

II- KEY TO A GREAT USER EXPERIENCE: AT A GLANCE, IN ONE CLICK

1) Disintermediating access to information: Rich Media browsing

In the late 1880's, Almond Strowger, an undertaker from Kansas City was unhappy when he found out that the telephone operator was routing business to his competitor, who was the operator's husband! He subsequently invented the first version of a switching system that was to remove go-betweens and power direct connection between users.

Today, when we give a call, we establish immediate connection. However, voice access routing does not quite apply to data. For example, reading the news, going through a list of programs using a WAP browser, or zapping through a list of TV programs is cumbersome. If you want to move from one application to another, you must quit the video player, go back to the browser page, select the desired channel and reopen the player, etc. In other words, navigating across different services requires complex multiple clicks and actions, which can lead to frustration, lower uptake of these services, and consequently, lower data ARPU. In addition, most browsers work on the principle of downloading a complete file and then rendering, which can cause significant latency

People using their handsets are usually on the go. They want things now. The Streamezzo Rich Media Packaging technology precisely enables disintermediated access to services, provides instant access to data and allows users to navigate within and across services effortlessly without having to quit one application, go to another, and return to the original application. Subscribers across the board are often reluctant to browse the Mobile Web primarily because they are forced to use browsers as intermediaries to access data on small screens¹. On the contrary, the Streamezzo Rich Media browsing does not require the mediation of a browser, which reduces latencies, increases stickiness to the services and hence produces improved data ARPU, subscriber growth, and lower churn rate.

2) Good navigation tools to generate active navigators

a) "My" home screen

The so-called "idle screen" is the first screen that users see on their devices and is increasingly targeted as a possible advertising place of choice. Why not! This is easy, as it is easy to let them dress this idle screen with the wallpaper of their choice. Why not go a step further by first allowing them to transform this screen into *their* home screen for *their* device?

Figure 15: From meaningless idle screens to "my screen"



In this example (left), data provided by the widgets, rotates every ten seconds. Using the right and left arrows, you are able to check the weather in your area and get the latest breaking news.

The top five choices (more can be included) are selected from the Web interface. The « + » button displays the list of all the other services that are available to the handset.

¹ The success of the iPhone shows that not all browsers are to blame. Its main, yet major, limitation is that Safari operates in the closed environment of an isolated device with non-portable characteristics.

Handsets are very personal items, much more so than PCs. The currently fairly low usage of mobile services is primarily due to implementations that ultimately alienate users from the very device they selected. The considerable discrepancy between the immediacy they experience when they make a call and the byroads they must take to get to data services is simply not acceptable.

Using the Streameezo platform, handsets become ready-to-use navigators that directly take users to their subject of choice, regardless of whether it is a piece of information within a complex arborescence or a simple widget.

b) Navigation dashboards and Electronic Service Guides

Reaching out to the people through an intuitive interface is always the fastest way to make them want to know what you have to offer: Streameezo offers a wealth of user interface design capabilities that all smoothly contribute to transcend the size of the handset's screen. Here below are a few samples of navigation dashboards.

Figure 16: Examples of navigation dashboards



The excellence of the Streameezo navigation holds true regardless of the content involved.

Figure 17: Electronic Service Guide



In the example to the left, users access TV channel of their choice. The graphical interface presents an Electronic Service Guide (ESG). Clicking on an icon displays the corresponding channel as well as information related to the channel. Getting back to the ESG is just as simple, only requiring the user to click the Back button (in this case).

The user can also switch from one grid to another to see an additional mosaic. The number of summary screens on this virtual carousel is not limited. Depending on how access to services is configured, this Electronic Service Guide can also be customized and include, for example, a carousel that features the user's favorite channels only.

When users browse the ESG to find another collection of programs, they can switch to a new program directly without having to go back to an upper node, as shortcuts between "pages" are possible.

3) Experiencing the Mobile Internet without restriction

Browsers for Mobile Internet treat handsets as keyholes through which users painfully take a peek at the Web. Streameezo views them as agile instruments, handy spacecrafts of sorts, to discover the Mobile Internet without restrictions in a single click.

The foundation of this perspective lies in the Rich Media Packages that developers create using the Streameezo Workbench. These packages are condensed packs of interactive data that point to other packages, virtually indefinitely. Because of this technology users are able to discover contents the way they want, but always effortlessly. In short, Streameezo gives handsets a depth that largely makes up for their smaller screen surface. Each click leads users to immediate content access both within a given application and across applications.

a) Visibility, accessibility, legibility, readability: Creating stickiness

Visibility, accessibility, legibility and readability are the key principles that drive a successful interaction between a reader and any content, and the guidelines of a Streameezo-enabled interface.

In the example below (Figure 18), users are able to:

- See what interests them because they are first able to tell from a glance what the document is about.
- Click on the headline area and thus gain instant access to the news document as well as skim through the document to further assess if it is of interest to them using the scroll bar.
- Read the document because the fonts are perfectly adapted to the screen.
- As a result of this positive experience, users are more like to continue to explore what is available, such as, for example, access to the Photo gallery to browse through the various pictures.

Figure 18: Navigating with an application: News at a glance in one click



The Streameezo Rich Media environment not only delivers the Mobile Internet for handsets, it actually encourages users to continue exploring – provided that services are expressed in a language they understand or like to read. In this respect, showing attention to customers may require more than addressing them in the language of the country where they currently live. Optimal service may also be to consider the language of country from which they may come. It is critical to always keep in mind that the primary use of handsets is to communicate via voice and that when it is possible, most people move to their native tongue to interact more spontaneously. It may be worthwhile to take this characteristic into consideration.

The Streameezo's services can be designed in virtually any language as Streameezo supports double-byte characters, which allows operators, manufacturers, and content providers to transparently combine multiple languages within the same data plan and let people choose their language of choice based on the service they use. For example, a Chinese American may favor English for business topics, but Mandarin for entertainment subjects.

Figure 19: Addressing customers in their mother tongue

Chinese...



Hebrew...



French...



Comfort in use drives continued usage, which opens up large avenues to mobile marketers. As a result, they have no reasons to limit themselves to snippets of information or believe that the umpteenth music download site is what people expect. Information can be of any type and any length. They can even leverage the long tail effect! The Streamezzo Rich Media interface enables marketers to introduce users to the depth of their catalog as easily on a handset as they would on the regular Internet, but differently and, to some extent, more agreeably. It is well known that content on page 1 of the WAP deck sells much better than content on page 2. A Rich Media presentation lengthens the very short tail mobiles usually offer, allowing display and browsing through much larger amounts of content, as well as targeted recommendations.

Figure 20: Leveraging the long tail effect



b) Unified user interface across applications: Creating viral usage

Stickiness for a service or an application is primarily due to the ability to ensure that each click leads somewhere, in other words, that each action has a value from the point of view of the user. The same holds true when multiple applications are involved. If going from one application to another is convoluted, chances are that users will not try - especially if they have already struggled within one application to get what they were looking for.

While seamless navigation across applications is extremely hard to implement when applications are independent Java applets, it is a given using the Streamezzo platform, not only because Streamezzo operates as a common foundation for multiple applications, but also because the Streamezzo Rich Media Packages are intrinsically relational and are, consequently, able to activate applications that were not designed using Streamezzo. As a result, navigation within an application and across applications, whether all Streamezzo-based or not, obeys the exact same *one-click principle*.

As already shown in section I (figure 5), a user can instantly access and browse the phone calendar by clicking on a selected day. Conversely, a user browsing through a TV program can immediately add a reminder for a show in his/her phone calendar instead of having to write it down on a piece of paper to later re-enter the information manually. Likewise, a user browsing through the yellow pages can immediately add a

telephone number in his/phone book instead of having to write it down on a piece of paper to later re-enter the information manually. In short, reading a telephone number in the Yellow Pages is instantly actionable, which is a basic rule for e-commerce initiatives.

Figure 21: Effective e-commerce implementations: From data to voice in one click



Streamezzo lets users navigate freely across applications regardless of the nature of the information at play. In the example below, a user is watching Beyoncé on a TV channel. A message asks if he/she is interested in getting related content available on the Internet. If he/she clicks "Yes", the user interface displays a list of songs. The left window is resized, and while the TV program continues, the user can browse through the various video clips.

Figure 22: Live TV, Video on demand, HTML, user generated content at once



c) The low-latency user experience: Speed

In addition to one-click navigability, speed is a critical requirement. Multiple aspects of the Streamezzo design especially contribute to maximizing the end-to-end performance, regardless of the device:

- The Rich Media Packaging technology itself, which enables the creation of structurally relational and interactive data sets and disintermediates access to the Mobile Internet.
- The optimized CPU utilization and power consumption on the device, as well as intelligent caching and programmable caching policies.
- The On Demand Real-time access to information powered by the Streamezzo Dynamic OTA (Over the Air

Provisioning).

- When video and television are involved, the Streameezo Fast Switching Server capabilities, as well as disintermediated access to streaming servers.

For more details about these topics, please read the first section of this document.

4) User ergonomics: The art of charging less to sell more!

Providing a unified user interface where each click has the intrinsic value of letting users access content regardless of the application is critical. A satisfied user is also more likely to become a better customer. The Streameezo Rich Media interface maximizes usage and encourages users to discover an increasingly larger number of applications, in sharp contrast with most browser-based approaches.

A remarkable innovation at the time it appeared, WAP now hinders the expansion of the Mobile Internet. WAP browsers have an extremely modal interface that engages users in a large number of actions whose sole purpose is to let them access their destination. The Streameezo Rich Media browsing experience removes all these valueless steps.

Figure 23: Before - Browsing through Amazon.com using a WAP browser

The user must scroll the home page and click on the "more categories" item... ...Then scroll the long list of sections... ...Finally click on the corresponding link "VHS."



Figure 24: After - Browsing through Amazon.com using Streameezo

In just one left click the user goes to the "more categories" page He/she presses 3 to select the U-Z tab... ... Then clicks on the corresponding item: "VHS."



For the same operation, the number of steps involved using a WAP browser is 21, against 5 using the Streamezzo Rich Media browsing in the worst case scenario – for if you consider a home screen and have widgets or RSS feeds, there is no click at all! If you look at the news three times a day, you have lost $3 \times 30 \times 10^3 = 15$ minutes in one month. If you are interested in four services and face a similar experience, you have lost 4×15 minutes = 1 hour in one month. If you have a data plan that gives you 300 minutes, you have lost 20% of your plan simply struggling with an inappropriate interface. If your plan has no limit, you have still wasted one hour. The difference in latency between a WAP access (over 3 seconds) and a Streamezzo-powered rich media access (under 0.5 second) is at least 80%

Multiplying valueless steps prevents usage scalability:

- 1) Consciously or not, users get tired of performing an excessive number of manipulations. Users give up because the experience is too cumbersome or too expensive, or both.
- 2) Based on the previous calculation, and for the same data plan, a Streamezzo user is able to access the same service at least 3 more times per month. Think! If the amount of time spent on the browsing interface had been dedicated to using services, \$28.5 Billion would have been added to the current Mobile Internet market estimated to be \$9.5 Billion in 2007.

User ergonomics is a critical market driver and part of an overall quality of service that the mobile industry owes to users - and this for its own benefits.

Currently users pay significant amounts of money for voice and data plans with few services and end up spending more money on cell phones than on computers. As a result, their loyalty is clearly up for grab as is clear from the Apple example. The iPhone market may still be small, but the fervor of its aficionados should not be understated. If it is true that the iPhone is a closed world that cannot be extended to the whole industry, its success unambiguously shows where the trends are. This makes it even more urgent for the non-Macintosh world to look at development and deployment platforms that offer professionals the ability to adopt a similar all-encompassing strategy and get up to speed with what the word is about today.

III – MOBILE WEB 2.0 TODAY: INTERACTIVE EXPERIENCE WITHOUT BORDERS

The Streamezzo Rich Media platform was built from the start around the core concepts what the Web 2.0 and Web 3.0 have now made popular. Whatever the environment, PCs or mobile devices, people expect a self-service and participative environment where they can freely connect, consume, share and generate information.

Streamezzo is all about interactivity, connective intelligence, and convergence. This section provides three complementary examples of interactivity:

- The Streamezzo Interactive ODP, powered by a unique Dynamic Real Time OTA, illustrates the interactivity between users and service providers in general, as well as the grassroots power of users. They are the ones calling the shots.
- The exceptional range of alerting and advertising capabilities enabled by the Streamezzo architecture.
- The revolutionary device convergence enabled by the Streamezzo technology.

1) The Streamezzo Web 2.0 ODP

The acronym "ODP" (On Device Portal) appeared about three years ago as a way to circumvent the limitations of WAP portals. Although the definition of ODPs remains somewhat imprecise, their merits are clear. Two of them are worth emphasizing:

- Contrary to WAP portals, ODPs allow storing, accessing and running more than one application locally.
- Services can be provisioned remotely, which enables content providers to have a better knowledge of what users want, see how often they interact with the services, and establish a closer relationship with them to expand both the services market and targeted advertising.

The ODP trend has triggered a plethora of ODP "solutions". Yet the market is only expected to reach \$1.4 billion by 2009 according to ARCchart². Why so little when there are close to three billion phones in use? The truth is that while ODPs have emerged to address the slow take-up of mobile data services, their success depends on the exact same requirements: creating mobile data services that work and are compelling! This requires an architecture providing full scalability across devices and OSes, and technologies capable of dynamically updating services and aligning content providers' offerings and users' expectations.

a) Scaling up the ODP potential

Because the Streamezzo platform is a device, OS and network agnostic platform, content providers can design solutions that address a much larger potential market while keeping development costs under control. To further simplify the development tasks, Streamezzo delivers an ODP Factory with a large variety of ready-to-implement modules. In short, Streamezzo not only guarantees the scalability of solutions across devices, but also their fast design.

² Matt Lewis, research director at ARCchart quoted by Monica Allevin in WirelessWeek - May 15, 2007

Figure 25: The Streameezzo Rich Media ODP Factory



b) Discovering the Live Web: Real-time, dynamic OTA

Handsets have limited CPU and battery power. Does it make sense to load devices with as many applications as possible to maximize the offline presence? Even if the best nanotechlogists tended 100 GB of storage, the purpose of handsets is not to store everything possible locally or to transform handsets into self-sufficient miniature PCs (whose mission was not to load the Web either). The reality is far simpler: ODPs are personalized media to not only access "data on the Web," but also to become active contributors to the Web of data.

On Device Portals are intended to let users *interact* with the largest possible spectrum of information available on the Web. Streameezzo ensures that ODPs are equipped to fare efficiently. The application on the device has the smallest footprint in the industry, and services are intelligent, *dynamically* downloading content from the server. Such *Real-Time Dynamic Download Over The Air* capability is a major advantage of Streameezzo, as it enables content providers to seamlessly and dynamically add/upgrade/update services on devices at all times. As a result, a Streameezzo-powered ODP is not a repository of applications and services, but a beachhead for content providers to fulfill users expectations extremely fast, and a live platform for users to obtain services on demand.

Figure 26: Streameezzo-powered ODP (designed by a European operator)

The user selects a service by scrolling the animated carousel.

In the music store he/she can browse albums, listen and buy singles.

In a video sharing service he/she can watch the latest most popular video and post comments.



• **Bridging the gap between "local" and "remote": Real-time interaction**

The Web 2.0 is all about removing barriers between what is online and offline, and assuring a fluid and

invisible transition between both. Users must be able to help themselves to services when they want, as they want, and *à la carte*. The Streamezzo *Real-Time Dynamic Download Over The Air* blurs the frontier between what is local and what is remote. This technology brings considerable benefits:

- **For users:** they can seamlessly operate locally and download applications and services from a WAP site or sideload them from any kiosk via Bluetooth. What matters to users is an experiential low-latency continuum and ease of access at any time.
- **For content providers:** Benefits are twofold:
 - 1) New features added to services do not need to be repackaged into new "releases". They are automatically made available to customers as ongoing services that undergo continuous improvements. As a result, content providers are spared from the cumbersome and costly tasks of redeploying services at the device level.
 - 2) They keep in contact with users at all times, learn from them and are able to adapt services quickly - this at minimal cost given that upgrading services does not necessitate redeployment.

Figure 27: ODP without and with Streamezzo
Updating an ODP without a RT dynamic OTA.



Actions required from the end user



Updating an ODP using the Streamezzo RT dynamic OTA.



No action required from the end user

• **Scalability: Offering a high diversity of services today**

The mass market for mobile applications is here today. Services diversity is not only what stimulates new markets in general, but also a necessity for a market potentially addressing over a billion users, from all walks of life and with considerably different centers of interest. Defining in a granular fashion what each category of users will use on their devices is essential. Therefore, keeping close contact with customers is also the most efficient way to keep them informed about new services. Streamezzo includes an Analytics Module that delivers feedback data to marketers and helps them make informed decisions, as well as create personalized advertising campaigns.

Figure 28: Measuring the efficiency of an ODP



Continuous contact with customers allows services providers to analyze what customers use and/or promote to others.

c) ODP: A participative P2P environment

Genuine interactivity is bi-directional and participative. Devices are not simply receptacles that users can customize to their liking (look and feel, addition of widgets and feeds -news, weather, traffic, etc.) and from which they can download what they want from any source. ODPs can also support the ability for users to communicate with others and generate content spontaneously either by sending or collaborating on information in multiple ways: uploading audio or video files, participating in a quiz or in a vote, inviting peers to join a game, being part of an active community, etc.

• **Dynamic Real-time upload**

In the same way that users can download content quickly and unobtrusively, they can also upload content on the server for others to use. To ensure that the upload operations do not hamper other usages of the device, Streamezzo automatically and transparently manages the progressive upload process by automatically disassembling the files to upload and assembling them.

Figure 29: Interacting with peers

The user browses through the pictures he/she wants to share.

He/she checks one the pictures full screen.

He/she proceeds to the transfer of the pictures.



- **Real-time user feedback and interaction**

Figure 30: Real-time user feedback and interaction

Real-time user profiling



Quiz



Voting

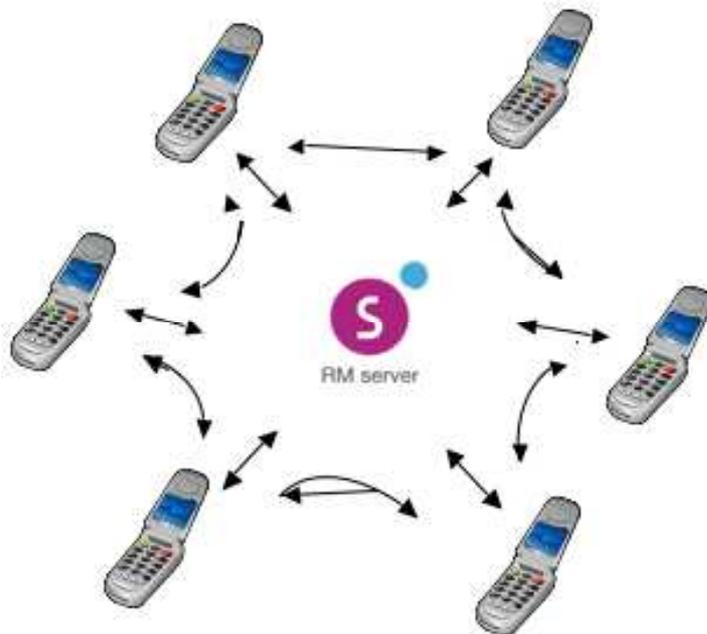


- **The Streamezzo ODP: Both a client and a server**

As noted earlier, the emergence of ODPs comes from the need to address the shortcomings of WAP portals. The idea is to empower users by giving them more offline capabilities in order to encourage them to download additional services, which in turn gives more knowledge to content providers about what they want. The limitation of most current ODPs, however, is that they are rarely device independent and that over the air provisioning remains a cumbersome process. The Streamezzo ODP has two major advantages:

- 1) It is a dynamic, real-time OTA that blurs the distance between what is local and what is remote and introduces a seamless and continuous interaction between the user – the client – and the content provider.
- 2) The second characteristic of the Streamezzo ODP technology is even more important. Because of the Streamezzo's real-time dynamic upload capabilities, each device is a virtual server offering content to other clients. Then Streamezzo acts as the broker of a peer-to-peer relationship between devices, capitalizing on the power of users.

Figure 31: The new dimension of ODPs: Devices as networked mini-servers in a P2P architecture



Streamezzo powers an overall participative and cooperative architecture where user-generated services may first live alongside vendors-driven services, but will end up reshaping the vendors-driven services themselves. In other words, the Streamezzo approach considerably accelerates the dynamics of the mobile services market and immediately places the Mobile Web within the Web 2.0 and Web 3.0 era. While vendors of the first era of the Mobile Web will continue to try to make money by "controlling" users, by only "serving" clients, and shape their ODPs to their own convenience (and do so with moderate success), the successful vendors of the second era are those who will leverage the power of the serving-clients, and become the catalysts of and, consequently, the winners in an exponential services growth. The success of companies such as Google has proven that the key to competitive advantage lies in the capability of vendors to understand the immense value of the data that users add to what they provide. Taken from that angle On Device Portals have a gigantic potential! The "long tail" is a 3 billion users pool able to serve content!

2) The "Sell Phone Revolution"³: From interstitials to surround sessions

A cell phone is virtually always on – which means that users can always connect or be invited to connect to a service. The unique efficiency of Streamezzo for advertising results from the combination of several unique aspects of the technology:

- **Dynamic, real-time OTA:** The dynamic, real-time OTA allows for up-to-the-minute update of any application or service, and, consequently, instantly targeted advertising within or between services.
- **Device-level optimization:** A fully optimized management of the internal resources of the devices as well as the Streamezzo rendering and font management technologies guarantees the best user experience.
- **Rich Media Packaging:** The intrinsic intelligence of Rich Media Packages enables advertisers to combine all types of data at any time and from anywhere.
- **Standards-based architecture:** The standards-based Streamezzo architecture interfaces with most Ad Servers and provides personalized information about each user through the Streamezzo Analytics module.
- **Interoperability across applications:** The Streamezzo interoperability across applications and services enables users to switch seamlessly from one application to another (for example from an entertainment site to a store), with phone books or any other built-in applications on a device.

³ Title of an article published by BusinessWeek, April 23, 2007

Some of the multiple benefits for advertisers include:

a) Precise targeting

Any user can be qualified with the utmost accuracy. If you have a GPS or, even better, an LBS service, a Streamezzo-driven advertising campaign can alert you if there is a promotion on items for which you have shown interest in the mall where you are walking. This level of granularity is possible today as Streamezzo transparently combines data from multiple sources within a unified interface - in other words, delivers mashups on the fly.

This level of hyper-targeting may cause privacy advocacy groups to cringe. It is up to vendors to address potential problems and ask users, if, when, and how they want to be alerted, and enable them to set up their own rules.

b) Wide range of ad designs

The Streamezzo enables the largest possible range of advertising styles from simple context-sensitive texts to elaborate video animations, with clicks to call or clicks to SMS. The ad specifications can also be of virtually any type ranging from very short interstitials to clickable banners, rectangles, skyscrapers, or surround sessions enabling advertisers to create a story line that develops as users navigate within an application. Because of the powerful Rich Media capabilities offered by Streamezzo, only creative skills are the limit of what can be conceived.

Figure 32: Sample advertisements

Interstitial advertising when loading content



In page banners



Expandable banners



c) Massive audience and massive content

The slow take-up of mobile data services has inevitably translated into a slow take-up of advertising. As indicated earlier, by being OS and device agnostic, Streamezzo eliminates the siloed implementation of services, and its overall technology considerably simplifies access to the Web, which enables even small vendors to also implement mobile services at reasonable costs.

The principles of successful advertising on the Mobile Web are the same as on the Web and results from the combination of small sites. The long tail effect is also what will take Mobile advertising off the ground – with one key difference, however: The potential of the Mobile Web could be significantly higher. As previously indicated, if customers use ODPs as means to also create and serve content (and not simply to consume content), the long tail effect could change to an order of magnitude.

d) Real-time copy-testing

The Streamezzo dynamic, real-time OTA enables advertisers to easily copy-test their advertisements and based on initial reactions, select what works best for a given audience. In reality, no advertisement needs to ever be in a final state. Just as any content served by a content provider, a piece of advertising is an ongoing

service that is likely to improve continuously based on users' reactions.

3) Personalized and mission-critical alerts

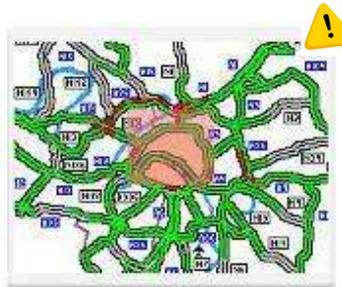
In the same fashion the Streamezzo platform is able to push to users any form of advertisement, it can push alerts, users permitting, regardless of the application that this user is currently using, a simple Web site or a TV program. Today's generation likes multi-tasking. You may be watching your favorite singer on a TV program and be alerted that another user has just posted a song on You Tube or an image on Flickr and check what it out. You may be checking your eBay bids and receive an Amber alert.

Figure 33: Sample alerts

As an investor you want to be alerted each time the NASDAQ goes up or down by at least ten points.



As you drive in Paris, you want to be informed of the most current traffic jams.



Whatever you are doing, you want to receive any Amber Alert issued in your area.



4) Streamezzo: A key building block in the content convergence era

By disintermediating access to data and disengaging data access from the constraints of browsers, the Streamezzo platform also allows operators to enhance Triple Play and Quadruple Play services with Rich Media.

Streamezzo has already provided key proofs of concept in this area. We have ported the rich media client on a set top box, which is the same as the one on phones. By having Rich Media Client on the Set-Top-Box platform, a service developer can develop services using the same set of tools that are used on mobiles, and create the same look and feel and preferences. We have demonstrated this technology with a partnership between a broadcaster, Set-Top-Box provider, and a middleware provider. We demonstrated during a live broadcast that an abduction alert can be inserted by the broadcaster. This technology can be easily and transparently demonstrated on other platforms, such as, IPTV.

Figure 34: Multi-play services



CONCLUSION

Platform changes make development models and application paradigms evolve. Web applications are not offsprings of PC products; they are as rich and as elaborate. They reflect a different need. Likewise mobile services are neither Web nor PC applications; they are services of a different nature within a completely different industry framework and represent a phenomenal market potential. Streamezzo delivers the technology that will make this market a reality. "Cellular data services, mobile Internet, and upcoming 4G technologies hold out the promise of Internet-like ubiquity for mobile applications, but the sheer complexity of porting code to dozens of platforms and hundreds of devices is delaying the market," said Gerry Kaufhold, Principal Analyst with In-Stat. "Streamezzo's solution presents a breakthrough that can jump start revenues for carriers, content providers and application developers."

In order to better assist the various stakeholders of the Mobile industry, Streamezzo offers a variety of complementary programs that can all be customized to specific needs. Here below is a summary of the three main programs:

- Technology Assessments and Strategy Definition
- Developers Program
- Migration from WAP to Rich Media

Technology assessments and strategy definition

The purpose of the Streamezzo Technical Assessment Program is to help a company establish a clear status on the various company's initiatives regarding mobile services and applications and define what strategy can be adopted based on the objectives or needs expressed by the departments involved in the process. This initial coordination is destined to place all the people involved in the mobile services strategy on the same page and define a consistent service-oriented strategy based on the existing assets and available resources.

These technology assessments are performed by a Streamezzo consultant, or by an external consultant certified by Streamezzo and usually take a week. Streamezzo then delivers a summary report and issues practical recommendations adapted to the situation of the company.

This Expert review can be combined with training sessions on the various technologies available to design Mobile Services and complemented by Quick Start and Prototyping sessions.

Developers program

The Streamezzo platform is now freely available to developers, system integrators, and the rest of the mobile community to develop mobile applications. As an open, standards-based platform, it is accessible to a large number of developers. However, given the richness of that platform, developers may want to accelerate their learning process. Therefore, Streamezzo has developed a three-level training program:

- Quick Initiation (2 to 3 days). These sessions primarily provide an overview of the entire platform and its various capabilities, and help developers to better leverage their prior experience with other development tools.
- Optimization training (2 days to one week). Once developers are familiar with the platform, this optimization training helps them optimize their code and consolidate the best practice development and deployment methodologies for a given corporate environment. This training is based on examples provided by the developers themselves and consists primarily of hands-on sessions.
- Assisted development
The assisted development program is a continuous assistance provided by Streamezzo consultants or Streamezzo-certified consultants. The length and the detailed content of this assistance are agreed upon between the corporation and Streamezzo. The help provided by Streamezzo may be diverse, ranging from a regular technical review of the services created by the internal teams or system integrators selected by the corporation to the development of sample services or sets of services

Migration from WAP to Rich Media

This program may be directly linked to the Technology Assessments and Strategy Definition program. It is intended to help content providers to take the best advantage of their sometimes significant investments in WAP portals. These portals are a valuable stepping stone, and can be enhanced with Rich Media.

Streamezzo has developed a methodology that enables professionals to create a completely refreshed rich media portal while leveraging the existing content and content management practices already in place. This process can be gradual and start with only a selection of services.

The diagram below shows the partial migration of a WAP portal.

Figure 35: Upgrading a WAP portal

Before

Search

Category Top Sellers

[Books](#)

[DVD](#)

[Music](#)

[More categories](#)

[Your Account](#)

[View Shipping Details](#)

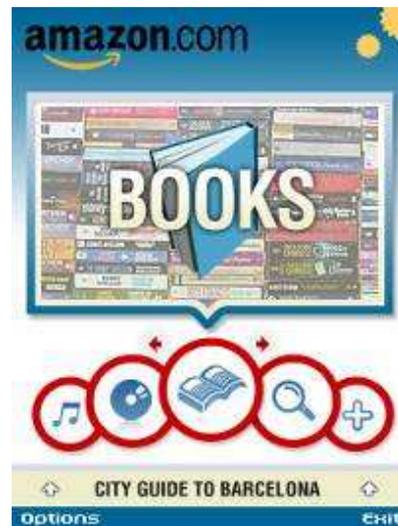
[Shopping Cart](#)

[Wish List](#)

[Amazon PC Site](#)

[Help?](#)

After



The customer selected to add rich media to its popular services and noticed a significant traffic increase. For example, the Vodafone Live 2.0 service launched by SFR has reported that moving from WAP to Rich Media has tripled the number of subscribers in 6 months. Also, the Streamezzo technology has allowed SFR to add new innovative services incrementally. To experience the Vodafone Live 2.0, you may use the following url: <http://www.sfr.fr/infos-loisirs/infos-mobile/vodafone/vodafone-live-20/decouvrir/>

**For more information, feel free to contact us.
Contact information is available on the Streamezzo corporate Web site:
<http://www.streamezzo.com>**