

Implementation Of Digital Signage Sixth Screen Device

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Abstract—Digital signage is an emerging new technology. It is expected to play an important role in today’s dynamic world as digital signage displays timely information, the main focus of this paper is the design, the implementation, and evaluation of a digital signage system based on a LCD/LED to display web contents on digital displays located at one or more location. The system will display information based upon playlist that can be dynamically updated. On the basis of our evaluation, it is real world. Interface as embedded touch screen, moment, and image capture Device.

Key Words:- Open Sources, Display screen, Panda board.

I. INTRODUCTION

Today, Digital Signage is the most compelling platform to effectively reach employees, students, customers and partners. This Digital Signage is used to convey important information and messages news, training material, and information about upcoming or current events. Digital signage is a form of electronic display that shows television programming, menus, and image, and information, web server advertising and other messages. Digital signage is a network of customizable displays that can be controlled by electronically and server using a board, allowing schedule to be changed remotely for the most targeted messaging possible. Digital signage can be implemented using liquid crystal Displays, Light Emitting Diodes, Projection, Plasma, etc. Digital signage can be used in airports, research organizations, shopping malls, railway stations, and restaurants to dynamically deliver information, message animations, video, text, and other web contents on a (high quality) display to targeted viewers at a specific time. The main challenge today for many organizations is the successful deployment and integration of a digital signage network system. This is designed and developed a prototype system, based on using a PANDABOARD directly attached to a digital display in order to sixth screen display. Our target display was the large screen LCD&LED/display located at the building [1, 2].

II. HOW TO MAKE DIGITAL SIGNAGE SYSTEM

Digital Signage is electronics of any number of methods used to display in public Area. Digital Signage alternatively known as dynamic Signage, narrow-casting and network of digital signage.

We are making digital signage system for Sixth screen system for Advertisement, display etc.

These are implementing in windows, Linux, Ubuntu and Mac OS. We are implementing in Ubuntu because we are flexibility to change any time and any where & Ubuntu is also the part of Linux, & it is free.

So, implement this project we are using open source. We are using four open sources Xibo, Concerto, Vodigi And Risevision. We are implementing Digital

Signage on **Xibo** open source.



Fig. 1: Working of Digital Signage

III. DIGITAL SIGNAGE OPEN SOURCE

- Vodigi Digital Signage.
- Concerto Digital Signage.
- Risevision Digital Signage.
- Xibo Digital Signage.

IV. DIGITAL SIGNAGE SOURCE

Table 1: Open Source [2]

S. No.	Open Source	Operating System	Free	Lay out	Features
1	Vodigi	Windows Free	Y	Own	Display Video, Mange System.
2	Concerto	Windows/Linux	Windows/Linux	Own	Graphical Text based & alerts Messages.
3	Risevision	Windows/Linux	N	Fix	Content, Project, Network, H/w, S/w Development, etc.
4	Xibo	Windows/Linux	Y	Own	Video, Flash, Image, PPT, Text, RSS, Web pages, Database, etc.

A. XIBO

Xibo is an open source, multi-display, totally scheduled digital signage solution controlled and centrally manageable web interface. [2]

B. Generation of Digital Signage Screen

- First Digital Screen: Silver Screen.
- Second Digital Screen: Television.
- Third Digital Screen: Personal Computer, World Wide

Web.

- Forth Digital Screen: Wi-Fi, 2G, 3G (mobile services).
- Fifth Digital Screen: Public areas.
- Sixth Digital Screen: Advance Digital Signage.

C. Pandaboard

Pandaboard is a low cost, low power single-board computer platform based on the OMAP4430 system on a Chip. We are implementing our project on Pandaboard. Pandaboard is multi-function board [4].

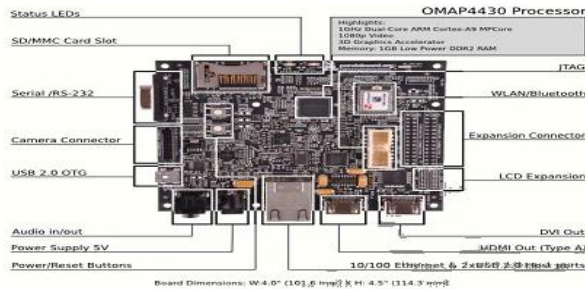


Fig. 2: Panda Board

V. MECHANISM OF DIGITAL SIGNAGE

- Install Xibo on Pandaboard
- Make Server and Client as Pandaboard
- Connect Client and Server
- Design Layout of Display Screen
- Making a region for Screen
- Porting Image/Video/etc. on region
- Assign Client for design Layout
- Port Ubuntu on Pandaboard[3]

VI. DIGITAL SIGNAGE IMPLEMENTATION

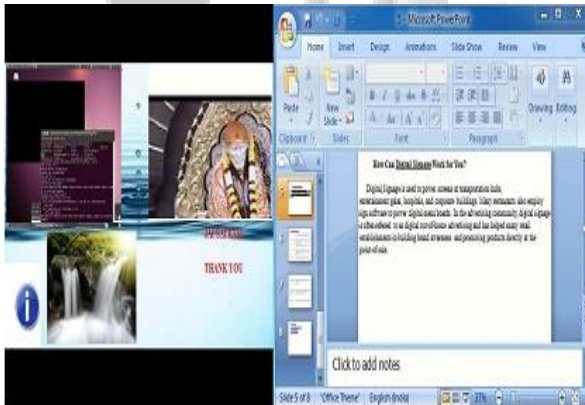


Fig. 3: Digital Signage Implement

VII. BENEFITS OF THE DIGITAL SIGNAGE

- Cost Reduction
- Instant customer "message - action"
- Brand Enhancement
- Time of day content targets specific types of customer
- Centrally controlled campaign management tools
- Brand relevant "feel good" editorial content

VIII. FUTURE WORK

- It any technology that the holds great promise for digital signage in the future work, it's the organic light

emitting diode and transparent OLEDs absolutely revolutionize advertising, making it easy to turn glass and remove walls and windows into ad space without sacrificing visibility.

- The Flexible OLEDs stand to change the digital signage is implemented as well imagine being able to mount paper-thin interactive screens on walls instead of LCD sets.



Fig. 4: Future Work

IX. CONCLUSION

We have successfully implemented a complete digital display information system. We have designed, developed, and evaluated a hardware & software solution based on a LCD, to control and display different web contents (or other dynamic information) on digital displays located at different locations. The system is based upon a set of open source software packages and a few modifications to one of the packages. The system meets our original design goals. On the surface the system appears to be an efficient and scalable way to display dynamic contents via digital displays according to a specified schedule.

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