

ANALYSIS OF RECENT WD MYCLOUD INFORMATION SYSTEM INSTALLATION PROCEDURES AND ITS FEATURES

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ABSTRACT

This research is conducted because, Western Digital Corporations, the biggest manufacturer of hard disk in the world is still not known by many people. Furthermore, the WD My cloud, created by WD, is a very useful and innovative device that people can use in their daily lives. Instead of paying for extra cloud storage, people can now own personal cloud storage. The research methods used to obtain information for the research are Internet research, Interviewing employees and researcher as participant. Through the research conducted, we were able to learn more about the information system (IS) and the WD My cloud device. The findings included the hardware and software used by the selected information system, components of the Information System and also the problems faced by the IS and the solutions to resolve the issues.

Keywords: *Cloud, Computer Systems, Digital Corporation, Information Systems*

I INTRODUCTION

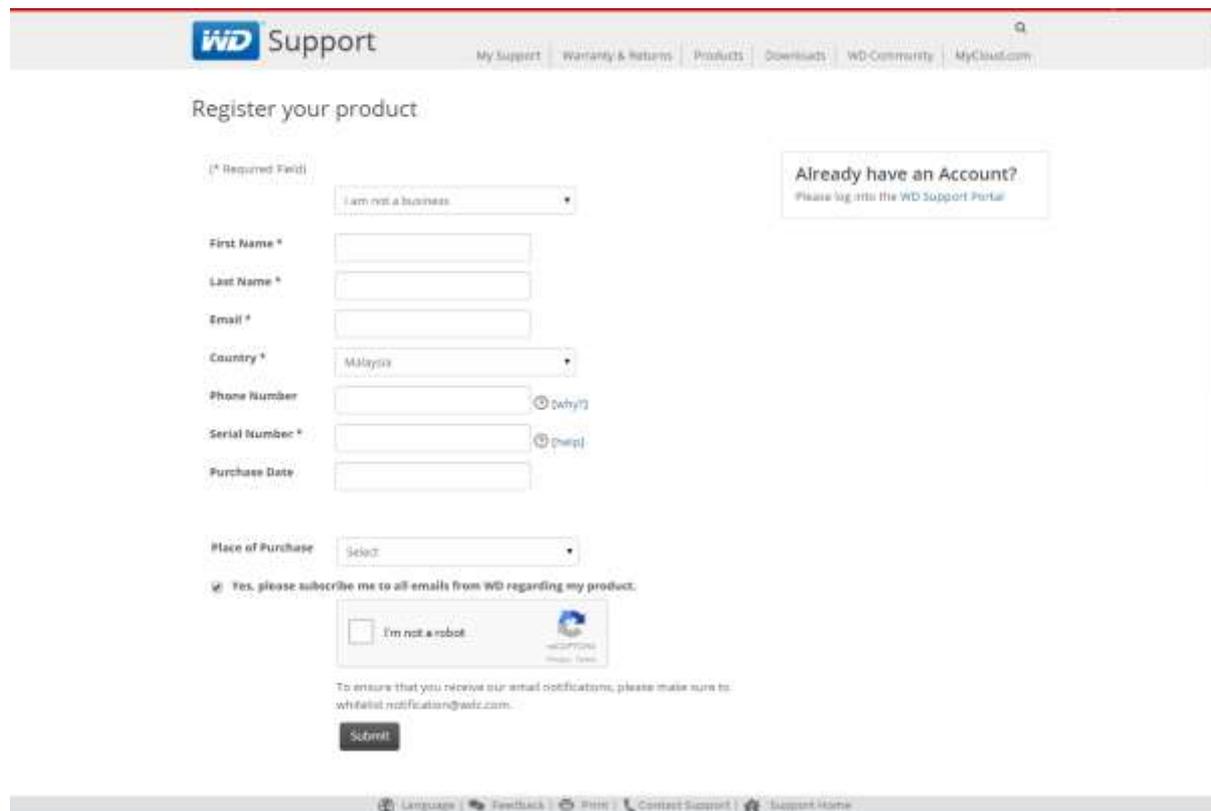
Western Digital Corporations (WD) is one of the largest hard disk manufacturers in the world. Established in 1970, Western digital started as a manufacturer of metal oxide semiconductor test equipment but quickly change direction to focus in the data storage market [1]. As a storage pacesetter, the company produces reliable, high-performance hard disk drives and solid state drives. These drives are deployed by OEMs and integrators in desktop and mobile computers, enterprise computing system, embedded systems and consumer electronics applications, as well as by the company in providing its own storage products. WD's leading storage devices and systems, networking products, media players, and software solutions empower people around the world to easily save, store, protect, share and experience their content on multiple devices. [2]. The Information System that has chosen from WD is the WD My cloud. The WD My cloud is a private storage unit that plus into your home network. It automatically backs up and centralizes all your content in one safe place no one can see but you. And with Internet connectivity, you can quickly access your WD My cloud unit and share whatever you want, from wherever you are [2]. Users can login to the WD My cloud using their computer or smart mobile devices.

II COMPONENTS OF INFORMATION SYSTEM

In WD's daily operation, there are 5 components that are taken into consideration for the success of the product. The 5 components are data, hardware, software, procedure and people.

2.1 Data and Information

During product registration, customers are required to fill in an online form. Customers have to provide data such as First name, Last Name, Email, country, phone number, product serial number, date and place of purchase.



The image shows a screenshot of the WD Support website's registration page. The page title is "Register your product". The form includes several fields: "I am not a business" (dropdown), "First Name *", "Last Name *", "Email *", "Country *" (dropdown with "Malaysia" selected), "Phone Number" (with a "why?" link), "Serial Number *" (with a "help" link), "Purchase Date", and "Place of Purchase" (dropdown with "Select" selected). There is a checkbox for "Yes, please subscribe me to all emails from WD regarding my product." and a "I'm not a robot" checkbox with a CAPTCHA image. A "Submit" button is at the bottom. A box on the right says "Already have an Account? Please log into the WD Support Portal". The footer contains links for Language, Feedback, Print, Contact Support, and Support Home.

Figure 2.1 Data and Information

The data that is filled in this form are text and numbers only. The quality of the data that inserted is accurate, verifiable, and also cost-effective. The data is accurate because the data is typed by the customer. If there are errors in the serial number, then the system will prompt that the serial number is invalid and will ask the user the key in the serial number correctly. The data is also verifiable, customers have to provide where they bought their WD My cloud device. The data is also cost-effective as it is done online instead of hastily filling up paper forms. After the data is collected, the system compiles all these data and stores it as the product information. The information can be accessed by the organization to keep track of the products and also send information about the device. User can also use WD Support to learn more and ask question regarding their WD My cloud device.

2.2 People

People are one of the most important and expensive components to the Western Digital. The people are the ones play a big role in maintaining and constantly interacting with the Information System. There two main users of WD's information system. That is, the customers and the employees

2.3 Hardware

Hardware is something that can be physically touched [3]. There are two types of hardware used in WD's Information System that is input devices and output devices.

2.3.1 Input devices

An input device is a peripheral used to provide data and control signals to an information processing system such as Keyboard, Mouse and WD My Cloud Device [4].

2.3.2 Output devices

An output device is any devices such as Monitor and WD My Cloud Device used to send data from a computer to any other device or user [5].

2.4 Software

Software is a collection of instruction that enable thee users to interact with a computer [6].

2.4.1 System software

System software is a type of computer program that is designed to run a computer's hardware and application programs [7]. An operating system is an example of system software. The operating system that is used by default by the employees in the company is the Windows 7. The WD My Cloud can be used in both the Windows, Mac, android and iOS operating system. The WD My Cloud device itself is running on embedded Linux operating software.

2.4.2 Application software

Application software is programs that perform specific tasks for user [8]. Internet browsers are a type of application software. Internet browsers such as Internet explorer and Google Chrome are used to do product registration, access the My Cloud Dashboard, to access the cloud facility (if did not install the application), and to help and support customer question and problems.

2.5 Procedure

To ensure that the device is up and running there are certain procedures that the customer need to follow a few procedures.

2.5.1 User and device registration

For first time use of the product the user is required to register the product with the device model and serial number for the device warranty and device verification. Once the device is registered, the user will have to

register themselves by providing some of their personal details such as name, e-mail address and date of birth.(Western Digital Corporations, 2015)

2.5.2 Device set up

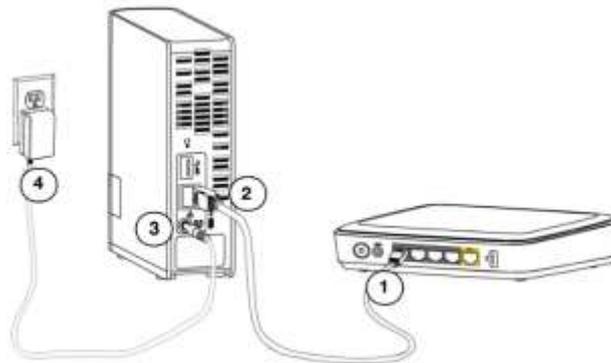


Figure 2.7 Shows the Physical Setup of the Product

Firstly, connect the Ethernet cable to the internet modem or router then connect the other end of the Ethernet cable to the device. Then, connect power cable to the device and plug the power adapter the power source [9].

III MULTIMEDIA

3.1 Text

Text is the basic element of the multimedia. Text is the most flexible means of presenting information on screen and conveying ideas. It involves the use of text types, sizes, colours, and background colour [10].

3.1.1 Text in the selected IS



Figure 3.1.1

Western Digital's logo was made using the AR DESTINE font for WD. Underneath the logo is the phrase which says 'A Western Digital Company.' The logo is hyperlinked to the home page. It has no special animation. The letters WD is white in colour and put in a rounded rectangle shape which is blue in colour. The other text are using Calibri and Arial Black. The words 'My Cloud' is hyperlinked to the My Cloud sign in page. The My Cloud OS is hyperlinked to the My Cloud OS page which shows all the information for My Cloud OS. Under the word 'Products' which is hyperlinked to all the products being sold. The words 'Learning Centre' is hyperlinked to a page which has all the manuals on how to use each product. The word 'Developer' is hyperlinked to a page where they talk about the developers.

3.2 Images

An image is a visual representation of something. An image is a picture that has been created or copied and stored in electronic form [11].

3.2.1 Images from the Information System



Figure 3.2.1 displays the image of scenery that gives a relaxed impression to the website. There is laptop in the image that shows the user interface of the WD My cloud.

3.3 Audio and Video

Video is a recording, manipulating, and displaying moving images in a format that can be presented [12] while audio is sound available within the acoustic range of humans. With these forms of multimedia, explanations and tutorials become easy to be used and accessed.

3.3.1 Videos from the IS

There are video tutorials in the webpage to help, introduce and explain about the product and its functionality.



Figure 3.3.1

In this video the WD My cloud users are shown how to upgrade their device to the latest firmware that is OS 3. The user is able to update their WD My cloud device via mobile devices. The device can be updated by using

the WD My cloud app available for the mobile devices. The WD My cloud device can also be update by using a computer by accessing the WD My cloud dashboard. The new operating system installation for the device may take a while. There are other videos in the website that teaches users step-by-step on how to setup the WD My cloud device and briefing on the My Cloud operating system the “*My Cloud OS 3*”. There are also video tutorials on how to use the WD Sync to backup files and also how to upload files to the My Cloud. Video tutorials in the website include on how to use the mobile application to operate the WD My Cloud device and also using the WD My Cloud’s user interface to add and monitor users of the device.

3.3.2 Interactive

Interactive multimedia is a special multimedia that accepts inputs from users by means of input devices and perform actions as per user input.



Figure 3.3.2

In this navigation panel, when you’re in the “*My Cloud*” page, an underline will appear under the *My cloud* marking that you are in that page. When you want to click to move to another page, than underline will appear under the wordings that you have selected that particular page to be directed to.

IV PROBLEMS, SOLUTIONS AND RECOMMENDATIONS

4.1 Problems found in current IS

4.1.1 Very slow or blank Dashboard

The dashboard is the main frame of the WD My cloud device where the users can make changes to their account and device configurations. According to *WD Communityforum*, many users have compliant that this particular page does not appear once they have set-up and login to their device. The page appears to be blank and user sometimes receive messages that the connection has timed out.

4.1.2 The Blinking White Light

On the WD My cloud device there is a light that indicates the system status. Several users have claimed to see the white light keeps blinking and the drive does not appear on their computers or mobile devices. (Western Digital, 2015)

4.1.3Time Machine backup with Mac

Time Machine is a backup software application distributed with the Apple OS X computer operating system. The software is designed to work with Apple’s Time Capsule as well as other internal and external hard disk drives (HDD’s). Users complain that the WD My cloud does not backup any data from the time machine backup protocol.

4.2 Solutions to the problems faced by the IS users

4.2.1 Solution to the very slow or blank dashboard

The cause of this problem is because the WD My cloud devices begins its media scan every time you access the device, turn-on media serving or added a new connection the cloud device. This is common in the OS3 operating system as it is to ease the information flow from device to device. Thus, this result in slow dashboard or blank sometimes when the scans are not complete. Hence, it is recommended that the users to change the device setting so that the device scans are performed manually by the users.

4.2.2 Solution for blinking white light

The blinking white light indicates that the device is establishing the connection with the network. When the light stops blinking and turn blue, it indicates that the device has is ready to be used. This could take time but it also depends the internet connection. If the My Cloud white light keep blinking, the user have to press the reset button then wait. If the device still doesn't respond, then the user has to unplug the device for 10 seconds then plug it in back. The device should be up working. If it does not work, the device itself control board may have some issues. The user may return or exchange for a new product the retailer purchased.

4.2.3 Solution for Time Machine Backup with the Mac

Users must first make sure that their internet connection is steady. If not try troubleshooting the network. There is nothing to troubleshoot in the WD My cloud if the internet cannot be connected to the device. Secondly, turn on the Mac Backup settings in the WD My cloud by turning on the **Mac Backups/Time Machine ON**. This way the WD My cloud device will auto-run the setup with time machine backup app in the Mac.

4.3 Recommendation

For the slow dashboard loading, the company should alter the new operating system to minimise the loading time by setting the device to allow user to access the dashboard first then begin the scanning. This will help the user to get real time information and also able access the dashboard and make changes during the scans. Second recommendation would be test run each hard disk drive before installed into the device. This will avoid the usage of failure drives installed in the WD My cloud and also reduce customer disappointment against the product. Lastly, its recommended and requested by some people on the community to ease the firmware and software upgrading procedure. This can be done by the allowing the WD My cloud to instantly download and save the upgrades received first than ask the users permission for the installation.

V CONCLUSION

Through this research, uses and capabilities of the device were able to learn. The WD My cloud device is a very innovative and useful product manufactured by WD. The developer software that is available on the WD Support website allows users to integrate functions that is preferred by them. The product is suitable for all users. It is also able keep all your precious data and memories safely without fear. There might be few bumps in the system but with future upgrades and updates, WD has promised to keep make the device a better product too use.

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