

Theory Applied
A Value-Added Evaluation of
The University of Washington's Front Portal: MyUW

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Introduction

Institutes of higher learning worldwide face a large information problem. Every day, thousands of students, faculty, staff, and other affiliated people and guests need to access their resources, but what is the best way to provide academic resources and records for these people? Virtually all of these institutions have developed user websites. The University of Washington's interface is called MyUW, and in this paper, I will illustrate and examine this system in five parts: (1) A description of MyUW (2) Intended users (3) Aspects and organization of features (4) Storage, search, and retrieval capabilities and (5) Representative scenarios.

I will use the Eisenberg/Dirks Modified Taylor's Value-Added Model from February 2008 (Taylor, 1986, p.50) throughout the paper and make recommendations for improvement on the system as necessary, then provide an overall analysis of the MyUW system and draw conclusions.

While qualitatively very useful, I consider the both the Taylor (1986) and Eisenberg/Dirks Modified (2008) Value-Added Models to lack in their ability to quantitatively evaluate systems. For this reason, I will use the Eisenberg/Dirks (2008) Modified Taylor's Value-Added Model using a system of plus and minus points to evaluate attributes of MyUW and use the Yim Modified Eisenberg/Dirks Taylor's Value-Added Model for a holistic evaluation of the MyUW system. The application of these models should become clear through this evaluation.

What is MyUW?

UW Technology provides the following definition:

MyUW is the front portal of University of Washington for anybody with a UW NetID. It is a simple and easy-to-use tool for accessing the web resources you need to fulfill your goals at the university. Based on your affiliations with the university, it would anticipate what you may need by providing you a customized initial set of resources. You can 'personalize' it by including or excluding the resources you see listed, adding your own favorite links in your custom boxes on any MyUW page, and choosing the background and accent colors you prefer. ("About MyUW," 2008).

This definition implies that in order to use MyUW a user must have a UW NetID, but this requirement raises the question of who is eligible for one.

Intended users

Who is eligible for a UW NetID? Currently, users seeking NetIDs must come from one of eight possible affiliations as shown on the second step of the six-step application prompt.

These are: UW Student, UW Medical Centers Personnel, UW Faculty, Staff, Retiree or Affiliate Employee, UW Applicant for Admission, UW Alumnus/Alumna (UW degree holder), UW Alumni Association Member, Cascadia Student, and Cascadia Employee. (“Get your UW NetID,” 2008).

This page of the application asks the applicant to select the *first* option that applies to them. This implies that the applicant must choose a single affiliation to the University, but some applicants are bound to have more than one affiliation. Table 1 shows a few positive (+) and negative (-) system processes that the UW NetID application process carries out by forcing a user to choose from eight options.

Table 1 – Evaluation of University Affiliation Limitation

User Criteria	Values Added	System Processes
Noise Reduction	Order	Indexing (+)
	Selectivity	Selection (-)
		Filtering (+)
Adaptability	Flexibility	Customizing (-)

When the application asks for only the first option that applies to an applicant, it implies that the responses are in order and are thus indexed, which is positive (+). In terms of selectivity, having only eight possible affiliations is very limiting resulting in a poor range for selection (-). The system reduces noise by filtering (+) which safeguards against people who should not be allowed to use the system, but the system is inflexible because there is no way for an applicant to customize their affiliation if it is not found amongst the eight (-).

Between the user criteria of noise reduction and adaptability, I believe the latter is a more important issue because the inflexibility in terms of customization, allows people who legitimately need a UW NetID to fall through the cracks.

As the University of Washington grows and globalizes, more and more people will become affiliated to the University in new ways and need to access UW services; a guest entrance won't be enough. The current system does not accommodate this fact, and frankly there are a few current situations where I foresee trouble. For example, why are Cascadia Community College students and employees represented in the NetID registration, but not those from other Community Colleges? To be fair, it would be wise to have a drop-down list of possible transferring community colleges and if the college is not listed, the system should include a space for typing in the name of the college and add it to the drop-down list. These user-defined names would then need to be checked for quality in terms of validity by means of quality control.

Aspects and organization of features

MyUW goes much deeper than just a UW NetID. There are many applications, functions, and features that are available directly through the MyUW interface such as email, registration, degree audits, grades, and transcripts, but also include links to resources outside of MyUW like

Catalyst Web Tools, Undergraduate Advising, University Bookstore, King County Metro Transit, Amtrak, Sea-Tac Airport, Mountain Pass Reports, and Voter Registration.

According to your affiliation with the University, MyUW anticipates your needs and provides a basic set of resources on 10 different page tabs. They are called: MyFrontPage, Student, Faculty/Staff, Teaching, Admin Svcs, Alumni, News, Calendar, Reference, and Bookmarks. (“MyUW Main Page,” 2008).

Typically, a user will not need to access the resources available through each of these pages because for example, a user will not be a student, staff member, an administrator, and an alumni/alumna at the same time. While these tabs add noise to the interface, they allow a user with one affiliation to have a smooth transition into another, for example from student to alumni. How well does MyUW organize topics like email, mountain pass reports, and voter registration? Table 2 and the evaluation below evaluate organization.

Table 2 – Evaluation of MyUW Organization

User Criteria	Values Added	System Processes
Noise Reduction	Selectivity	Selection (+)
	Classification	Semantic connecting (+)
Adaptability	Flexibility	Customizing (-)
		Choice (-)

I consider the organization of the MyUW system to have positive noise reduction features, but negative adaptability features.

Noise Reduction (+)

The organization scheme is relatively flexible in that the user can add and remove content windows from their pages. This allows users to reduce noise by selection (+). It also has a good classification system for its content, which the interface connects semantically (+). For example, it groups all of the email links in the email content window and the personal services in the personal service content window.

Adaptability (-)

MyUW attempts to be customizable by allowing users to change the name the interface addresses them by and change the background color, but this is a low level of customization (-). Also, when users add a new window to a page, they have no choice of where to put it. MyUW has preset ideas of where each added content window should go, but I believe this should be left up to the user, thus lack of choice is also a minus (-).

Search, storage and retrieval capabilities

Tens of thousands of students and employees at the University of Washington depend on the MyUW interface everyday. It is an interface so rich with information that it is easy to misplace items or not know where to find certain resources. For this reason, the MyUW interface provides various search, storage, and retrieval capabilities, but how effective are they?

Search

The MyUW interface has only a very basic search capability available. This is the search box located in the upper right hand corner of the interface. There are two options here: UW and MyUW. If a user searches UW, they are directed through a Google Custom Search that is specific to the University of Washington. The search results are the familiar Google style results with an underlined blue link with black description text with matching words in boldface. From this point, they can collect their results from the UW database or decide to redirect their search to include results from the entire web. ("MyUW Main Page," 2008).

If a user searches the MyUW database, results appear with links to the page tab on which the initial query appears. From this page, the user can continue to search through MyUW, or redirect their search to UW Google or Worldwide Google.

Storage

The University of Washington provides central storage space for all of its students and employees. This space is for storing digital files, UW email, and Web files, all of which are held on UW's central servers. Dante is the remote access computer cluster for student use and Homer is Dante's counterpart for staff/faculty use. ("Glossary," 1999). Users can access these servers through WebPine, the University's e-mail system or a Secure File Transfer process (sftp), but the sftp interface is not very intuitive to access because it comes in a computing package with many other similarly named items.

(<http://www.washington.edu/computing/diskspace/manageYourServices.html#understanding>)

It is a very basic file transfer system that isn't very pleasing and I imagine that many users turn to more pleasing file transfer systems such as GoogleDocs or use flash drives. Most of my interaction with Dante is through WebPine. An evaluation of WebPine will occur in the Scenarios section.

Retrieval

The MyUW system is meticulous when it comes to retrieval, especially within the WebPine System. Every first day of each month, WebPine asks the user to move the prior month's sent mail into a folder. I agree to do this because I cannot access my mail without dealing with the prompt and I worry that if I decline, I will lose my sent mail. This creates more folders that take up more space on the UW servers. Are the extra folders useful? For some users I think they may be, but it seems like WebPine is suggesting that putting sent mail into folders categorized by months is the proper way to deal with sent mail. I feel that users should be able to choose how to manage their email.

Scenarios

Scenario 1: WebPine

Jonas Malmberg is a university undergraduate advisor. He is 37-years-old, has a wife and two children. He uses WebPine as his primary email service for his job and for personal emails but is

seriously considering switching to a different email service. He chooses WebPine as his primary email because the user domain: “@u.washington.edu” gives his emails more credibility. He receives about 70 emails each day, most of which are from within the University of Washington, but occasionally from his wife or children. He has a difficult time keeping up with his email and is continually concerned about using up his storage space and losing important incoming emails. He likes to categorize his emails into folders, but he finds that it makes his emails easier to forget about. He doesn’t like the fact that WebPine e-mail doesn’t allow any text editing such as adding italics, bold, or changing font sizes or colors. He has also noticed a quirk in the system that doesn’t allow him to go back to his main inbox by clicking the back button. Table 3 shows an analysis of Jonas’ experience with WebPine.

Table 3 – Evaluation of WebPine

User Criteria	Values Added	System Processes
Quality	Authority	Selecting (+)
Adaptability	Flexibility	Data manipulation capabilities (-)
Noise Reduction	Classification	Indexing (-)
Performance	Security	Server size (-)

The only positive value Jonas gets out of the WebPine system in this scenario is the authority he receives from his user domain @u.washington.edu (+). On the negative side, composing emails is inflexible because the system does not allow for data manipulation (-). Classifying emails into folders seems helpful, but diminishes the value of the email through indexing (-). And, the system threatens the security of his emails because of the small server size (-). With a table listing three negative attributes against one positive attribute of WebPine, it is clear that Jonas should switch or find another email service to compliment WebPine.

Scenario 2: Student Registration

All University of Washington students must work through the MyUW interface is to complete registration. Each student registers for classes on a “priority date” that gives students with greater number of credits a higher priority, and thus an earlier registration date.

For Angela Smith, a returning full-time sophomore, the registration process is easier than it was as a freshman, but still tedious and frustrating at times. She has not declared a major, but she is interested in music and art. Her parents are pushing her toward a chemistry major, so she will be registering for *General Chemistry* this quarter. She spent some time looking through the time schedule and quickly found a ceramics class she is interested in, but she sees that there are only nineteen spaces in the course and there are already thirteen people signed up. Her registration date isn’t for another two weeks and she is worried that she won’t get in.

She calls her friend Lisa, who is a senior, and asks what she should do and Lisa tells her that she should find a backup class. She uses the general education search and chooses *Three-Dimensional Design Fundamentals* as her backup. Her third class is *Second-Year German* and she shouldn’t have any problems getting in because it is the second quarter continuation of second-year.

On the date of her registration, Angela wakes up at 5:45 am in preparation for her 6 am registration time. She has heard that the server sometimes opens a few minutes before 6 am, so she should start inputting her classes starting at around 5:55am. She has learned from last year that it is easiest to use the schedule finder. She finds that the server is moving very slowly because many students are all accessing registration at this time.

She is eager to input her class list and get officially registered to know she has a spot in all of her classes. Last quarter, the system bogged her down by forcing her to choose insurance and other optional charges before she could register. She was also asked to donate \$3.00 to WashPIRG, which she did even though she had no interest in it. Luckily this quarter, MyUW allows students to take care of these charges beginning one week prior to registration.

Angela uses the schedule finder to coordinate her three classes and chooses the fourth schedule option on the results list. Table 4 shows an analysis of Angela’s experience with student registration.

Table 4 – Evaluation of Student Registration

User Criteria	Values Added	System Processes
Ease of Use	Browsing	Alphabetizing (+)
	Mediation	Formatting (+)
	Orientation	Simplifying (+)
Noise Reduction	Selectivity	Filtering (+)
Performance	Time saving	Bandwidth? (-)

In terms of ease of use, MyUW student registration has many strengths, but has one weakness in this scenario. The time schedule was helpful to Angela because it is organized by school and lists departments in alphabetical order (+) simplifying navigation. The schedule finder is similar to that of a search engine, where the user inputs the classes he/she wants, and comes up with a series of possibilities. It serves as a form of mediation between the student and registration to help the student negotiate and format (+) a schedule that works for them. As a returning student, Angela was well oriented to the layout of the registration system, which made classes reasonably easy to find (+). The general education search allowed her to filter out (+) classes that have prerequisites and that start before 10:30 am, which greatly reduced the noise for her. Overall, registration was a simple process for Angela and the only negative aspect of her experience was with the performance of the server, which was slow because of low bandwidth (-) and high user traffic.

Overall analysis of MyUW and conclusion

In order to analyze MyUW in a scientific way, I have combined tables 1, 2, 3, and 4 into Table 5. The “User Criteria” column includes all of the user criteria I discussed in prior tables. The “Values Added” column have each value I mentioned followed by a number to indicate how many times the item was mentioned. The “System Processes” column contains each system process mentioned along with a positive or negative number, that I derived from the pluses and minuses from the prior tables. (Each plus equals +1 point, each minus equals -1 point.) The final “User Criteria Evaluation” column contains the summation of the system processes’ points

for each user criteria. I have bolded and italicized the highest and lowest figures for each column to show where the system is doing well and where it could use improvement.

Table 5 – Combined evaluation using the Yim Modified Eisenberg/Dirks Taylor’s Value-Added Model

User Criteria	Values Added	System Processes	User Criteria Evaluation
Ease of Use	Browsing [1]	Alphabetizing [+1]	<i>+/3</i>
	Mediation [1]	Formatting [+1]	
	Orientation [1]	Simplifying [+1]	
Noise Reduction	Order [1]	Indexing [0]	<i>+/3</i>
	<i>Selectivity [3]</i>	Selection [0]	
	Classification [2]	<i>Filtering [+2]</i>	
		Semantic connecting [+1]	
Quality	Authority [1]	Selecting [+1]	[+1]
Adaptability	<i>Flexibility [3]</i>	<i>Customizing [-2]</i>	<i>[-4]</i>
		Choice [-1]	
		Data manipulation capabilities [-1]	
Performance	Security [1]	Server size [-1]	[-2]
	Time Saving [1]	Bandwidth [-1]	

As you can see from the table above, the values I considered most crucial throughout this paper were selectivity and flexibility. In terms of system processes, MyUW is doing well with filtering, but could use improvement with customizing. As a whole, MyUW scores high in terms of ease of use and noise reduction, which is very important and positive for the system, but according to this study, MyUW developers should pay more attention to adaptability features.

The system of plus and minus points with the extra column for user criteria evaluation I have created and illustrated in table 5 allows both the researcher and all other people concerned with the system to quantitatively determine which system processes need the most improvement. Thus, I propose the Yim Modified Eisenberg/Dirks Taylor’s Value-Added Model (2008) should be used together with the Eisenberg/Dirks Modified Taylor’s Value-Added Model from February 2008 (Taylor, 1986, p.50) for system evaluation.

References

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