

Fourth stack – service-specific definition

The fourth tier in the definition stack is FMC services. Defining specific services is difficult at this early stage in FMC evolution; the majority are existing services that can be run over converged networks as well as a single platform and so cannot be defined as FMC-specific.

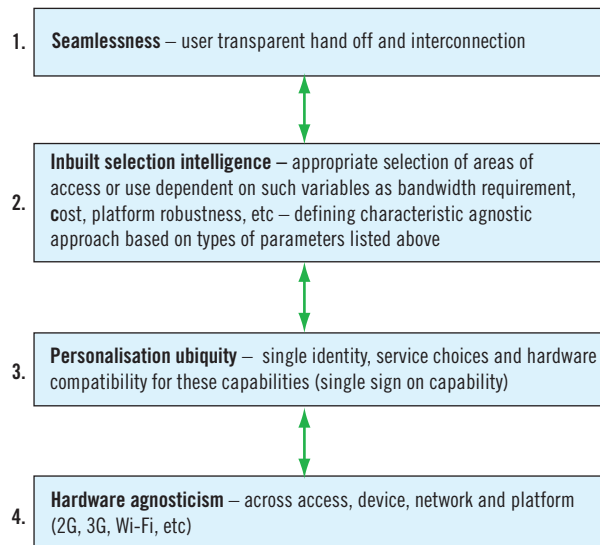
There are a few services that can be defined as FMC-specific, for example WVoIP when used in conjunction with a dual mode device. In this case, the assumption is that the business proposition for WVoIP is only viable when it is seen as an FMC service – used in both a Wi-Fi and a homezone (including office) environment. Its business case or justification is as a way to reduce opex by routing via fixed infrastructure. WVoIP is considered as an FMC-specific service in this report while forecasts of FMC services are WVoIP.

As FMC moves forwards it is likely that services will develop that use its specific attributes; these are attributes that apply across all of the definition tiers (see fig. 2.2).

Defining FMC attributes

FMC incorporates a number of the generic capabilities – or defining attributes – which are also useful in defining what an FMC service should entail (see fig. 2.2).

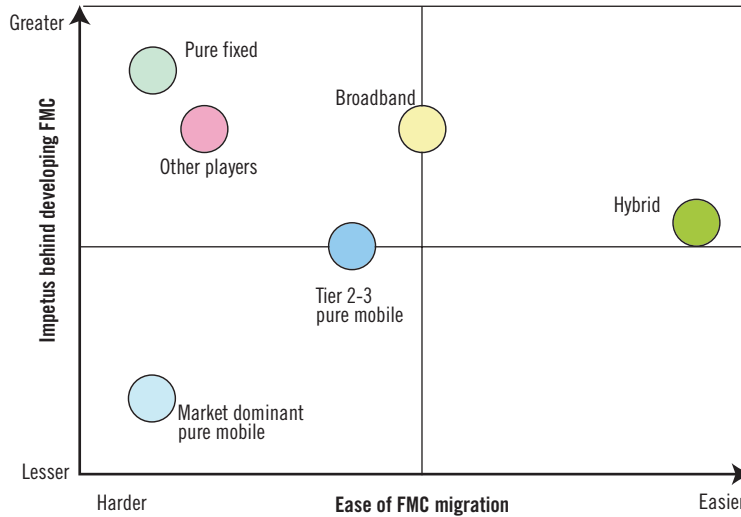
Figure 2.2: Hierarchy of FMC's defining attributes



Source: Informa Telecoms & Media

Many of these attributes and capabilities apply to the definitions previously discussed, particularly the network and device definitions. For example, personalisation is a generic feature across the device and network requiring a single identification mechanism across all a user's devices and access networks that he or she uses.

Figure 3.3: FMC value chain strategic positioning matrix



Source: Informa Telecoms & Media

Fig. 3.2 is split into four segments. The y axis indicates the impetus behind FMC to show the different value chain players' standpoint toward FMC; for example the pure fixed operators have a strong impetus toward FMC so are positioned particularly high up the y axis. The x axis indicates the ease with which the players can launch FMC services.

Pure fixed operators

As already pointed out, the pure fixed operators' impetus behind FMC relates to the desperate position they are in due to FMS. This puts their drive toward FMC higher than all the other FMC value chain players. However, in order to deliver FMC the operator must partner with a potential direct competitor, mobile operators. Consequently this negotiation process complicates the ease with which it can deploy FMC.

Dominant pure mobile operators

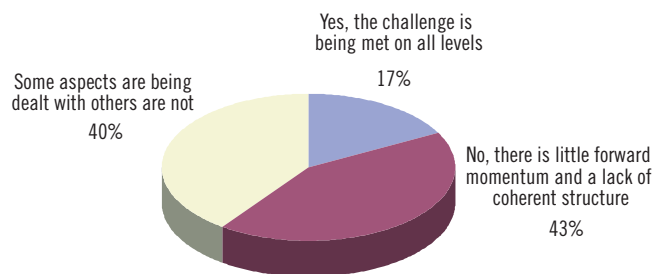
Pure mobile players that are dominant in terms of market share have a much lower impetus towards FMC due to the risk of cannibalising their existing voice telephony services and opening their market up to competition. Like the fixed operators, the ease of FMC migration is complicated by the requirement to partner with a potential competitor – a fixed operator in this case – which may be even more reluctant to allow a dominant mobile operator already pressuring it through FMS to enter its core market.

The growth of peer-to-peer networks in the fixed environment led to an explosion in claims of intellectual property theft and a call for robust standardised digital rights management (DRM) systems. This concern regarding intellectual property (IP) was expressed by the Industry Survey respondents with ownership of content being identified as the third most important consideration.

The convergent network magnifies the problems seen in the fixed environment with content distribution as IP owners risk their content being disseminated over an even larger converged network. DRM standardisation is an important stage in the protection of IP and the respondents identified this as the fourth most important consideration.

Respondents were asked to say whether they thought that these challenges were being adequately met and the opinion was fairly negative (see fig. 6.2).

Figure 6.2: Are these challenges being adequately tackled by those value chain players involved with them?



Source: Informa Telecoms & Media's FMC Industry Survey

The majority of the respondents felt that little or no movement had been made despite the fact these are the main obstacles to launching anything other than voice over FMC networks. This reaction goes some way to illustrate the level of the challenge facing the value chain players trying to popularise FMC.

Off-net open access

Operators looking to develop an FMC content business model must abandon any vestiges of the historical approach toward content that sought to control access – the so-called ‘walled garden’ approach. Convergence will accelerate the process of content competition where nothing but the most up-to-date services and brands will capture the consumer’s attention. FMC operators will need to embrace the concept of third-party content delivery in order to remain competitive or face the possibility of becoming nothing more than a bit pipe over which services are delivered. Delivering the most innovative and attractive content attached to the mobile operator brands delivered over their networks will be the only way to survive at the forefront of the customer/provider relationship within a convergent environment. Therefore, attracting the most valuable content providers will become vital and part of the process to achieve this will be to allow unfettered access.

ultimately prove more valuable. It is likely that BT saw such an approach as a way to avoid routing calls over Vodafone's network – routing them onto its own IP network instead – when calls are made outside the PBX environment, while ring-fencing/protecting lucrative corporate customers.

However, the company's announcement regarding the UMA-enabled HP iPAQ 514 appears to be a reversal of this strategy, although the device also uses Wi-Fi and BT has expressed its preference for Wi-Fi in the RAN for SIP-based PBX integration. It is likely that delays in IMS inter-working with PBX systems have influenced support for UMA, which is seen as an interim solution in this environment. Moreover, BT continues to work on a SIP-based PBX system that will integrate with its Fusion service.

Pure mobile operator: 3 UK X-Series – a convergent service approach

Background

Hutchison 3G UK is a subsidiary of Hong-Kong-based Hutchinson Whampoa, a Fortune 500 company with holdings in retail, property development, energy and infrastructure providing industries as well as telecommunications.

3 was set up to roll out and run next-generation 3G network infrastructure to offer a content/data driven service to cellular subscribers; it holds the position of being the first operator to launch such services in a number of countries, including the UK and Italy. As of 1Q07, 3 was active directly and through subsidiaries in Australia, Austria, Denmark, Hong Kong, Indonesia, Ireland, Italy, Norway, Sweden and the UK.

3 was one of the first companies to acquire a 3G licence in the UK, awarded in April 2000 for US\$4.38 billion. By the end of 2006 it had 3.8 million subscribers in the UK.

Figure 8.2: 3's WCDMA network rollout

Country	Operator	Start date
Italy	Hutchison 3G	Mar-03
UK	Hutchison 3G	Mar-03
Australia	Hutchison 3G	Apr-03
Austria	Hutchison 3G	May-03
Sweden	Hutchison 3G	May-03
Denmark	Hutchison 3G	Oct-03
Hong Kong	Hutchison 3G	May-05
Ireland	Hutchison 3G	Jul-05
Indonesia	Hutchison Telecom Indonesia	Dec-06
Norway	Hi3G Access	not launched yet

Source: Informa Telecoms & Media