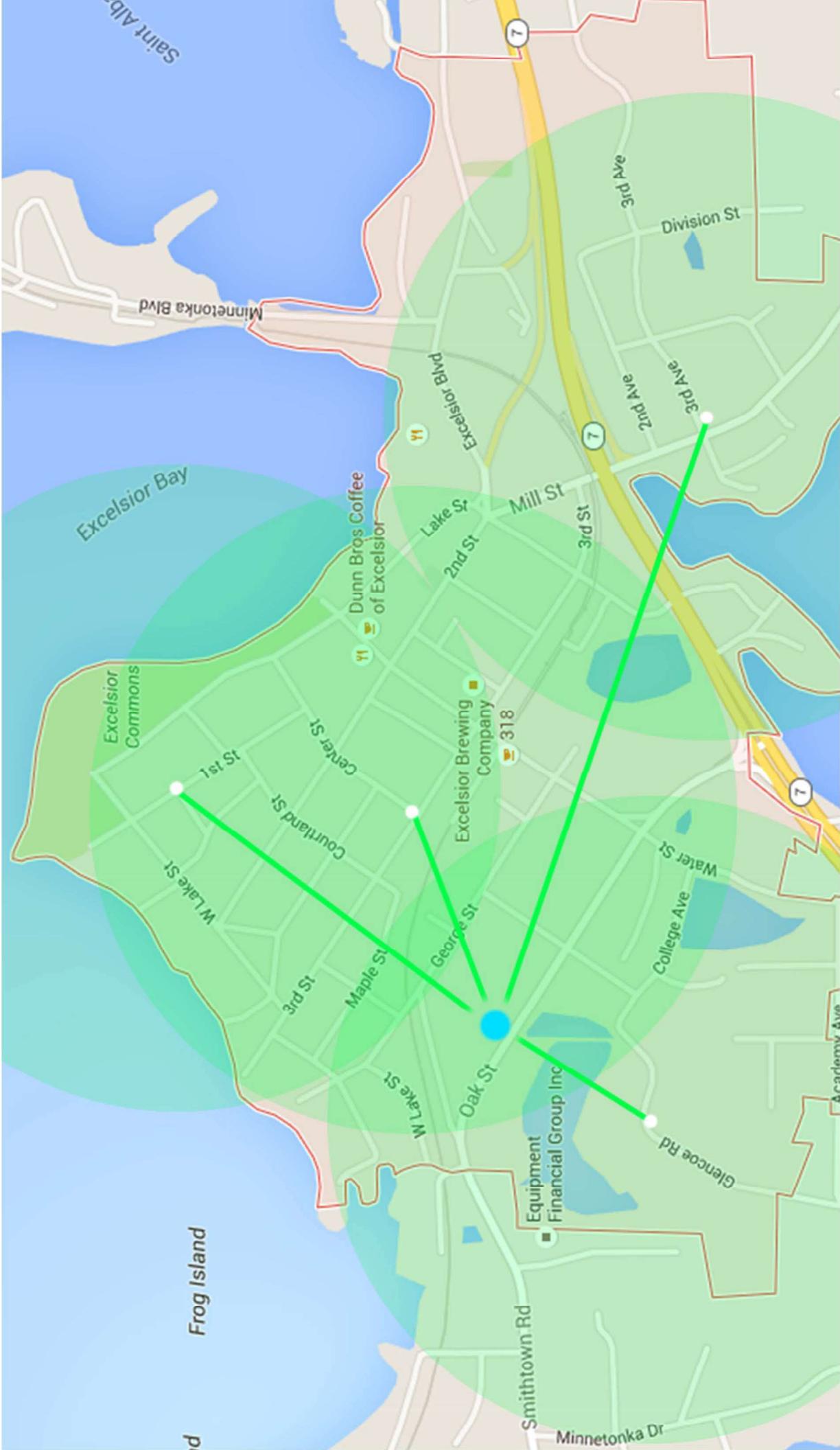
"Our case is unique, with so many brick-and-mortar businesses and comparatively few residents," says Hotvet. "Because of this, our economy relies heavily on external sources for tourism. This means that we're constantly competing outside of our own borders."

Delivering more than just the Internet

Retail is a competitive industry that simply requires fast Internet. The speed of your Internet service not only impacts how quickly you access email or find important information, it affects the quality of your customers' experience. Whether it's processing a customer's transaction or using Big Data to forecast sales trends, fast Internet can have a huge impact. In fact, enhancing the customer experience is a major driver of satisfaction and loyalty - both of which are vital to your bottom line.

For residents, although there may be no bottom line, the importance of a fast Internet connection can still be significant. Whether it's home prices or social equality, there's a reason for everyone to want their fair share. High speed Internet availability has been shown to add \$5,437 to the price of a \$175,000 home - about as much as a fireplace, or half the value of a bathroom. Going beyond market value, the rate at which collaborative projects are being uploaded and downloaded has been ever-increasing, and has now outpaced what some connections are capable of handling. Stifling innovation and communication is bad for everyone involved, including providers. High speed Internet access has become vital to the success of individuals and communities. Our nation's commitment to equal economic opportunity, educational advancement, and democratic participation can only thrive if everyone has equivalent access to these critical communications networks. As important as it is to our country to ensure access to what we think of as more traditional resources or services for all citizens, closing the digital divide in America strengthens the entire country economically and socially.

To learn more about how ExcelsiorNet can transform your community, click [here](#) to provide us with the best way to contact you. We are always excited to discuss new opportunities.



Excelsior Net

