

<u>1 Methodology OSMM applied to the open source cms Drupal.....</u>	<u>1</u>
<u>1.1 Drupal assessment : Software.....</u>	<u>1</u>
<u>1.2 Drupal Assessment : Technical support.....</u>	<u>5</u>
<u>1.3 Drupal assessment : Documentation.....</u>	<u>6</u>
<u>1.4 Drupal assessment : Training.....</u>	<u>8</u>
<u>1.5 Drupal assessment: Integration.....</u>	<u>10</u>
<u>1.6 Drupal assessment : Professional services.....</u>	<u>13</u>
<u>1.7 Drupal assessment : Global Evaluation.....</u>	<u>14</u>

1 Methodology OSMM applied to the open source cms Drupal

1.1 Drupal assessment : Software

4 aspects are taken into account:

Element	Description
Product functionality	How well does the product answer the user requirement collected as the first step in this process
Longevity	How long has the product been available
Quality of the product	Does the product reflects good quality and development process ? Is there sufficient testing with good quality test?
Quality of the technical team	Is the team large enough with right skill and experience mixture ?

The information's gathered from the check-list shows that Drupal is a product that posses many functionalities. Strictly from a functional aspect Drupal probably matches most requirements an organisation could expect form a CMS. The modular architecture of the product allow the organisation to add to Drupal only the necessary modules as the requirements of the organisation evolve: Drupal presents therefore an interesting advantage in term of flexibility.

The translation of Drupal in several languages is also an interesting advantage for many organisations. The modular architecture and the respect of coding standards (PEAR) are elements that positively influence the quality of the product and make it easier to maintain.

Drupal offers functionality that are even and sometimes superior to most proprietary CMS, several comments from the community and analyst also confirm the good quality of the product however some of them mention a steep learning curve due to the product's "complexity". The expected functionality in term of content creation, content management, publication and presentation are met with a good level of satisfaction by Drupal.

Drupal is assigned a score of 8 for product maturity

Open Source Maturity Model	
Software check-list	
Product: Drupal	
Method	Notes
Product functionality	
<p>Reviewed applicable standard:</p> <ul style="list-style-type: none"> Taxonomy : a way to organise information RSS : Real simple syndication Blog Forum Sondage Xhtml support 	<p>Drupal supports directly or indirectly those standards. When Drupal does not support the standard by default in the core product there is a add-on available to implement it. For example syndication support requires the installation of a free add-on to be supported.</p>
<p>Compared with commercial vendor's published functionalities :</p> <p>We used www.cmsmatix.org to compare Drupal's functionality with Joomla and some commercial vendor (Epression 1.7 and Simplicity)</p> <p>Also wikipedia : http://en.wikipedia.org/wiki/Comparison_of_content_management_systems</p>	<p>Drupal offers a large panel of functionalities that match most commercial vendors (ie : Expression, ABO, Simplicity). Many add-on make it possible to add new functionalities to the base product, it is particularly the case for most built-in applications (chat, contact management, job posting,...)</p> <p>However compared to commercial products Drupal does not offer most of the advanced functionalities related to performance. For example Drupal does not offer database replication or load balancing (see www.cmsmatrix.org for a detailed comparison).</p> <p>Despite the lack of those advanced functionality no forum or mailing list mention problems related to performance. However this aspect should be taken into account by organisations with high</p>

	performance requirements.
Reviewed technology analyst « best of breed » functionality definitions (eweek, advancedwebdesigned.com, ...)	<p>Drupal offers a large panel of functionalities and many add-on are available via the user community. Analysts also mention that Drupal is “an excellent solution for professional web site”.</p> <p>The marketing and review section from the website also references several article published on the web by analyst and independent IT Magazine: those articles insist on modularity and good functionality but also mention the fact that the learning curve is steep and requires a substantial investment of time.</p>
Polled user community : 7 users chosen randomly	<p>1 out of 7 express negative comments (he did not managed to install the product)</p> <p>The user’s opinions are positive: Mostly they mention functionality and flexibility of use.</p> <p>Several comments also mention the advantage of the many available add-on but also mention that the product is difficult to use in the beginning of its use.</p>
Product longevity	
Version	4.7.2
Life span	5 years (started in 2001 by 2 university students from the university of Antwerpen: Belgium)
Total number of download	Since September 2005 the number of monthly download is around 30 and 50.000
Product Quality	
Source code review	<p>In order to become part of Drupal’s core product the code has to comply with the PHP PEAR¹ coding standard.</p> <p>The 3 modules examined are clearly commented, the code is nicely structured witch makes it easy to understand and</p>

¹ <http://pear.php.net/manual/en/standards.php>

	<p>maintain.</p> <p>Drupal's API reference page is easy to use : all files, functions are listed and commented. The API reference also has search facilities to ease the developer's work.</p>
QA assessment : Number of QA tests	<p>Drupal has a test module to perform unit testing. The web site also mention that the test module is not widely adopted and also that more tests will be added to the module. The web site also propose a tutorial that explain how to perform tests.</p>
QA assessment : Review of QA tests	<p>Documentation, coding standards, Drupal's information for developers on how to write secure code, Drupal's test suite are all elements in favour of the product's quality</p>
QA assessment : Test coverage assessment	<p>It is hard to asses test coverage however the process described in the previous section are very encouraging for the quality of the product delivered</p>
Activity level of the product : Number of outstanding bugs	<p>1438 for a total of 8131</p>
Activity level of the product : Number of code check-ins	<p>On average a little less than 1 patch a month</p>
Product Team	
Team size	<p>70 maintainers : each maintainer review the code of the proposed changes and maintain the code. According to Dries Buytaerts the number of developer is about 450</p>
Skill and experience level of team	<p>Most contributor have work in development or own a web development company. A number of the developer have a Ph.D.</p>

1.2 Drupal Assessment : Technical support

OSMM potential points for support

Type	Points
Community support	6
Paid support	3
Advanced self support	1
Total support points	10

Because most companies cannot provide internal support for Drupal, community and commercial support are very important issues. It is of course even more important for small size organisations.

Paid and community support can easily be found on Drupal.org site and also with Google searches.

The support page from Drupal is clearly structured, and provides links to several categories: Documentation, forums, feature request...

Forums are grouped by category, members are active and responses are fast, however around 20% of questions or bugs remain unanswered. Members of the Drupal community are helpful and local community are created for Drupalers.

Commercial support is also available but the number of companies is limited. Drupal.org site and Google searches return professional support provider that are mainly located in Northern America and western Europe (also Belgium and France)

The score assigned for support is 6.

OSMM support assessment check-list

Open Source Maturity Model Support assessment Check-list	
Product: Drupal	
Support Assessment	

Method	Notes
Reviewed mailing-lists/forums	<p>Drupal's web site has 10 forums related to support. The web site also offer an advanced search engine in order to find previously answered questions in forums. Out of 100 chosen randomly 18 remain unanswered or without solutions.</p> <p>The tone of questions and answers on the web site is respectful.</p> <p>The web site also inform the user on how to ask questions efficiently.</p>
Assessed paid support	<p>Drupal references 16 companies that offer a large choice of support and services.</p> <p>Those companies are mostly located in Northern America and Europe.</p>
Assessed self support	<p>Modularity and the respect of coding standard makes internal support easier.</p> <p>PHP MySQL and Postgresql are already very popular open source products and many organisation will have among their staff people with those skills.</p>

1.3 Drupal assessment : Documentation

OSMM potential points for documentation

Type	Score
Developer created	3
Web postings	2
Commercially published documentation	5
Total documentation potential points	10

The documentation available on Drupal's web site is of excellent quality: good structure by category and it also provides information's for the user on how to use the product (page creation, links,...), for the administrator and also for developers.

The documentation is built by the user community and this process is of course eased by the use of Drupal. Sadly enough the information is not available in exportable format (i.e. : pdf,doc), however every document can be published in a printer friendly version. The documentation is also available in many other languages (among them French, Flemish) but not all information's from the English site are translated.

Many users also publish high quality documentation, most of the user produced documentation is in English and can easily be found with Google searches.

A few books about Drupal are also available, the fact that is this type of documentation exists is in itself a very good maturity indicator. The number of commercial books is not very important (only 3 in Amazon) but the opinions of readers are usually very positive and usually review the book as a good introduction Drupal. Given the collected information's the documentation receives a score of 6.

OSMM documentation check-list

Open Source Maturity Model Documentation assessment check-list	
Product: Drupal	
Documentation assessment	
Method	Notes
Reviewed developer created documentation	Compared to other open source product documentation from Drupal's web site is high quality: nicely organised by category, it provides information's for the users, administrator and developer. The documentation is also available in several languages. The documentation from the web site is also available in a printer friendly version but is not available in other format (pdf, doc..) this might be a problem for users who do not have access to the internet
Reviewed web postings	Google searches returns some very good

	<p>user created documentation (most of the time in English). Drupal is very flexible it is therefore no surprise that the returned results are numerous and related to a wide variety of subjects.</p>
Reviewed commercially published documentation	<p>3 books are available from Amazon.com site: comments from previous reader are very positive, they are described as a good introduction without but going into the details of the product. These books talk about Drupal in the context of online community building.</p>

1.4 Drupal assessment : Training

OSMM potential points for training

Training type	Score
Web-based mini-tutorials	1
Developer-created tutorials	2
Commercial tutorials	3
Classroom delivered by development team	2
Classroom delivered by commercial entity	2
Total training maturity possible score	10

In Drupal.org site the user manual as well as the user recommendation's guide are already a very good source of training and should probably satisfy most new users.

External entity training is possible but the nature of the product probably explains that most companies emphasise on professional services instead of training. Even though training possibilities are limited in quantity they cover most aspects of the products and are targeted to users or administrators.

The commercial web site www.lullabot.com offers for free video's to install Drupal and there are 3 books available on amazon.com that introduce to Drupal.

Even though the quality of the offer is good, the training opportunities are limited in quantity, Drupal receives a score of 5 for training.

OSMM training assessment check-list

Open Source Maturity Model Training assessment check-list	
Product: Drupal	
Training assessment	
Method	Notes
Web-based mini tutorials	
Research on the web for training materials	Several tutorials, mostly related to the use and installation of Drupal. www.lullabot.com (commercial web site) offers free of charge video's to help install Drupal.
Developer created tutorial	
Search on Drupal web site	No named tutorials but the user guide and the guide for good practice is a great help for the beginner. Drupal also has video's that present Drupal and its new features. But it is sometimes difficult to find what u want right away for users unfamiliar with the site's presentation.
Commercial tutorial	
Searches on Drupal and Amazon	3 books from amazon comments are identical to documentation
Classroom delivered by development team	
Reviewed Drupal site	The Drupal sites references several companies that provides services and training for Drupal. All companies have at

	least 2 years experience with Drupal: support, training, migration, implementation...
Reviewed forums and mailing-lists for training discussions.	Forums and mailing-lists provide very little information about training. Forums mainly inform about “meeting-up” and informal training session organised by and for the community. www.briyht.com offers training on Drupal for free.
Customer opinion about Drupal training	Not performed
Classroom delivered by commercial entity	
Reviewed Drupal site for certified training by partner	Not applicable
Did web search to locate other training providers not listed by Drupal	Most companies that offer training are first and foremost professional services provider. Some of those services provider also propose training (ie : webschuur in Belgium)
Spoken to 2 services and training providers to determine quality.	The staff is very skilled but are not specifically dedicated to provide training.

1.5 Drupal assessment: Integration

Points OSMM potentiel pour l'intégration

Element	Score
Integration identified	2
Necessary integrations possible via self-development	3
Necessary integration identified by commercial vendors	5
Integration maturity possible score	10

Drupal site list a number of integrations with third party software that are already available (around 20), among them LDAP, Google Analytical, Amazon. It demonstrates the presence of Drupal on the open source CMS market and also that the product is already taken into account by third party witch is a good maturity indicator.

It is also interesting to note that for some missing integrations Drupal proposes a guide that will help the developer to create the missing integrations. Drupal site also mention the most important missing integrations that need to be addressed.

Compared to other CMS Drupal also offer the possibility to run with MySQL but also Postgres, I support not only Apache but also IIS. The support of IIS is especially interesting for organisation's who wish to keep their original IIS web server.

A score of 8 has been given to integration, this takes into account the present integrations possibilities and also reflect the commitment of Drupal to integrations issues

OSMM integration check-list

Open Source Maturity Model Integration assessment check-list	
Product: Drupal	
Method	Notes
Identified integration	
Interview members of product selection task force to determine needed product integrations.	The ONE intranet web site is entirely written in html with some javascript witch does not raise any integration issues with Drupal: Drupal provides built-in methods to support ajax and javascrit. The module section of Drupal lists 20 existing integrations.
Interview with developers	None discovered
Reviewed process table	None discovered

Interview with DSI	<p>The CMS should be able to use the existing environment (MySQL, IIS)</p> <p>Drupal supports Apache as well as IIS, MySQL as well as Postgres</p>
Necessary integration available via self-development	
Identified missing integrations	none
Evaluated possible integration mechanisms that can be used to create necessary integrations	none
Necessary integration developed by commercial vendor	
Identified missing integrations	<p>For missing integrations to third party Drupal site propose a guide that will help integration in some of the most demanded area: Shared user database, session issues, integration with theme engines.</p> <p>Even though those integration are missing Drupal list them and propose a guide that will help the developer.</p>
Available commercial integration	<p>In addition to the 20 integrations listed in Drupal Web search return the following commercial integrations:</p> <p>Digital Content Process http://www.contraire.com Telecommunication process http://www.developmentseed.org information architecture planning specialist http://www.tejasa.com</p>
Missing integrations	
Identified any integrations that cannot be created previous mechanism	<p>Drupal list the following missing integrations without providing any solutions for it:</p> <ul style="list-style-type: none"> • Shared authentication • Synchronization with 2 user database.

	<ul style="list-style-type: none"> • External authentication • Script import <p>Forums and mailing list mention about 20 integrations requests</p>
For every integration, decided whether project can go forward without integration	None of the missing integration forces our organization to stop the project.

1.6 Drupal assessment : Professional services

The official maintainer team of Drupal does not directly provides professional services, however the Drupal list more than 15 professional services provider specialised in Drupal. Most companies reference some of their implementations, they usually provide services related to implementation, training, support, implementation follow-up.

Most of those companies are small or mid-sized companies located in Northern America and Europe. Web searches make it possible to find companies specialized in Drupal and/or open source. Given the small size from most of those companies and a relative limited offer Drupal receives a score of 5 for professional services.

OSMM potential scores for professional services

Element	Maturity Points
Product team offer services	3
Services available from local or regional firms	4
Services available from national or international firms	3
Professional maturity score	10

OSMM professional services assessment check-list

Open Source Maturity Model Professional services assessment Check-list	
Product: Drupal	
Method	Notes

Examined Drupal site for information regarding professional services.	The company listed in Drupal for professional services are the same as for training, the comments are identical.
Performed Google search on “Drupal consulting”	Similar comments as for trainings
Reviewed web site from identified services providers.	Identified companies are often specialised in open source and of small size. Most of them have at least have at least 2 years experiences with Drupal and provide references from several previous implementations.
Interviewed 2 professional services for assessment.	Among the 2 companies contacted one is a small size company specialized in Drupal , the second is larger and operates only in open source and also Drupal. The skill level as well as the experience are very good but the small size might be a risk in term of availability and dependence with key people
Reviewed references for 2 professional services providers	The 2 companies provide references with small and large customer. Amser a company specialized in open source is well know in Belgium for high skilled staff and often makes the news in specialised IT magazine (ie : Datanews) and national television

1.7 Drupal assessment : Global Evaluation

Drupal OSMM final score

Element	Potential score	Actual score	Weighting factor	Element weighted
Software	10	8	4	32
Technical support	10	6	2	12
Documentation	10	6	1	6
Training	10	5	0,5	2,5

Integration	10	8	0,5	4
Professional services	10	5	2	10
Total maturity point for Drupal				62,5/100

The scores given to Drupal indicate that the product has already reached an overall good level of maturity: Given the OSMM recommendation the product has already reached a level of maturity that would qualify the product for production by early adopters and is close to satisfy pragmatic users for production use. The maturity level is also confirmed by the use of Drupal by many large web site and organisations (NASA, NATO, MIT, SFSU...). Software and integration are the most mature elements of the product, however the production still shows some area that need to be improved: The offer for training and professional services could certainly be more available.

As suggested by the OSMM method the result of this analysis will not decide whether the organisation choose to use the product or not, but it will provide a good material for an informed discussion.

Given all the information's gathered it sounds reasonable to suggest that those discussions with the help of OSMM results for Drupal could lead even the pragmatic user to test Drupal in Pilot project.