

Content download clients – a way to close the gap between mobile and media industry

Market and technology background

Content download clients represent a new way of distributing mobile content to users, going beyond the established service enablers such as SMS/MMS (push content e.g. for news and sports), WAP (news browsing over a mobile portal) or media streaming (watching video clips from mobile portal).

While traditional service enablers all feature individual characteristics, they have one thing in common: Their user interface is defined by embedded handset software and cannot be changed after production, limiting content providers' and operators' abilities to introduce their own branding, or adapt the user experience to the individual content offering. Another aspect to consider is that SMS and MMS were primarily designed for communication rather than for content delivery and presentation purposes.



It is therefore interesting to explore alternative service enablers for mobile content. Indeed, most of today's mobile phones are equipped with a software environment (based on Java or BREW technology), allowing the installation of new applications. More advanced devices, such as smartphones, come with an open operating system (currently Symbian, Microsoft or Palm), where third party applications can take advantage of an even richer functionality.

In Europe the majority of newly sold terminals can be used to install specific programmes designed for downloading and displaying content, changing the phone's user interface or bringing applications to the phone – programmes that we refer to as content download clients in the context of this document.

Introduction to content download clients

Content download clients are programmes installed and executed in a phone to enable the download and display of mobile content or applications. The clients communicate with server software to receive content and client updates.

Sonera "Mobile Fun", by Viisas Communications



We categorise the clients by **purpose**: There are 'content viewer' clients for single or multiple content channels (newspaper, sports, erotic pictures). 'User interface' or 'screen style' clients sit on top of an application framework (such as Nokia Series 60) to personalise menu layout and structure, e.g. with pictures of a favourite soccer club. More comprehensive, 'UI and content provisioning' as launched by Sonera in Finland called 'Mobile Fun', is a client acting as a content catalogue, enabling the service provider to 'push' new content to a user's terminal easing the content discovery and the purchase process.

There are several ways of **provisioning** these programmes to the phone, some of which initiate the billing process at the same time:

- Factory pre-installation on phone memory or storage card (e.g. Nokia 6600)
- Download by the user over a mobile portal
- Push download initiated over SMS or over a web/WAP page by the end user or another entity (advertising company, operator)
- Over memory card sold separately from the handset

Pro's and Con's

Compared to the established means of content delivery described above, content download clients have the following advantages and disadvantages:

Advantages	Disadvantages
<p>+ Feature-rich Can include extra functionality, e.g. a news ticker in addition to article browsing</p> <p>+ User-friendly</p> <ul style="list-style-type: none"> ○ Superior usability, once the application is started ○ Offline reading function can reduce data traffic and improve user experience ○ Background download function and pre-defined user interface elements reduce waiting times for download and interaction with the server <p>+ Flexible</p> <ul style="list-style-type: none"> ○ User interface can be adapted to the service's requirements (e.g. content reading, picture viewing) or the service provider's brand ○ Client software can be updated over the air ○ While some large operators aim to influence the handset's native UI design, smaller operators lack the necessary scale. UI clients enable this also for lower handset volumes <p>+ Tangible</p> <ul style="list-style-type: none"> ○ Comparable to Java games, consumers more easily associate value to a mobile media service if they see a dedicated programme and icon for the service on their phone 	<p>- Installation/provisioning So far, few phones have pre-installed content clients, so that an installation is necessary before content consumption</p> <p>- Handset requirements Sufficient memory and a large enough display are needed to deliver a compelling user experience. More advanced clients require an open operating system (Symbian etc.)</p> <p>- Accessibility With some terminals starting a Java application requires the additional step of accessing the JAM, choosing the client and starting it</p>

Pricing models

There are currently three pricing models applied in this space: First, the client can be offered for **free download**. This will mainly be done if it is designed to initiate additional traffic and especially content purchases, such as ringtones or Java games in case of an operator's "content catalogue" or other traffic-generating applications.

Similar to ring tones or logos, the so-called 'screen style' clients are currently offered against a **download fee**. For content viewer clients, the business model is to charge a **subscription fee** (usually € 3–5 on a monthly basis; or weekly charge). This way, content providers can offer such clients directly to consumers.



Conclusions – who ensures that consumers can enjoy content download clients

While the content experience using a WAP browser has considerably improved since the launch of GPRS colour handsets, some shortcomings of mobile browsing remain. Addressing these has become possible by providing specific content clients, giving users a more comfortable and personalised way of accessing content over their phone.

Not only consumers benefit: Media companies obtain means to reach mobile customers directly, without having to compete for the visibility in the operators' mobile portals. Branded content download clients can act as marketing tools for both digital and physical media content. The service billing can be realised over premium SMS, alternatively the service can be bundled into existing media subscriptions for newspapers, premium websites or even pay-TV packages.

Operators will have to analyse whether their service offering can benefit from this new technology. Some operators (e.g. Verizon) have already chosen to resell content-provider branded clients, as the improved user experience can increase traffic revenues and create premium content revenues via revenue sharing. On the other hand, operators aim at establishing their WAP portals as the prime sales and consumption channel for digital content, which can lead to a conflict situation and puts more pressure on product management.

Handset vendors will improve the usability and functionality of mobile browsers, eliminating some of the advantages that content download clients currently offer. On the other hand, also Java technology will become more feature-rich, and future handsets will become more advanced in terms of their ability to be updated over the air. Therefore the categorisation of clients presented in this document will evolve in the next few years. This development can partly be seen as a strategy for vendors to market and sell associated services directly to phone users.

In the short term it is clear that the new potential brought by the latest Java handsets, and operating systems such as Symbian, means increased business opportunities in the mobile media space, and enables people to better use their phone for business and entertainment content services. Northstream is working with operators, handset vendors, content providers as well as application developers to capitalise this market opportunity.

Acronyms

JAM	Java Application Manager
MMS	Multimedia Message Service
SMS	Short Message Service
UI	User Interface
WAP	Wireless Application Protocol

Contact

Northstream has studied all aspects of the mobile content business and is well positioned to help industry players on how and when they best can benefit from these opportunities.

Please contact us if you would like to find out more about this or about our company and the services we provide: E-mail us at info@northstream.se or call us at +46 8 564 84 800

About Northstream

Northstream provides strategic technology and business advice to the global wireless industry. Northstream has assembled a multinational team with some of the world's best experts and analysts on wireless communication business and technology. Northstream's list of clients includes several of the world's leading operators and system suppliers as well as some of the leading investment banks and financial institutions.

For more information please visit us at: www.northstream.se