

Chapter 11

How Thick Is Your Client?

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ABSTRACT

Average Revenue Per User (ARPU) is a measure of the revenue generated by users of a particular business service. It is a term most commonly used by consumer communications and networking businesses. For mobile devices, they generate ARPU through network and content services (value-added services) that they make accessible to the user. The more accessible these services are the greater the ARPU generated. The harder something is to find, the less likely someone is to use it. This paper explores the potential continuum between ARPU and service discoverability for mobile services by comparing and contrasting various technologies with respect to development, user experience, security, and commercialisation.

INTRODUCTION

Average Revenue Per User (ARPU) is a measure of the revenue generated by Users of a particular business service. It is a term most commonly used by consumer communications and networking businesses. For mobile devices, they try to generate ARPU through network and content services (value-added services) that they make accessible to the User. It seems that the more accessible these services are, the greater the ARPU

generated - the harder something is to find, the less likely someone is to use it.

Therefore, a Continuum appears to exist between ARPU and accessibility.

This is by no means the only factor that affects ARPU, for instance usability for instance plays a large major role in retaining Users and sustaining ARPU.

The problem appears to be that the more accessible services are the more closely integrated with the mobile device they have to be. The tighter this integration is, the more complicated and costly it becomes to implement.

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A common method for integration is a ‘client’ where a locally device-hosted piece of software delivers a service from over a network to the User. Clients vary in ‘thickness’. Client thickness is often measured in terms of the size of their resource footprint on the host - the greater the footprint, the thicker the client. Commonly, the thicker a client is, the better able it is to integrate with local functions, the more capable it is of local processing and interaction, and ultimately, the better it is at exposing services to a User through a mobile device.

Moreover then, there appears to be a Continuum between ARPU and client thickness.

This begs the question, how thick is your client? The answer to this question is more often than not, a business one. The thicker a client is, the more expensive it tends to be to develop and maintain. While not directly a factor in ARPU, this expense would have to be offset against ARPU to justify a Business Case.

Significant technologies that constitute this Continuum include:

- Mobile Browser;
- Browser Plug-In;
- Web Portal;
- On Device Portal (ODP);
- Thick Client;
- Widget and App Store.;
- The Idle Screen.

This paper compares and contrasts these technologies for service discovery by considering each with respect to:

- Development;
- User Experience;
- Security;
- Commercialisation.

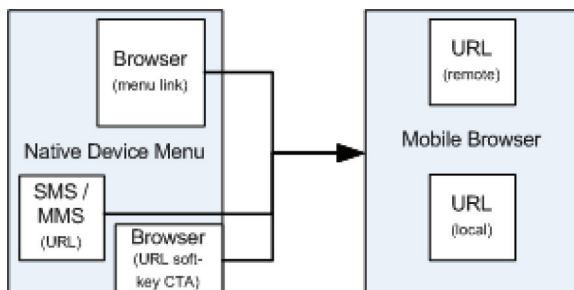
MOBILE BROWSER

Browsers are the thinnest of clients. The Mobile Browser (Figure 1) is much like its larger brethren, albeit a cut down version specifically engineered to operate within the constraints of its environment - limited memory, Central Processor Unit (CPU), network connectivity, and storage. They are native to the device as standard and require no Operator or service provider intervention with the Original Equipment Manufacturer (OEM).

As device capabilities have increased over time, mobile browsers have kept pace and have increased their capabilities by taking advantage of the increased memory, CPU and storage offered by the handset. This has allowed modern Mobile Browsers to support newer rendering technologies (Extensible Hypertext Markup Language (XHTML), Cascading Style Sheets (CSS), JavaScript), and provide a better experience. Native browsers, such as Safari and the Palm WebOS browser, also offer deeper integration with the device and expose some of the device capabilities, such as accelerometer to mobile web applications.

Despite sharing a common ‘client’, mobile web applications are notoriously difficult to develop. The mobile web developer has to keep front of mind the numerous restrictions that the mobile device presents - limited screen real estate, input and navigation controls (Young, 2009a). Integration with technology such as Wireless Universal Resource File (WURFL), can exploit the unique

Figure 1. Mobile Browser



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