Setting up a Wireless Internet Hot Spot Business on a Tight Budget
Introduction....

This document was prepared as a ‘how-to’ guide to help a wireless Internet hot spot start-up business.
Technology: unlimited vs. tight budgets

If money is no problem then a wireless Internet hot spot provider can buy technology
  - **High performance full function wireless and router equipment**
    • Colubris, Proxim, Tropos, etc. ($1,000s/unit)
  - **Comprehensive software for billing and network management**
    • Alepo, IntralSP, Capterra ($10,000’s)

The secret to low budget wireless Internet hot spot provider survival is knowing how to buy low and get good deals
  - **Buy low cost hardware and install 3rd party firmware**
    • Senao, Compex, Ubiquiti (approx $100/unit)
  - **Don’t buy billing and network management software**
    • Build your own software using free open source systems
    • Get software as a service and pay only when you make money
Multi-expert skills are desirable

- The wireless Internet hot spot provider-on-a-budget owner must be prepared to learn new skills and adapt to new situations
  - Business: what types of wireless Internet hot spot provider opportunities are worthwhile: how to identify the best opportunities
  - Money: will a project make money and if so how much: what is the return on investment
  - Technical: find the best low-budget technologies
  - Marketing: how to identify and attract customers
  - Customer support: extremely important as satisfied customers give referrals
  - Maintenance: have a system in place to fix things fast and avoid losing money
  - Managing staff: businesses require staff to grow
Knowledge is the key to success

- Spend time learning about the open source technologies that are used to build wireless Internet hot spot provider systems
  - Linux operating system: the platform for open source
  - Apache web server
  - Radius authentication server
  - SNMP device monitoring and management
  - Captive portal
  - SSL encryption
  - Scripting languages (Perl etc.)

- Open source technologies that you will need to learn

- Learn about free firmware for cheap wireless hardware
  - OpenWRT, M0n0wall, Avansu, Locustworld
Careful business analysis is required

• Analyze the wireless Internet hot spot provider business plan
  – Get help to prepare a business plan if necessary

• Clearly define the business model
  – What services; to whom; when; where; how much

• Study the economics of the business model
  – Investment; operating costs; fixed vs. variable costs; profit analysis; cost to grow business

• Prepare a cash flow spreadsheet to look at projections and test ideas
  – Do the number make sense?, is the business a good idea?
  – If not then what can be done to make the business performance look good on paper
Define the business model

- A wireless Internet hot spot provider has many types of products/services that can be sold to customers
  - Decisions are based on region, customer type, etc.

- The business model describes how to do business
  - What services will be offered?
  - How are the services delivered?
  - What products will be required to deliver services?
  - Will products be offered as part of service or separate?
  - How are services charged: one time, monthly?
  - Will customers be charged for installation?
  - Will same service be offered to all customers?
  - Will customized services be offered?
Fine tuning the business model

- Wireless Internet hot spot providers have two basic business choices and can focus on one or develop both
  - Subscriber business opportunity
  - Speculative business opportunity

- Subscriber opportunity
  - Providing a service as part of a contractual agreement
  - Cash flow can be projected with precision
  - Low risk with modest sales margin

- Speculative opportunity
  - Offer a service where a % of potential customers may use with an unknown frequency
  - Cash flow can only be approximately projected using historic data for each location
  - High risk with low to high margin sales
The subscriber opportunity

- The subscriber model provides a regular income for a fixed period (contract) by supplying wireless Internet access
  - Customer might be a homestead requiring connection to the Internet via a wireless link
  - Customer might be a business that needs a wireless link between two offices: but no Internet
  - Customer might be a business that needs a wireless link to the Internet plus web site design and hosting
  - Etc.

- Customers will pay monthly for different types of services during a fixed contract period
  - Decide where to draw the line: list services offered to customers and list what will not be provided
The speculative opportunity

• The wireless Internet hot spot business provides a service that customers may use sporadically
  – Wireless Internet hot spot opportunity at a public area (airport) where the customer might pay hourly for Internet access
  – Wireless links for special events such as trade shows that exhibitors might use during the show
  – Etc.

• Each opportunity is a risk
  – Spend as little as possible to offer the service
  – Be prepared to pull out if expectations are not met

• Minimize the cost of testing/developing opportunities
  – Develop a ‘portable-wireless-kit’ approach that can be set up and taken down quickly
Subscriber vs. speculative opportunities

- Subscriber pros and cons
  - Medium term income guarantee but modest margins
  - Subscribers are extremely valuable in the long term if the exit strategy is to sell the business

- Speculative pros and cons
  - A risk investment has to be made to offer a service without any customer commitment
  - Select the location very carefully: income opportunities vary widely
  - ‘Monopolies’ at busy locations give high returns: airports, marinas, resorts, etc.
Economics of the wireless Internet hot spot provider business

- Money flows out of the wireless Internet hot spot provider business in three ways
  - Capital investment
  - Fixed operating cost
  - Variable operating cost

- Capital investment can be minimized with the right plan

- Fixed operating costs should be avoided or minimized wherever possible

- Variable operating costs means that money only flows out when a larger amount of money flows in

- Money flows in from two types of income opportunity
  - Fixed term/price agreements
  - Variable revenue sources
Sources of income

- Characteristics of fixed term/price agreements
  - **Income derived from last mile subscribers**
  - **Upside:** subscriber value improves business worth
  - **Downside:** modest margins due to competition

- Variable revenue sources
  - **Income derived from hot-spots etc.**
  - **Upside:** can produce excellent financial results
  - **Downside:** high risk, requires very careful analysis

- Other wireless Internet hot spot provider income sources
  - **Operating wireless data links for businesses**
    - Fixed term/price but can be quite profitable
  - **Maintenance contracts for business telecom**
    - Competitive segment but profitable
Managing expenses

- Work from home initially
  - Avoid office lease and installation costs

- Never purchase equipment for customer opportunities where ROI is long term and requires contract completion
  - Always cover the equipment cost with ‘installation services’
  - Or arrange for a customer equipment lease; banks can advise about this

- Avoid buying expensive test equipment
  - Cheap notebook computers with shareware software will cover 95% of testing requirements

- Don’t buy business /network management software
  - Use shareware or software as a service (SaaS)
Managing fixed costs

- Work from home initially
  - Avoid office lease and installation costs

- Avoid paying for advertising
  - Network with people: word of mouth
  - Build a good web site: learn how to get a high Google ranking
  - Write a blog: share your knowledge, attract customers

- Don’t hire full time people initially
  - Find people who will work hourly

- Avoid making fixed term Telco agreements and agreements that have a cancellation fee
  - Shop around to find flexible backhaul providers
Managing variable costs

- Deliver customer solutions with expenses that disappear if the customer stops paying
  - Telco contracts that can be cancelled
  - Equipment that can be reused with other customers
  - Antenna site fees that can be terminated anytime

- Hire people per job
  - Collect from the customer and then pay wages

- Negotiate up front partial payment from customers
  - Cover out of pocket expenses

- Negotiate payment to vendors based on receivables schedule
  - Avoid out of pocket expenses
Profits

- Profit calculation: ensure all costs are included
  - Profit = sales - costs

- Sales
  - Subscriber fees
  - Customer invoices per job
  - Over the counter sales of products, accessories

- Costs
  - Amortization of capital expense (with interest)
  - Fixed operating cost
  - Variable operating cost
  - Cost to grow business (reserve for investment)
  - Owners salary
Financial planning

- A spreadsheet for projected cash flow is important
  - Include all cost items and sales month by month
  - Make spreadsheet adjustments month by month to reflect actual business conditions
  - Plot the profit/loss month by month
  - Identify high profit sales
  - Identify low profit /money loosing sales

- Make decisions about the business direction
  - Analyze month by month results
  - Focus on high margin business, avoid low margin work
  - Use the spreadsheet to experiment with scenarios and evaluate projected returns: price adjustment etc.
Several software companies produce wireless Internet hot spot provider management software for network operations management: essential features are.....

- Customizable log in screens and customer interfaces
- Customer billing via: access code, scratch cards, credit card, monthly subscriber billing, wholesale billing
- Login page disclaimer with conditions of use
- Login page banner advertising and banner management
- Traffic shaping to ensure optimum resource sharing
- Traffic flow control determined by billing model
- Equipment failure monitoring with auto trouble ticket
- Remote management of wireless and router devices from the network operations center
- Traffic statistics and billing reports with billing data export for book keeping applications: Quickbooks
Software features: customization

- Install the wireless Internet hot spot provider business ‘look and feel’ in all network equipment customer interfaces
  - Wireless Internet hot spot provider / wireless Internet hot spot operator web site
  - Login interface screen (splash page) with the wireless Internet hot spot provider graphic design
  - Splash page click-through to the wireless Internet hot spot provider Web site
  - Disclaimer notice
  - On-line information (manual, FAQ)
  - Authentication code entry
  - Credit card data entry
  - Customer error messages
  - Customer support request
  - Customer targeted advertising
Software features: customer billing

- Billing options permit testing and deployment of different customer billing strategies
  - Access code generator with a file format that can be printed via standard software
  - Off the shelf scratch cards available with time options
  - Ability to generate custom scratch cards (wireless Internet hot spot provider graphic design + custom time options)
  - Credit card billing with options to use different CC processors (authorize.net + PayPal®)
  - Monthly/quarterly account billing for contract customers
  - Control bandwidth via billing to offer ‘basic’ and ‘premium’ services
  - Wholesale billing for business customers
  - Report generated for usage (statistics)
  - Report generated for sales processed (financial)
Software features: login disclaimer

- When providing public services there are liability issues where responsibilities must be declared
  - All customers must acknowledge the terms and conditions of use drafted by the wireless Internet hot spot provider by clicking the ‘I accept’ button
  - Downloading of copyright materials is illegal and the RIAA will sue: customers cannot be prevented doing this but the wireless Internet hot spot provider must advise customers that this is not permitted under the terms and conditions
  - Advise also that the use of the wireless network to capture information transmitted by users is illegal – hackers may try to access passwords and other information
  - Seek attorney’s advice when drafting disclaimer
Software features: banner advertising

• Banner advertising placed on the login page is a source of income for the wireless Internet hot spot provider

  – Prepare banners centrally and distribute to all devices in the wireless Internet hot spot provider network
  – Configure banners for individual devices, groups of devices and globally
  – Banner login page options include click-through and non click-through (charge different rates)
  – Banner updates should be immediately viewed by customers on new login screen
  – Timer available for free wireless Internet hot spot applications when the customer can be logged out after a programmed time to force repeat viewing of the banners
Software features: traffic shaping

- Traffic shaping is tied to billing rates and also prevents users who transfer large files to cause a slow down for all other users of the same access point or Internet circuit
  - Offer price/performance points for customers: ‘basic’ service bandwidth limited, ‘premium’ full bandwidth service
  - Prevent a user who is downloading MP3’s or video files to ‘hog’ the network
  - Identify data volume transferred by each user
  - Set breakpoints of data volumes to determine bandwidth priorities
  - When a user has transferred up to the first predetermined limit of bytes then bandwidth priority is lowered and file transfer slows for that user
  - File transfer becomes much slower as other data volume break points are reached
Software features: failure monitoring

- It is extremely important that the wireless Internet hot spot provider network manager is informed as soon as a network device failure occurs to minimize loss of income and avoid angry customers

  - Automate trouble ticket generation on the failure of any device or circuit
  - Management system should constantly monitor status of network components via SNMP (simple network management protocol)
  - System should send trouble ticket email to network manager advising of outage
  - System should send repair work order to field technician via cell phone text message
  - Automated call center message to inform customer that outage is temporary and that repair is taking place
Software features: redundant systems

- Ideal wireless Internet hot spot provider management system supports low cost hardware so that redundant system can be built
  - Installation cost for two devices is almost the same as for 1 device (wireless access points)
  - Configure redundant equipment for ‘hot-standby’ so that the network manager can activate locally or remotely
  - Network manager responds to device failure alarm by activating redundant device at the same location.
  - Technician can repair failed device while backup device continues to provide service
  - When paying for node management, ensure that one device charge only is made for redundant installation, and that charge can be swapped from failed to standby device
Software features: remote management

- A single wireless Internet hot spot is easily managed by connecting a computer to the device.

- A wireless Internet hot spot provider network with multiple devices in multiple locations requires remote device management permitting central management from the network operations center:
  - Devices support SNMP to permit remote management including configuration of important parameters.
  - Central database of configuration files for all devices in the wireless Internet hot spot provider network.
  - Device independent configuration files permit device to be replaced with different type but use same configure file.
  - Facility to lock down device parameters which can take the device off line when modified remotely.
Software features: statistics reporting

• Network planning requires information about the current usage of the network, and historic network usage
  – Extract data traffic info from any device in the network
  – Define device groups, then access traffic info for the group
  – Extract time-varying information for individual devices and for groups of devices
  – Network device stats should measure the % utilization of devices and circuits so that points where capacity is exceeded can be identified quickly
  – Information files should be downloadable in common formats for loading into a spreadsheet to permit advanced report generation
Software features: billing reporting

- Billing reports are essential for the wireless Internet hot spot providers business to provide input for book keeping and accounting software
  - Examine data for individual devices, or for groups of devices
  - Download access code billing data for any device or group in the network
  - Access credit card billing data for any device or group in the network
  - Download credit card billing reports for verification against credit card processors statements
  - Download comprehensive billing reports in a format that can be used as input into book keeping software, such as Quickbooks
Software features: access code reporting

- Each access code initiates a billing process when entered by a customer so it is essential that the use of each access code can be verified
  - Access code usage report with date(s), time(s), location of usage, device that validated the access code and current status of the access code
  - Generate report for customer who questions usage of access code or claims that access code was not used
  - Verification of suspected billing fraud at any site
  - Access code usage provides additional input for network planning process – for example, identify codes that were purchased at one site but used at another site
Wireless Internet hot spot provider management tools summary

- Avansu: wireless Internet hot spot provider network billing, monitoring and management
  - Details at www.avansu.com

- Alepo: OSS/BSS solutions for Public Wireless LAN providers
  - Details at http://www.alepo.com/

- IntraISP: Billing, CRM, and OSS for Broadband Service Providers
  - Details at https://www.intraisp.com/

- Capterra: OSS system includes provisioning, workflow and customer care for WISPs
  - Details at http://www.capterra.com

- Intrameta: Broadband operations support system BOSS
  - Details at http://intrameta.com/

- Powercode: ISP billing and network management
  - Details at http://www.powercode.com/

- All City Wireless: Turn-key wireless network management
  - Details at http://www.allcity-wireless.com

- Wireless Orbit: ISP network management and billing solution
  - Details at http://www.wirelessorbit.com
Wireless Internet hot spot provider network building blocks

- Wireless Internet hot spot providers use several different components to build out networks: all devices should have the characteristics described in the previous section
  - Wireless access points: short/long range, indoor/outdoor (2.4GHz operation)
  - Multi-port routers for wired applications (e.g. hotel rooms)
  - Wireless repeaters with multipoint local access (2.4GHz) and backhaul (5GHz) to central antenna
  - Point to point wireless links (900MHz and 5GHz bands)

- The wireless Internet hot spot provider may also require equipment for additional services
  - Server for customer email service, etc.
ISM unlicensed frequency bands

- Wireless Internet hot spot provider wireless equipment uses unlicensed ISM bands
  - Customer facing access points are always 2.4GHz for laptop access: access points are point to multipoint configuration
  - Point to point wireless links use the 5GHz frequency bands, with up to 54Mb/s bandwidth, however for line of sight ONLY
  - Point to point wireless links can use the 900MHz frequency bands, with 2-11Mb/s bandwidth, NEAR line of sight
  - Wireless repeaters use 2.4GHz for local access and 5GHz for backhaul to central transmitter
- WIMAX may also be used for licensed or unlicensed point to multipoint distribution
Functionality of wireless Internet hot spot provider equipment

- Wireless Internet hot spot provider equipment is generally very expensive due to the complex functionality and small volume market
  - Suppliers: Cisco, Colubris, Tropos, Proxim, etc
  - Carrier grade equipment in the price range $1000 to $5000 depending on functionality and redundancy

- Low cost equipment can be used with 3rd party software by the wireless Internet hot spot provider with a tight budget
  - Suppliers: Ubiquiti, Engenius
  - Equipment price range $50 to $200

- 3rd party firmware can be downloaded onto budget hardware to add wireless Internet hot spot provider functionality
  - OpenWRT, DD-wrt, Avansu

- Redundancy can be built by duplicating budget hardware
Equipment hardware configurations

- Select the correct equipment configurations for each application
  - Multi-port router configuration
  - Point to point wireless with high gain antenna
  - Long range point to multipoint (wireless Internet hot spot) configuration
  - High bandwidth point to multi-point configuration
  - Full duplex wireless repeater configuration

- Point to point issues
  - High antenna gain transmits further, however very high gain antennas are difficult to align

- Point to multipoint issues
  - Radio technology is limited to 20 to 70 concurrent users depending on equipment performance: for more users multiple radios are required
Multi-location wireless Internet hot spot management system

- All devices (routers and wireless access points) owned by the wireless Internet hot spot provider are managed from the providers computer
  - Each account holder has access to a comprehensive suite of billing and management functions
Applications for wireless Internet hot spots

• Wireless Internet hot spots are for travelers, vacationers, and visitors
  – Resort: wireless, kiosks, wired rooms
  – Hotel: wired rooms, wireless for conference areas, business center with computers/printers
  – Trade show: wireless for exhibitors and visitors, wired booths, kiosks
  – Marina: wireless internet
  – Internet cafe: wired kiosks, wireless for laptops
  – RV park: wireless Internet
  – Airport: wireless for laptops, kiosks

• Some locations make less money in sales but may benefit from providing free access with advertising
  – Bookstore, restaurant, coffee bar, golf club
Potential wireless Internet hot spot cash flow

- The amount of money that can be made depends on several factors
  - Technology awareness of potential users
  - Users urgency to access information
  - Users willingness to spend money + economic level
  - Volume of potential customers + seasonality

- Locations that generate good cash flow (estimates)
  - Airport: $100,000/month
  - Trade show with 250 booths: $25,000/show
  - Resort: $20,000/month
  - Internet café: $5,000/month
  - Marina: $5,000/month
Coffee bar wireless Internet hot spot: requirements

- A small wireless Internet hot spot deployment example
  - Coffee bar, customer area is 1500 ft sq.

- One medium range access point with a built in 8dBi patch antenna is required with billing software installed
  - Equipment cost: $200
  - The access point is powered via the Ethernet cable (PoE): makes wiring easy

- The access point is connected to the ADSL router
  - Monthly cost for business DSL: $75/month

- Sell pre-pay 6-hour open scratch cards to customers
  - Cost: 75c each, retail for $7.50 each (example)
Coffee bar wireless Internet hot spot: ROI

• Investment and operating costs
  – Equipment: $200
  – Billing system account: $20/month
  – Resell 6h scratch cards: cost 75c, retail $7.50
  – Internet DSL: $75/month (share with other equipment)
  – Maintenance $0, customer support: $0

• For 20 customers/month, income
  – Net; $60/month, payback on investment < 3.5 months

• For 100 customers/month, income
  – Net; $600/month, payback on investment < 2 weeks

• For 500 customers/month, income
  – Net; $3300/month, payback on investment < 2 days
Resort wireless Internet hot spot: requirements

- Full service resort with 20 acre campus
  - Provide wireless Internet access for: 4 miles of beaches, 2 pools, 3 restaurants, 4 bars, 1 theater, business center, indoor public games area, outdoor public games area, reception area, guest apartments (wired), staff apartments (wired)

- Important requirement
  - The network manager must be informed immediately if any equipment fails
  - Network manager needs remote configuration accessed from any location with Internet
  - Customization of login pages and scratch cards
Resort wireless Internet hot spot: equipment

• Equipment
  – 3 routers for wired staff and guest apartments and business center computers
  – 3 high power long range access points with sector antennas, mounted on a tower for beach and outdoor public area
  – 12 medium range indoor/outdoor access points with integral patch antennas for other areas

• Wireless Internet hot spot provider management software
  – Billing via access codes, scratch cards and credit cards
  – Alarm monitoring of all equipment + repair dispatch
  – Remote management from head office and offsite
Resort wireless Internet hot spot ROI

- Total investment: equipment, installation and training
  - $38,500

- Monthly operating costs: support, maintenance
  - $4,000

- Customer charge
  - Optional $50/week extra: 15% of customers purchase

- Monthly gross sales
  - $20,000 : 400 customers/month

- Monthly net income
  - $16,000

- Time for payback on investment
  - 2.5 months
Managing wireless Internet hot spots across multiple sites

• A business that has multiple sites can operate a wireless Internet hot spot at each site but manage the system as one large multi-site wireless Internet hot spot
  – See Avansu specifications

• Use wireless Internet hot spot management software that permits network equipment to be managed individually or in groups
  – Track performance of devices
  – Track performance of device groups

• Overall operating costs can be reduced for multiple sites
  – One customer support line for all sites
  – Central maintenance coordination
  – Central updating of devices at remote sites simultaneously
Wireless Internet hot spot accounting and reports

- Wireless Internet hot spot management software packages reporting
  - Node (device) traffic stats
  - Node (device) billing record
  - Node (device) credit card processing record
  - Device group traffic stats
  - Device group billing record
  - Device group credit card processing record
  - Download billing/CC reports as CSV files, import into applications like Excel and Quickbooks
  - Access code verification report
  - Network inventory (graphical)
  - Node configuration report
Wireless Internet hot spot installation schedule

- A small installation like a coffee bar will take 1 hour
  - Time will be saved by using equipment that is powered over the Ethernet cable (PoE): avoids having to run power to the location of the access point: access point is placed in a good location for the antenna

- A large installation like the resort example might take 1 month to install: there are many tasks
  - Install long range wireless equipment on a mast and medium range equipment at each location
  - Run cat-5 cable from the server room to all equipment
  - Staff training to sell Internet, and answer questions
  - Train customer technical support staff
Deploying and evaluating the wireless Internet hot spot

• Start small with the minimum investment
  – Learn how the technology works
  – Learn how to support customers
  – Test different Internet selling strategies
  – Talk to customers and get feedback of the service
  – How many customers will use the Internet/month?
  – Analyze the financial results, cost, sales, profit
  – Is the wireless Internet hot spot system reliable?
  – Is system performance adequate (any complaints)?

• Verify the results against initial expectations

• Expand carefully, test and verify at every step
Growing wireless Internet hot spot sales

- Wireless Internet hot spot income is limited by the number of customers who want Internet access
  - What % of total customers use the Internet?
  - Offer a free trial to increase this %

- Will local companies want to advertise to your customers
  - Sell hot-spot banner advertising

- Sell computer accessories to wireless Internet hot spot users
  - Laptop wireless USB device: wholesale $10, retail $25
  - USB storage device: wholesale $5, retail $15

- Sell additional services to wireless Internet hot spot users
  - Access to a printer; charge per page printed
  - Offer a photo printing service
Finding ‘goldmine’ niches

- There are a few opportunities where wireless Internet hot spot providers have made a great deal of money: characteristics of the goldmine opportunity are …

  - Locations with high numbers of people in constant turnover: e.g. airport
  - Locations where Internet access is extremely important for customers: travelers checking itineraries: business people planning meetings
  - ‘Monopoly status’ is required: hold an exclusive concession to provide Internet service
  - Locations where additional income can be derived from login page advertising of local businesses
  - Locations where customers understand computer technology to minimize support costs
Strategies to acquire a ‘goldmine’

- The best locations are owned by big businesses/govt.
  - Big businesses are slow to launch new technologies so welcome a wireless Internet hot spot provider

- The best locations are:
  - #1: airport: $100K to $250K /month
  - #2: busy trade show venue: $20K to $100K /month
  - #3: all inclusive resort: $5K to $20K /month

- The opportunity is obtained by negotiating with the business owner to provide exclusive wireless Internet hot spot service
  - The wireless Internet hot spot provider covers all costs of the installation and all operating costs: business owner has no cost
  - The wireless Internet hot spot provider gives a percentage of sales to the business owner – after recovering the initial investment
‘Goldmines’ are risky: homework required

- Spend a lot of time at the chosen site gathering data before speaking with the business owner
  - Acquire as much data as possible about customer volumes, customer types, demand for the service, advertising opportunities, etc.

- Calculate very carefully what the installation and operating costs will be
  - A big part of the install cost is the wireless Internet hot spot providers labor, remember that permits must be pulled (additional cost/time) and union rules obeyed (higher wages)

- With a good plan wireless Internet hot spot providers can get payback on the entire installation investment cost very quickly
  - Fastest we have seen was 2 weeks
Customer support requirements

- Customer support is essential for all wireless Internet hot spot providers
  - If the customer can't connect his computer to the Internet then it is the wireless Internet hot spot providers problem

- Must have telephone support
  - 1-800 number with trained support technician
  - Depending on quality of service agreement with customer, wireless Internet hot spot provider may have to provide support 24/7
  - Support can be outsourced to specialist company

- Make repairs quickly
  - Have fault detection plus automated trouble ticket

- Install redundant equipment
  - Have hot standby equipment that can be activated on failure of production equipment
Good customer support generates sales

- All subscriber agreements have some quality of service component
  - If QoS is not met then customer can cancel contract

- If wireless Internet hot spot customer can’t connect the laptop then the customer will not purchase airtime
  - Biggest wireless Internet hot spot support issue currently is Windows Vista: the hot spot wireless Internet hot spot provider must have a Vista specialist to explain Vista wireless network security configuration

- Mediocre support will drive customers to competitors
  - Customers inability to use the service quickly is a deal breaker

- Good customer support generates referrals
Good customer support is a selling point

- All wireless Internet hot spot providers can capture customers from competitors by offering better support
  - Sales support
  - After sales service support
- A happy customer will buy more services and give more referrals
  - Your customer is your best sales person
- Give special deals to long term customer to avoid ‘churn’ (customers defection to competitors)
  - Have the support person do more then just answer questions
  - Proactive support means calling on your best customers to offer sweet deals, discounts, etc.
Strategies for business growth

- A successful business will grow until your exit strategy is reached
  - Don’t just create a job: create an investment

- Business growth will only happen when certain conditions are met
  - Customers are happy because tech support solves all their problems and the network never breaks
  - The business is generating sufficient profits to pay the costs of growth
  - Employees are happy with their working environment and stay for the long term to grow with the company
  - The wireless Internet hot spot provider hires bright people to implement the growth plans
Business growth through acquisition

• A startup wireless Internet hot spot provider will develop sales in a limited geographic region for a number of reasons
  – The wireless Internet hot spot provider owner knows potential customer personally and understands the needs of potential customers
  – The wireless Internet hot spot provider owner knows the topography and can quickly plan wireless links

• Eventually the wireless Internet hot spot provider will grow to the point where the chosen region is saturated: the only way forward is to grow geographically
  – The wireless Internet hot spot provider is immediately at a disadvantage: geographic growth will be much more expensive

• The first step to geographic growth should be to look for competitors that could be acquired: cheaper long-term
Sales and marketing strategies

• Minimize marketing and selling costs with creativity
  – Carefully monitor the cost to acquire customers as this is an investment that must be amortized during the contract period

• Potential subscribers can be easily identified
  – Homesteads outside the range of DSL
  – Businesses that have multiple sites, etc.

• Personal contact is your most valuable sales tool
  – Make an appointment to visit potential customers to present the advantages of your service

• 100 subscribers will be the start of a successful business
  – 3 to 6 months of visiting potential customers
Sales and marketing materials

• Communicate clearly and simply with potential customers
  – Describe the benefits
  – Describe the costs
  – How is your offer better than the competition
  – Describe special time limited deals

• Put your message into print (flyer, brochure) for mailing and leave a copy with the customer after a visit
  – Use the skills of a graphic designer to make your material look professional
  – The image you project is very important to win customers

• Ensure that all sales materials are always available
  – Sales contracts, support forms, referral forms, etc.
Sales and marketing via the Internet

• Your Web site will project your image
  – Your potential customers already surf the Web and have seen many professionally produced web sites
  – Spend the time to build a functional web site, pay a design professional to make it look good
  – When money is tight buy a good template ($150)

• Your Web site is an important sales and marketing tool: can customers…….
  – Purchase services on line?
  – Get support on line?
  – Seek referral commissions on line?
  – See new products and services on line?
  – Upgrade/downgrade services on line?
Exit strategies

- It might seem strange that a presentation on starting a business should include the exit strategy (selling the business)

- This presentation has described planning and delivering the products and services that will help you grow your business

- The eventual results you get from your business are also very important, there are several options
  - Create a family heirloom: father/mother to son/daughter
  - Sell out to a competitor
  - Take the company public: IPO

- It is important to decide now because your decision will influence what you do
Exit strategy: business sale examples

- Telcos buy wireless Internet hot spot provider businesses to acquire the subscribers
  - The wireless Internet hot spot provider owner has built economies of scale through hard work and is now a fit for the Telco economic model

- Competitors will buy a wireless Internet hot spot provider businesses to expand
  - Competitors look for profitable businesses with high growth that will add value to their bottom line

- Service businesses that seek to expand into high tech areas will buy wireless Internet hot spot providers
  - A farm supply company might buy a rural wireless Internet hot spot provider to access Internet know how and also expand the wireless Internet hot spot providers network to their client base to increase revenue
For more information ..... Products for public Internet networks:

Fire4 Systems Inc. – www.fire4.com
Tel: 305-558-8773

Hospitality industry public Internet solutions

Hospitality Internet Solutions – www.hospitality-internet.com
Tel: 305-394-6333

OEM software customers – www.avansu.com