LANCOM White Paper Best Wi-Fi at events

These days, planning and organizing an event without wireless Internet access for the visitors is almost unthinkable. Speakers may need Wi-Fi for their presentations, or organizers may wish to give visitors free Internet access by hotspot as an extra service. Whichever is the case, it is vital that it works, be it in a small hotel, a large exhibition hall, or even a stadium. Setting up Internet access for an event involves the following steps:

1) Specify the purpose of wireless Internet access

First, be clear about the intended use of the Internet access. There is an important guiding principle here: Nobody notices a good Wi-Fi connection, but everyone notices a bad one straight away. In advance, it is important to find out who will be using the wireless network and for what purpose. If your Wi-Fi is only there to help visitors check their e-mails without having to rely on 3G or 4G, then visitors need to know that their connection is restricted.

Often, a simply configured network is not enough. More and more people want to share files, make video calls, or share their video footage from the event with their colleagues. This kind of user behavior requires a much larger bandwidth, otherwise the network will very quickly reach its limits. The consequence: Visitors will complain about the poor Internet connection. This is why you should plan for sufficient bandwidth right from the start.

2) Planning the network

Next is the network. If you lack the necessary IT skills, you should consider hiring an accomplished expert. It may be that the venue already has its own network. It is important to check whether it is able to fulfill the purpose set out earlier.



There are three critical aspects when designing a network:

- > The expected number of visitors: Most of us these days use several types of mobile device. Particularly for business events, users often take a tablet and/or laptop in addition to their smartphone. For instance, if 400 visitors have registered for an event, that number should be multiplied by 3 to allow for the extra mobile clients.
- > Peak loads: These occur at the beginning of the event, during breaks (when visitors access their smartphone, tablet or laptop to finish their work, check social media, or read the latest news), or when the event app becomes available, as all of the visitors want to download it at the same time. It is important to determine the bandwidths required during peak-load periods at an event and to be sure that the hotspot is capable of providing these bandwidths.
- Availability of the network devices: If the existing network is unsuitable, this can be upgraded in cooperation with the venue's owner either by renting or purchasing additional equipment.



3) The right Internet connection

Once the network planning is done, it is time to take care of the physical connection. A common assumption is that one third of the total budget goes toward broadband access. In many cases, however, one or more ADSL connections simply are not enough. You should always have a backup plan. A good option is to rent a fiber-optic connection. In combination with one or two ADSL lines, the result is a highly reliable connection. A 4G/LTE backup further guarantees the performance of electronic payments whatever happens. After all, telecommunication providers are not immune to making mistakes.

4) Network supervision

The magic word here is: Monitoring. IT experts observe what is happening on the network throughout the event. One single network error can lead to a domino effect that causes all sorts of other errors. A smart way to monitor the network is to get the visitors involved. After all, they are the first ones to be affected by possible disturbances or interruptions. One possibility would be to set up a Twitter or other social-media account where users can report any malfunctions on the network.

5) Prioritization of special event apps

If an app was developed especially for the event, it needs to be usable at all times during the event and so it requires priority on the network. Specialized Wi-Fi technicians know how apps communicate and can ensure that the app always has the necessary bandwidth and has priority treatment over the other forms of communication.

6) Cost amortization

The size of the budget necessary to finance wireless Internet access at an event can, of course, vary widely from case to case. Many factors contribute to the final cost.

It goes without saying that a simple network means much lower costs. However, the additional costs of greater bandwidth can quickly be regained by monetizing the wireless Internet access. One example would be the placement of advertising on the welcome page displayed to visitors logging in to the Wi-Fi network. Placing ads or linking to websites and social media channels can lead to additional awareness being generated there. A sponsor could also place ads that are displayed to Wi-Fi users every 30 minutes or so. This does not necessarily have to interrupt what a visitor is doing. You could even consider offering "packages" for a small fee that offer visitors faster Internet access that is free of advertising. Sponsorship helps to regain those costs, at least in part.

Summary



The success of Wi-Fi at events can only be measured by the absence of complaints. After all, nobody talks about an infrastructure that quietly gets on with its job. There are a number of steps to take to achieve this level of satisfaction, from defining the requirements and determining the limitations from the conditions at an event, and then the actual implementation of the wireless network itself. This may mean the expansion of an existing network, or even the complete installation of another independent network. Not to be forgotten is the WAN connection, which can be considered to be the key to a successfully planned network. The Wi-Fi may work perfectly, but a bottleneck to the outside world will mean that nobody is satisfied with the network.

During the event, you constantly have to keep an eye on whether anything on the network is unstable. This is an area where it makes sense to integrate the network users in order to pick up on any emerging problems early on. Although network monitoring may look like a part-time



job, the demands of Wi-Fi at an event today actually require real specialists. The costs must also be considered, as these can have an impact on the success of the event. All too frequently, the possibilities of sponsorship and other marketing opportunities on the Wi-Fi are ignored. Without a doubt, Wi-Fi is a must-have at any event these days. The steps listed here should be followed to make sure that it is a satisfying experience for everyone involved.

