Wireless Analysis Tools in the Enterprise Network Management Market

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Agenda

- Background
- Research problem
- Research methods
- Overview of Wi-Fi usage in enterprises
- Overview of Wi-Fi life cycle management
- Wi-Fi life cycle management tools
- Online questionnaires
- Recommendations
- Conclusions
- Future research



Background

- Ekahau Site Survey (ESS) is a software tool for planning, analyzing, and troubleshooting 802.11 a/b/g/n networks.
- Currently the product is mainly used by wireless engineers, Wi-Fi professionals, and in some degree by enterprises' network administrators.
- Enterprise Wi-Fi market is growing very strongly.
- The bloom is driven by three technological developments:
 - Switch controlled Wi-Fi networks
 - 802.11n
 - Voice over Wi-Fi



Research problem

- How to successfully strive for the enterprise network management market with Ekahau Site Survey?
 - o Is there market potential?
 - o What product features this particular target group requires?
 - o What is the most efficient way to approach this new market segment?
 - o Is the pricing correct?



Research methods

- Overview of Wi-Fi and Wi-Fi life cycle management
- Market research for Wi-Fi life cycle management tools
 - Direct and indirect competitors
 - Competition analysis
- Target group analysis
- Social media marketing study
- Three online questionnaires
 - Current customers
 - Evaluators
 - Website visitors



Overview of Wi-Fi usage in enterprises

- Wi-Fi penetration in enterprises is only about 15% (2007), but is expected to reach 30% in five years.
- Enterprise Wi-Fi equipment market reached \$1.6 billion in 2007
- The primary use cases for Wi-Fi in enterprises are:
 - Internet browsing, emails, instant messaging, etc. (Low bandwidth)
 - Database and business applications (High bandwidth)
 - Voice over Wi-Fi (Extensive coverage)
 - Location tracking (Extensive coverage)
- Payback time of a typical enterprise Wi-Fi installation is less than 9 months.
 - Wi-Fi usage increases productivity and flexibility



Overview of Wi-Fi life cycle management

- Building and managing a small wireless LAN is easy, but large-scale enterprise networks require a lot more work to meet several different requirements.
- Wireless analysis tools can be used to address several different Wi-Fi issues throughout the whole life cycle of the wireless LAN.
- The life cycle of the wireless LAN can be divided into five descrete phases:
 - Preparation
 - Planning
 - Designing
 - Installation
 - Ongoing management
- Especially site survey and planning tools can be used during all the five phases.



Wi-Fi life cycle management tools

- Direct competitors Site survey & planning tools
 - Currently 7 competitors at the market
 - 2 products with similar set of features
 - Rest of the products concentrate only on either site survey or planning
 - ESS is the market leader, but AM Survey is gaining with its richer feature set
- Indirect competitors
 - Protocol analyzers
 - Spectrum analyzers
 - Monitoring & management tools (Integrated with Wi-Fi switch controllers)



Current customer questionnaire (1/2)

- Technology websites and white papers have the biggest impact on purchase decisions.
- Different social media have very small impact on purchase decisions.
- 36% of the respondents' Wi-Fi networks are relatively small deployments with less than 10 access points.
- 64% of the Wi-Fi networks are controlled by a Wi-Fi switch.
- 45% of the respondents have already deployed VoWi-Fi whereas 27% are planning to deploy in the future.



Current customer questionnaire (2/2)

- The most common Wi-Fi network problems are:
 - Coverage
 - Performance
 - Planning related.
- The most important features of ESS are network planning, site surveys, and coverage and performance analysis.
- Spectrum and VoWi-Fi analyzers were the most requested new features.
- ESS pricing seems to be just right:
 - Just right (36%)
 - Fairly expensive (46%)



Evaluator questionnaire - IT management users (1/2)

- Social media's impact on purchase decision is next to nothing.
- Technology websites, discussion forums, and white papers are the most popular media.
- 38% of the respondents' Wi-Fi networks are large-scale deployments with over 50 access points.
- Only 51% of the respondents have a Wi-Fi switch controlled network.
- 43% of the respondents are planning to deploy VoWi-Fi in the future whereas 38% have already deployed.



Evaluator questionnaire - IT management users (2/2)

- The most typical Wi-Fi network problems are:
 - Coverage
 - Performance
 - Random client disassociations
 - · Planning related
- The most important features of ESS are coverage and performance analysis and site survey. Rest of the features are clearly less important.
- Spectrum analyzer and active measurements were the most requested new features.
- ESS pricing seems to be just right also among this user group:
 - Just right (19%)
 - Fairly expensive (51%)



Website visitor questionnaire

- Social media's impact on purchase decisions is also next to nothing among ESS website visitors.
- Technology websites and white papers are the most popular media.
- 46% of the respondents Wi-Fi networks are small deployments with less than 10 access points.
- 52% of the respondents have already deployed VoWi-Fi whereas 25% are planning to deploy in the future.
- The most common Wi-Fi network problem is coverage.



Recommendations

- Ekahau Site Survey's pricing is just right and could be even increased little bit.
- Selling time limited licenses is highly recommended.
- Marketing at technology websites that combine white papers, case studies, discussion forums and product reviews. For example TechRepublic.com.
- Spectrum analyzer and active measurements should be implemented to increase ESS' troubleshooting capabilities.
- Better support for portable devices.



Conclusions

- Enterprise network management segment is clearly very attractive market segment for Wi-Fi analysis tools with low competition.
- The three technological developments sets major challenges for Wi-Fi deployments.
- Better troubleshooting features are needed.
- Against the initial assumptions, social media marketing does not seem to be working among IT management users.
- More pricing options.



Future research

- Features' usability
- IT management users' usage study
- Marketing in social networks
- Reseller and channel partners study



