A study on how contents can be distributed through

With these technologies, there is a greater opportunity for students to participate and collaborate with each other. Aside from its portability mobile devices such as smartness and tablets are more reasonably priced than desktops and laptops. Mobile devices are different from laptop or desktop computers. Mobile devices are small, portable and compact. They can often fit In a pocket or purse. Unlike laptop computers, which are expensive and heavy, mobile devices are relatively low cost, lightweight, and some work a very long mime on a charge or a couple of standard disposable or rechargeable batteries.

Mobile devices are also the easiest method of accessing the internet. Most mobile devices are wife ready and can easily connect to any wife routers available in the area. Many mobile devices can, in effect, be " filled up" with hours upon hours of training and require no connection to a network, wireless or otherwise, until the time comes to replace old training content with fresh content, or to upload the results of assessments to a learning management system capable of tracking mobile learners.

In many training situations, thelearning experiencefor the student is largely unaffected by the way the mobile device accesses Information, wireless or otherwise. Rather, what differentiates m-learning from learning Is the nature of the mobile device Itself (Hanukkah & Prelacy 2003). Incommunicationtheory, the researcher wants to focus on the elements that can Influence the quality of the message through different kind of media.

There are two major aspects that can affect the message; the physical delivery of the content such as network or phone lines and the impression of

the message (Miracle, 2005) Architectural Design Extensible Markup Language (XML) coded-data can be converted into other structured formats in a common architecture for multi-channel delivery systems for m-learning such as Extensible HyperText Markup Language (XHTML), Synchronized Multimedia Integration Language (SMILE), Portable Document Format (PDF), etc. XML coded-data Is adapted to the capabilities of the requesting device via appropriate transformation processes.

Thus such a model of multi channel delivery systems enables the adaptation of learning content to device, desired level of details of intent and semantic aspects. The model proves some remarkable advantages. Definition (DAD). The XML approach allows the definition of transformation processes (e. G. Using the XML transformation language XSLT, SOLO, or the XML query language Query). Such transformations enable easy adaptation of learning content to given requirements. Transformation processes enable real-time delivery as well as delivery of online content.

Real-time delivery is used for online access to the content, where a quick adaptation to learners' requirements is requested. Most experts still prefer eating on a printed material because researches show that learning online significantly reduces learning efficiency and speeds up fatigues of the learners. That is, when the online content are the traditional printed scripts. Nowadays, there are already available educational APS and widgets that can be utilize by the students. These APS and widgets are interactive in nature with potential animations, video and audio.

Display Lectures in the Mobile The researcher's approach in transforming the existing workstation-based display lectures to mobile devices is based on using an open generic specification language. Given the multimedia content of online lectures, SMILE 2. 0 was used. It is an XML based language for describing rich time-based multimedia content (WAC 2001). By building a converter from the current online lectures to SMILE the researcher was able to: (1) make use of the current set of software tools for generating online lecture scripts and related medias; (2) produce output that can be delivered to any device that supports a SMILE 2. Player; (3) potentially integrate materials from other sources, such as Microsoft Powering, Macromedia Flash, etc In contrast to the display structures in the mobile that require a workstation or laptop, an m-learning lecture is executed as a SMILE script via a SMILE. O player running on a smartened device. The script " choreographs" the presentation of full screen slides and their animated overlays (stored in GIF, JEEP or BUMP formats) withmusicand viceroy (stored in either MPH or WAVE formats).

Control of the lecture presentation is handled via a set of small iconic buttons in a narrow " bar" at the top of the display. The navigation buttons currently available are: " move forward a slide", " move back a slide", " play the rent slide", and " go to the slide index". Additionally, a search system runs in parallel with the Pocket SMILE player and enables a user to search for text occurrences in the viceroy. The search system returns references to the slides, and animation sequences within the slides, where the queried text occurs (Smitten & Crimson, 2007).

Figure 1: The lectures display in mobile system architecture Figure 1 shows that lectures are converted taking as input the original script files with the different medial elements such as images, audio, video, and texts The converter automatically detects and extracts slide titles and includes them in a slide index file; this is used to provide a " table of contents" for that lecture. The transcript of the viceroy text is scanned to create an index of terms for the search system; in building the index the converter removes punctuation marks, removes some stop words, and then applies stemming.

The original script file is then converted to a Compatibles script file suitable for display on a handheld computer. During this process, the slide and images are rotated and the audio files converted to MPH from the original uncompressed BIFF format. The MPH files require about one eighth of the storage is about half the time it takes to present in the lecture theatre (with no audience participation). A live lecture that fills a one (1) hour lecture slot, occupies about 12 megabytes of handheld storage (Shares, 2007).

Multiplicand service: the proposed system The proposed system illustrates how content can be distributed through a multi channel service. A channel is defined as an architecture that can carry content to a device through specific interaction software. Following channels have been investigated in this discussion [8, 9, 10]: Mobile phones using the WOMB markup engage ; Laptops using the HTML markup language ; tablets using the SMILE markup language the application description for system illustrates in figure (2), the access to the application is made by two stages, client and proxy, each one with different functionalities.

The researcher made assumptions and limitations. The research does not focus on the XML vocabulary used to store the content and the storage architecture. It does not focus on design and layout of the web page, but the underlyingtechnology. Also, the multiplicand service has support for browsers that handle the following markup engages such as HTML, SMILE and WOMB. The researcher assumes that the Quality of Service (So) is ideal, in order to reach device adaptation, it is needed to build interface related ontology, and the ontology based automatic adaptation is discussed.

The client can be PDA or PC, and the server can distinguish the different kinds of access devices. With the content control technology such as C/UP protocol, the server gets the device and browser features and returns back the proper interface presentation. Experimental Test for Multiplicand System On the client side, three types of wireless devices were used. First is the Samsung galaxy ace smart phone. It uses smart telecoms service that provides a maximum 13 Kbps transfer rate. The second one is Macomb pro laptop core 17 with 2. 2 GHz processor, 8 KGB RAM a 802. Leg compatible wireless card to connect to the access point in the lab. The connection rate was at 11 Mbps. This is considered to be a high end device. The third one is the Samsung galaxy tab and uses the same network adaptor and network connection as the laptop but with less computation power and memory. The proxy server is programmed and runs as a workstation. The proxy code includes several modules as a normal proxy server does. They are a server side module, responsible for setting up a connection with the web server; a client side module, in charge of the connection with clients; a cache management module; and a BPML parser.

The web server used isGoogle. Com . The HTML page of Google. Com is less than k and rarely change, as in figure (2) above, three cases are designed to download a portion of the web page to the client, which is about kick size. In the remote case the page is downloaded from the origin site. The client sends out a quest, then the proxy relays the request to the origin site, having received the client, the pages of the web sites were transferred on to the proxy server's local disk, and inserted some pairs of tags into the origin pages.

Upon the user's request, the parts marked with < Priority value=" l "> are extracted and sent back to the client, and the cached case, an extracted copy of the web site, is transferred on to the proxy. When the user's request arrived, the copy was sent out immediately. Figure (3) shows the total time measured between the user's sending out the request and receiving the desired page. The performances of cached and extracted cases are very similar, whereas the remote case has two or three orders of magnitude of larger retrieving time. Each node represents the average time collected from 7 runs in the day of the test.

According to the experimental results, the average time to process a cache hit is about ms, to fragment a k Google. Com home page is about ms, and to download it from the web is approximately mass. The mass is due its relatively long expiration time, which results from pages downloaded from nearby proxy servers. The firstobservationis that to fragment a page on the local cache server is such faster than retrieving it. Conclusion The primary focus of this research is to find out the threshold of network speed that can

significantly offset the benefits of our approaches on a wireless network based on our experiments.

The successful implementation of programs in this research is to build learning content and distribute it through multinational to different users, those programs were tested successfully in transmission and reception of educational contents, the use of handheld devices can provide new opportunities for learning and communicating in localenvironment. In comparison with local developing steps towards m learning using local applications may consider as a step forward.

Live video is one of the most challenging media type, today, wired devices can provide a reasonable quality but with the presence of video converters, mobile devices can also provide quality video lectures already. The different combinations of media types require more of the underlying networks; such combinations will probably have diverse requirements to delay, bandwidth, and Jitter for maximum performance. Because of different device capabilities, an adaptation of the content ND the presentation is needed before it can be presented to the user.