

# Web Content Management System Stakeholder Evaluations Report

## BACKGROUND

Fordham University is evaluating candidate applications for the next generation of its Web Content Management System (WCMS). To facilitate the evaluation process the Office of Internet Services (OIS) targeted stakeholders and provided them access to demonstration versions of the software (sandboxes). Stakeholders reviewed each application and provided their feedback on the operation of each. The evaluation period was from 10/26/11 to 1/13/12.

## STAKEHOLDERS

16 stakeholders were invited to participate and represent the following areas of Fordham:

- Fordham IT
- Marketing & Communications
- Instructional Technology
- Student Services
- GSAS
- GSB
- Enrollment Group
- Law School IT
- Admissions
- FCRH
- GSE

12 stakeholders completed the evaluation.

## EVALUATION PROCESS

Stakeholders were asked to evaluate three WCMS candidates:

- TerminalFour
- Jadu
- WAVES2

Stakeholders were instructed on how to log on to the sandboxes of each WCMS. Each stakeholder was assigned a unique log on and password, and received documentation on how to perform the following basic functions within each WCMS:

- navigate within the WCMS
- creating a page
- previewing page content
- importing content
- importing media assets
- publishing a page

In order to complete any functions not listed above, stakeholders were encouraged to solicit help from each WCMS's Knowledge Base and Help Files.

### The Requirements Matrix

The OIS created a list of functional requirements, a *Requirements Matrix*, against which the stakeholders evaluated each application. The *Requirements Matrix* is composed of both *End User* and *Administrator* Role functional requirements.

#### Requirements Matrix Column Headings:

##### Category

Each function to be evaluated was assigned to one of three categories:

- Ease of Use:* The level of intuitive interaction with the functional requirement
- Workflow:* Capabilities that allow multiple authoring and dissemination of content
- Administration:* WCMS management and operational control

##### Stakeholder Role

The *Requirements Matrix* lists 26 functions, 18 of which are assigned as *End User* role functions, and eight of which are assigned as *Administrator* role functions. Stakeholders evaluated the WCMS function that targeted their particular role:

- End User:* Functions performed by end users and content creators
- Administrator:* Functions performed by the WCMS administrators

##### Test Function

As a result of the limitations of the sandbox environment, stakeholders were not able to fully evaluate every function in each WCMS. The *Test Function* column heading defines the extent to which the function could be evaluated in the sandbox environment:

- Yes:* The function could be fully evaluated
- Limit:* Because the sandbox environment does not emulate our production environment, there are limitations to fully testing the function

There were two functions defined as *Limit* for the *End User* role, and two functions defined as *Limit* for the *Administrator* role.

##### End User Functions Ratings

*End User* functions were evaluated by the following rating scale:

- 4 = Excellent
- 3 = Good
- 2 = Fair
- 1 = Poor
- 0 = Not Able to Evaluate

##### Comments

Stakeholders were encouraged to leave comments on functions they evaluated.

## METHOD

### End User Functions

There were 12 stakeholders who completed the WCMS evaluations. The highest possible score that a WCMS could receive in the *End User* functions evaluation is 864:

- if the WCMS receives an *Excellent* evaluation for every function:  
(4 points \* 12 stakeholders) \* 18 functional requirements

### Administrator Functions

Only one stakeholder having an *Administrator* role evaluated the *Administrator* functions. The ratings for *Administrator* Functions are as follows:

- 4 = Excellent
- 3 = Good
- 2 = Fair

1 = Poor

0 = WCMS Does Not Support the Function

The highest possible score that a WCMS could receive in the *Administrator* section is 32.

The highest combined score that a WCMS could receive is 896.

## DISCUSSION

### **End User Functions Rankings**

#### **WCMS End User Ranking**

The *WCMS End User Ranking* displays the sum of each rating column (*Excellent*, *Good*, *Fair*, *Poor*). The table below shows for each WCMS, the total number of points that each WCMS received in each rank. **Jadu** and **TerminalFour** received similar *Excellent* and *Good* scores, with 11 points difference favoring **TerminalFour**. In the *Fair* and *Poor* rankings, there is a 17 point difference in **TerminalFour**'s favor.

<b>WCMS</b>	<b><i>Excellent</i></b>	<b><i>Good</i></b>	<b><i>Fair</i></b>	<b><i>Poor</i></b>
<b>Jadu</b>	40	240	16	13
<b>TerminalFour</b>	48	243	21	25
<b>WAVES2</b>	24	196	20	33

TABLE 1. End User *Functions Ranking Totals*

#### **WCMS Not Able to Evaluate Ranking**

The *WCMS Not Able to Evaluate Ranking* is the sum of all functions that stakeholders rated as *Not Able to Evaluate* for each WCMS. The table below shows for each function, the number of stakeholders who rated the function as *Not Able to Evaluate*. When stakeholders rate a function as *Not Able to Evaluate*, it confers zero points toward a *WCMS End User* score. Therefore, the lowest rank is the best score:

Functional Requirement	End Users Not Able to Evaluate		
	TerminalFour	Jadu	WAVES2
Simple, intuitive and uncluttered user interface	0	1	1
Comprehensive end-user documentation	2	0	0
Ability to search through the CMS for a document or media asset	1	1	3
Content import from multiple sources	2	10	4
On the fly rendering/preview of Javascript	2	4	0
Integration with Dreamweaver	9	9	11
Source code error highlighting	12	12	12
An organized, intuitive image/media asset interface	1	1	2
Accurate page preview of layout, as well as client and server script behavior	2	2	4
Document re-purposing to multiple publishing destinations (mobile, PDF, portal) from a single source	9	10	11
Management and reporting of editorial revisions and page updates	4	9	10
Forms / surveys management and administration interface	4	3	9
Forms results data collection in multiple formats	11	9	11
Social networking integration tools	11	8	5
Page versioning with rollback	8	7	5
Archiving of documents / media assets	8	8	8
Easy and intuitive way to relocate documents among folders with CMS	5	8	6
<b>WCMS NOT ABLE TO EVALUATE RANKING</b>	<b>91</b>	<b>102</b>	<b>102</b>

TABLE 2. For each WCMS, the number of instances wherein stakeholders rated a function as Not Able to Evaluate

Both **Jadu** and **WAVES2** have a *WCMS Not Able to Evaluate Ranking* of 102. **TerminalFour** has a ranking of **91** which means that **TerminalFour** has 11 more instances than **Jadu** and **WAVES2** where stakeholders evaluated functions that contributed positively to **TerminalFour's** *End User* scoring.

Of particular note are three functions that generally would be used by most stakeholders, yet significantly more end users were able to evaluate in **TerminalFour** than in **Jadu**:

- Easy and intuitive way to relocate documents among folders with CMS
- Management and reporting of editorial revisions and page updates
- Content import from multiple sources

That **TerminalFour** has fewer instances of functions that stakeholders rated as *Not Able to Evaluate*, contributes to **TerminalFour**'s higher *End User* score.

### Administrator Functions Ratings

**Jadu** and **TerminalFour** were virtually equally matched in support of the *Administrator* functions. One minor difference between the two WCMSs is that **TerminalFour** has built-in functionality for single and bulk import of HTML content, which could likely aid in content migration. While both **Jadu** and **WAVES2** do not have administrator support for data migration, **WAVES2** further lacks support for the static publishing of content in multiple server technologies. Below is the scoring for WCMS performance in the major *Administrator* functions:

<i>Function</i>	<i>Jadu</i>	<i>TerminalFour</i>	<i>WAVES 2</i>
Static Content export in Multiple Server Technologies	4	4	0
Banner Luminis Integration	4	4	2
Editor tool customization	4	4	4
Data Migration Tool	1	2	1

TABLE 3. WCMS performance in the major Administrator functions

## FINAL SCORING

In *End User* evaluations, **TerminalFour** received the highest score of 337. **Jadu** is second with a score of 309, and **WAVES2** trails with a 273.

In the *Administrator* evaluation, **Jadu** received a total score of 25, **TerminalFour** a 24 and **WAVES2** a 22.

In the overall evaluation scoring of both *End User* and *Administrator* functions, **TerminalFour** received the highest score of 361, and is the stakeholder choice for WCMS.

<i>Functional Role</i>	<i>Jadu</i>	<i>TerminalFour</i>	<i>WAVES2</i>
End user	309	<b>337</b>	273
Administrator	25	<b>24</b>	22
<b>TOTAL</b>	334	<b>361</b>	295

TABLE 4. The WCMS Evaluation final scoring