

OMA's widening vistas

Mark Cataldo, Chair of the technical Plenary OMA talks to Intercomms about how the OMA is driving functionality forward?

Mark Cataldo, Chairman,
Technical Plenary, Open Mobile Alliance.

Mark Cataldo commenced his early career as a software engineer designing telephony software, and since 1994 he has been working on mobile services standardisation in international standards organisations. He has worked for several major international telecommunications and IT companies, and increasingly focused his career on supporting rich multimedia services over mobile networks and the internet. Actively engaged in creating the Open Mobile Alliance (which develops specifications to enable interoperable services and content in mobile and fixed domains), he was elected as the first Chair of the OMA Technical Plenary in 2002, and re-elected in 2004 and 2006. He is currently a Senior Advisor with FT/Orange in France.

Q: Has the OMA changed recently?

A: Organisationally, the only change we have had is the scope of our mission. In the past, we were focussed on the mobile side of enabling services, hence the name of the organisation. In the beginning of 2006, we changed our charter to address the provision and enabling of services on both fixed and mobile infrastructure, in particular for fixed technology which supported the IP family of protocols.

Q: What does this mean in practice?

A: In essence we carry on as normal but when we develop our technologies we are also keeping a mindful and watchful eye on the fixed industry and how we can co-ordinate and support the creation of services, not only for mobile but only for fixed too. Having done that on an IP infrastructure, we effectively encourage and promote reuse of those services to enable seamless operation across different access mechanisms.

Q: Has the expansion of the remit affected the OMA's membership?

A: In reality it doesn't, because effectively what we do is extend the IP protocol to our development of enablers, such that they increasingly focus on the use of IP protocols and therefore we encourage the re-use of underlying capabilities in those domains. Has that changed our membership? I don't think it has. We still have a steady membership and see the same faces turning up at our meetings and contributing to those standards. I think it is really the case of making sure that we remain relevant to the needs of the industry as opposed to simply trying to pull in more members and lifting numbers?

Q: What have been the key outputs since this change?

A: Within the organisation, we have introduced new enhancements to multi-media messaging, expanded and extended the scope of Digital Rights Management (DRM) by producing Secure Removable Media. In that field, our DRM enabler allows music to be securely downloaded to a device and then consumed as per the right that was purchased with that content. Those rights were effectively tied to that device so that if you downloaded that content to your mobile phone, you couldn't transfer it somewhere else. Secure Removable Media enables the rights associated with that content to be put on a different piece of equipment, say a flash card or a memory card and transported to a different device.

We have also developed and further expanded the OMA's Mobile Broadcast. Broadcast effectively enables a programme guide to be issued to a user's handset which describes the schedule of broadcast media to transmitted – think of TV channels and you have an idea of what this is. By associating content protection as well as charging and being able to pre-programme which programmes you want to receive and when, through mobile broadcast. We've seen this in proprietary models, already being used

in some countries. The OMA solution is an interoperable solution, and can be used across multiple devices and multiple operators and we are also developing a further evolution of that. We have also approved a firmware update management object enabler which is the ability of the underlying software to refresh the device, clean up bugs or add new functionality. It effectively allows over the air transmission of firmware updates in the device. If the underlying functionality is different between different devices, it then graphs that firmware and installs it on the device. In the meantime we have also approved a set of guidelines on how to use APIs' which had their origin in the fixed industry, effectively allowing applications to have a wide variety of APIs into underlying functionality and to be exploited by various applications and services. Another is the Smart Card Web Server, which effectively allows the SIM card in the device to exploit the browser capabilities on the phone. This functionality allows, in effect an operator to deploy software applications solutions and content on the phone browser and therefore have an internet or browser look and feel associated with it. This provides a much more enhanced capability for displaying this content to the user.

Q: What about the support of advertising revenue streams?

A: Something which is quite exciting are Mobile Codes. If you look at poster in the street, you may notice a coded square similar to a supermarket barcode which typically has random pattern of black and white squares on it. These contain encoded information. Using the camera phone in your mobile phone, you can scan the code, which can be used to directly deliver content to the user. For example, it may say 'set up for 50 percent off your next cup of coffee' or it may invite you to make voice call, SMS and therefore provide a one click approach to services or be able to encourage the user service. What is interesting is that there are two forms of this; where it directly contains the data or service to be

▶ consumed for example MMS sending or voice initiation, but there is also another mechanism which works in the background with the network and then converts or resolves that code to become more advanced information, a wider set of services, perhaps even a menu of selections to refine and contextualise user interests. This provides quite an exciting model to work on. It has been very successful in proprietary form with operators in Japan where it has been able to generate quite large business models. The OMA is first generating an investigatory white paper, developing detailed requirements and will then soon to move into an architectural design, to support this in an interoperable way, so it can work in multiple handsets and multiple markets and also support the roaming.

Q: What are you doing in mobile advertising?

A: There is also another OMA activity, which we are now progressing on, something called Mobile Advertising. When you are browsing the web and consuming that content, when you click on your favourite browser, you have panels and flashing displays with advertising. That advertising is, to a large extent, irrelevant to you as a user nor relevant to what you are looking for. The mobile phone is your own view of the world. You want to use the phone, set up the icons and screens and the preferences as you wish, so it is customised to what you need. What

we also have is the mobile phone which is also very much aware of your preferences and user profiles. This then enables the operator to deliver the content you have requested in the usual way, but is also dependent on the users interest and whether the user has signed up is the ability to deliver some targeted marketing and advertising to the user as part of that content and not interpreted as spam but introduce a potential revenue strain for this industry at large.

A recent survey suggested that there was \$12bil of advertising revenue in the mobile industry by 2011. By the OMA producing this Mobile Advertising enabler, we hope to be able to facilitate that and the contextualising of advertising to the user.

Q: After six years has the OMA filled in all the gaps in the standards arena and are you simply transitioning to the role of maintaining and updating this work or are there still new things to do?

A: We had an initial rush of activity, where we developed certain key enablers and we continue to maintain them. At the same time we have a very open model in terms of introducing new work and new activities within the OMA, with several having been begun over the past year and a half. The OMA has done a lot in the messaging space in terms of instant messaging, and push to talk over cellular, but what we have now done is start off a new

activity called Converged IP Messaging or CPM. What CPM does is effectively take and consolidate the existing messaging mechanisms, whether it would be your favourite instant messaging or whether it be an SMS text messaging, voice mail, or email. They each use different media; text images, voice or audio. It is very frustrating not only from an end user's perspective but also from a manufacturers view, who have to develop different boxes and even more so for an operator, who has to buy, deploy and integrate different boxes to keep up to date. What CPM does is to provide an IP based technical solution to create and deploy, IP based messaging solution which where necessary, interoperate with the existing legacy solutions. Instead of seeing one inbox for one type of images, another for emails, CPM would combine those together and provide a consistent, look and feel, regardless of the underlying technology that may be used. We are about a third or half way through the architectural design and it has a very large following in the OMA.

The OMA started with a flourish. We provided many user enablers which have undergone maintenance but at the same time we are continuing to bring out new activities and take those further.

