

DEVELOPMENT FRAMEWORKS AND METHODS

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SECTION A

In order to produce a management summary to explain to Dsdm attern would be an appropriate method to use in Night Watch (NW), we need to understand is DSDM framework for developing RAD, until now. we are using DSDM version 4.2 is the version identified. The basic idea behind DSDM is instead fixed a number of functions in a product and then adjust the time and cost to complete, it will try time and cost to complete, and then adjust a number of functionality stars be suitable. DSDM consists of 5 stages: Feasibility study, business study, functional model iteration, design and build iteration, and an implementation. Two early stages be done consecutively and completed at the same time. 3 final stages, each time the current development work is completed, will be repeated with the provisions larger.

We definitely have to know what kind of environment / system RAD / DSDM is appropriate for:

- ❖ **Small and Medium** size as in Example project's case study is "She cũng stated là IT department could create a functional prototype in 3 months and honest system could then be beta tested this with some of the ask for their regular clients."
- ❖ **The functionality of the system is not computationally complex:** it is suitable for night watch new system, in addition to the basic functions available in the system, the system will have new functions through data collection from user ("Customers chose the desired design, color and gõ có wrist measurements"), it does not have the functionality required complex calculations.
- ❖ **The application is interactive:** "These straps could be made to order after customers choose the desired design, color and entered their wrist measurements"
- ❖ **User groups are defined:** In the case of research, user groups are mentioned mostly regular customers of NW. This is mentioned in the "after create a functional prototype system in 3 months and that this could then be beta tested with some of their regular clients".
- ❖ **The development team:** Development Group should be commitment and trained in DSDM. Although all the participants of the development team were enthusiastic about WatchThis and are motivated to make it work *"for the last few years, their work has mostly involved minor additions and maintenance of the current system"*. It will cause many difficulties in the process of system development.

The form factor of the system and matching method DSDM Atern development are:

Summarize, the system determines matching method DSDM Atern or not, should be based on the working principle of the method DSDM In WatchThis new system

The advantage of using DSDM Atern:

- + Resources involved in the entire process of product creation to final delivery will meet the requirements of users
- + Prototyping in the early stages of development to help users have a better view of the product
- + Communication between team members is improved through seminars for the project can avoid misunderstandings and the risk of building the wrong product is reduced.
- + Timebox ensure the supply to meet the deadline
- + High priority business issues to be addressed in the implementation of the first
- + Dealing with the rapid changes in demand
- + The quality of products is guaranteed because the testing is done during each iteration.
- + Fixed the duration of the project and budget

Disadvantages of using DSDM Atern:

One drawback is the cost Atern DSDM. DSDM Atern offers many techniques to ensure the quality and coping with change so the cost would correspond to rise. Thus DSDM Atern is inconsistent with all small organizations with a low budget. To apply DSDM Atern, NightWatch this must ensure that they have sufficient funds to run the project. Second, the technical timebox fixed time limit could be some good features to be removed to fit the time limit.

SECTION B

Section B – High-level requirements analysis and MoSCoW prioritization

Firstly, High-level requirements are functional requirements so it will describe what the system should do , not how the system react to some specific situations.

Secondly , high-level requirements should be hard enough to care about in early stage of incremental approach.

Thirdly , high-level requirements should follow the important of the business

B1.1 Review the ‘Not high-level requirements’ list given at the end of Appendix A.

Non-high level requirement	The person who listed	The reason	Reference
The site must load quickly	John Davies(Managing Director)	Performance	Page 9
The site must be safe and secure	Jerome Bennett(Shiping,Logistics and Marketing)	Security	Page 10
Our existing customer must be log in	John Davie(Managing Director)	Security	Page 9

We must ensure that people who use the website can register and log in	Louise Grant (Shipping, Logistics and Marketing)	Security	Page 9
“We also need the following: Checkout/ Feedback/ Quick and easy/ Hosting/ Register a URL and we must not forget to trademark the name WatchThis”	Louise Grant (Shipping, Logistics and Marketing)	Too detail	Page 9, 10
It is imperative that the website be easy to use	Beau Conway (Accountant)	Usability	Page 10
You clearly need all the usual website functionalities (login, add to basket, pay, ship...)	John Davies (Managing Director)	Performance , Usability	Page 9

Here are some of the requirements to be evaluated is not “high-level requirements” given at Appendix A.

- “The site must load quickly” of John Davies(Managing Director) isn't high-level requirements because it because it is the performance of the website and it depends on the response time from the web to the server
- “The site must be safe and secure” of Jerome Bennett(Shiping,Logistics and Marketing) isn't high-level requirements because it belongs to the security and safety information in the system and this is non-functional requirements
- “People who use the website can register and log in” of Louise Grant on page 9 isn't a high-level requirement because it is the basic function of a system is determined and requests that are repeated from John Davies.
- “We also need the following: Checkout/ Feedback/ Quick and easy/ Hosting/ Register a URL and we must not forget to trademark the name WatchThis” of Louise Grant (Shipping, Logistics and Marketing) because it lists too many details and that is what must be done when the system is completed and it is related to the goods and brands
- “It is imperative that the website be easy to use” of Beau Conway (Accountant) isn't high level requirement because This is non-functional requirements that specify the characteristics of the system quality and performance, rather than detailed behavior. It can be focused on the later stages of the development of the system
- “You clearly need all the usual website functionalities (login, add to basket, pay, ship...)” of John Davies (Managing Director) isn't high-level requirement because this request was again echoed by John Davies, it is the basic function of a system and it was in the non-function

B1.2 Add 8 - 10 high-level requirement

The high requirement is functional requirement and delivered is one or more than one time box:

High-level requirement	The person who listed	The reason	Reference
“A way to select a design and specify wrist size”	Tom Thompson (Shipping, Logistics and Marketing)	Performance	Page 9

“Customers must be able to search and browse different 3D designs”	John Davies (Managing Director)	Security	Page 9
“A way for people to create their own designs”	Tom Thompson (Shipping, Logistics and Marketing)	Security	Page 9
“A way to pay for an item”	Tom Thompson (Shipping, Logistics and Marketing), Louise Grant (Shipping, Logistics and Marketing)	Security	Page 9, Page 10
“need to create 3D models ourselves”	Manfred Smith (Contracted consultant on 3D printing)	Too detail	Page 10
“A way for people to return items they are unhappy with”	Tom Thompson (Shipping, Logistics and Marketing)	Usability	Page 9

B2. Use the MoSCoW rules to prioritise the requirements in your updated ‘high-level

B2.1. Below is the updated list of high-level requirements reflected the priority for each requirement.

MUST HAVE

- ❖ Log base and management system
- ❖ The filtered product searches function
- ❖ Payment with intelligent form of payment online

SHOULD HAVE

- ❖ The system can log information about the employee and coal project on their profile
- ❖ The system can extract reports on attendance, performance of the group, the application of funds, etc
- ❖ This tracking system to explain what security personnel specific branch registered
- ❖ A scheduling system to assign staffer to property
- ❖ System graphical reports and data on sales and market penetration

COULD HAVE

- ❖ This system requires manual can search and guidance for new users.
- ❖ The system can find the personal information of all employees and customers so I can contact them if there are problems.
- ❖ The system can extract a map or calendar, showing weekly schedule and work assignments, which I can print it out and stick to the bulletin board.
- ❖ The detailed order history of this order

B2.2 Explanation about making this prioritisation

MUST HAVE

- Log base and management system this is love need indispensable in the system, it is the interaction between the relationship with each of the system is managed for example by the employees, employees with customer requested Otherwise, the system will become passive and it affects business efficiency of the system
- The filter product search function is a very important function of the system (the website) it helps to be flexible to our customers to have easy and know product information quickly with the fastest time
- Payment with intelligent form of payment online is one of the very important function, it can help customers easily determine the payment products and attract more customers to use the services of the system

SHOULD HAVE

- The system can log information about the employee and coal project on their profile.If no updated information on the young people on their profiles, all volunteers will get the same full-time employees will not know who has good experience and excellent performance can be selected to captain the team. Moreover, without it the information in the database will not be sufficient to develop information systems NightWatch Superintendent.
- The system can extract reports on attendance, performance of the group, the application of funds, etc.Without this requirement , the full time worker who manages about 10 volunteer can not figure out who is registered but not attend ,who show poor performance and whether the funds is invested appropriately.
- This system needs to keep track of what branch a specific staffer are registered with. This system can also change this, so a move to a different location. Keep track of what branch a special young workers belong is extremely important in the work of young workers assigned to the elderly. If the system removed this function, the system can be allocated to a number of volunteers to the inability to complete due to the distance. Besides not updated when a child moves to different branches will lead to the same problem because of the inaccurate information.
- A scheduling system to assign staffer to property.It helps department managers to impose penalties for a number of volunteers caused some damage to the engine. Without it, some volunteers will not be responsible for maintaining the original condition of the property and can reduce the number of instruments, this leads to raising the budget for equipment repair.
- System graphical reports and data on sales and market penetration is a function which is also very important to determine the ability of business development, but also unnecessary for users to follow Subscribe parties will not bring objectivity to the user in the report should be created by the spaces in between the prestigious rating system.

COULD HAVE

- This system requires manual can search and guidance for new users.It is not really necessary because the manager may have some documents that guide new users instead of doing it in the system. Without it, some new users can still use the system with a number of documents were provided.
- The system can find the personal information of all employees and customers so I can contact them if there are problems. This can be very important in the case of an emergency number to manage service centers have direct contact with some of the staff or customers. The system can extract a map or calendar, shows and weekly schedule

- The system can extract a map or calendar, showing weekly schedule and work, that I can print out and stick to the cover panel. printing schedule and sticking to the board as a way to avoid forgetting to remind job duties in case you do not regularly access the computer system. It is required the system can be done after everything is completed
- The detailed order history of this order is an important function in the system, it will not be a major influence on the new system because the customer can know through invoices received after the bar panoramic

SECTION C

C1

Fair

Data controllers clear and honest with must has about personal information over the individuals will Be used like have a choice to decide to ask for their share data or not. Besides use, personal information has a negative impact due not on Those Who share added. NightWatch is a retail company as an e-commerce business Acts, against the storage, collection and customer information is indispensable as well as to the rules for the collection, stored customer information.Problem: NightWatch wants implementation of the customer information and shares theirs .

Problem: NightWatch wants implementation of the customer information and shares their personal information with the company that the customer wants to know

- ❖ In this case, the controller must clearly analyze why should collect customer information and will share data with customer information without negative effects
- ❖ Besides the controller must also pay attention to the employees from the age before their spend data will information such as age, marital history etc so maybe it will be a negative impact if used other purposes

Specific

All personal data collected should only serve for one or more specific purposes and will not be further processed in any manner incompatible with that purpose or those purposes

- ❖ NightWatch wants to collect customer information for the purpose of Improving service quality and can meet all the needs of customers. The purpose of this will be specified in the agreement with the customer
- ❖ The data controller must inform customers about their data will be used for new services.

Adequacy

Data controllers need to know is that only collect the necessary information and conform to the purposes they are to be processed, avoid information being redundant or unnecessary

- ❖ NightWatch should collect personal data such as name, phone number and address of the customer to check the authenticity and shipping, online payment for the information of your credit card or e-wallet guest restaurant also some information such as date of birth, identity card number, marital status data are unnecessary
- ❖ The data controller must understand the need of information and data to the distribution and rational use of the system

Accuracy

All personal data is stored and processed must be accurate and must be updated as necessary

Problem: NightWatch can collect data of a personal wrong or is late to update the data necessary for the business. For example, when the regime of payroll for staff to be changed.

- ❖ In this case, the data controller will have to check whether the information provided by these individuals is accurate. Data controllers have the right to delete or correct false information.
- ❖ Moreover, the data controller should always be looking for an update if it is available. Data controllers must maintain old records to ensure all the old reports are not missing information.

Retention

Personal data must be processed when it is no longer necessary to avoid the overdue use data that is capable of damaging the system.

Rights

Individuals who provide their personal data will have some rights such as access to information a copy of their personal data, a right to oppose the processing that tends to cause damage to them or to claim compensation for damages caused by a breach of the law.

Problem: When NightWatch unfortunately let third parties use personal data for malicious intent and damaging the reputation of some individuals.

- ❖ The responsibilities of a data controller are to figure out how to compensate for the damage caused by this situation
- ❖ Data controllers may also contact those affected to apply for their decisions with their own information.

Security

This principle requires organizations to develop appropriate techniques for building a good security system to prevent personal data from being damaged or leaked and curbing the illegal processing or unauthorized personal data.

Problem: The information is organized and adjusted by NightWatch may be lost or leaked to other organizations.

- ❖ Data controllers must ensure that when a number of private data accidentally lost or leaked, the recovery is done quickly to avoid mistakes in the service and protection of personal data leaked.
- ❖ Data controllers must also help people authorized to know about the harmful effects of data leakage and guide them how to keep their data safe.

Transfer

When personal data is moved to a country outside the EEA (European Economic Area), it must ensure that personal data is protected carefully follow the rights and freedoms of the data subjects.

- ❖ In the case of NightWatch data is sent to a country outside the EEA, the data controller to assess whether the country has a strong security system to protect personal data.
- ❖ Second, data controllers should implement a contract that lists out all the terms which the country must comply with according to the eight principles of the DPA.

The purpose of the BCS Code of Conduct

Currently, the implementation of a common IT system and have a lot of information technology systems for different purposes. There are significant concerns about the abuse of IT systems side gain an advantage over those who lack knowledge in the field of information technology. Besides having a lot of bad behavior and illegal conduct in order to achieve personal gains. For these reasons, the BCS was established to control the behavior of all employees in information technology, expert or user-related information technology system. Its main purpose is:

- Providing professional standards and rules that all members must follow
- Encourage building an IT system that is useful and beneficial to the public

Public Interest

a. have due regard for public health, privacy, security and wellbeing of others and the environment.

Problem: When developing an information system, the development in many ways has information data of employees, customers sold for money

In this case, the developer has violated the rules (a) the public interest as he reveals all personal data without the consent of the individual providing their personal information.

According to the rules (a) in the public interest, the developers should care about privacy and public prevent leakage of personal information for personal gain.

Professional Competence and Integrity

- a. only undertake to do work or provide a service that is within your professional competence.
- g. reject and will not make any offer of bribery or unethical inducement.
- f. avoid injuring others, their property, reputation, or employment by false or malicious or negligent action or inaction. [1]

Problem: To increase wages and have higher rankings, a system developer wants a better report on his work to them bribes center director is better to add or upgrade its high productivity in the report.

In this case, the system developer will breach the rules (g) of professional competence and integrity. Instead of bribes, employees will improve their abilities so that he can have better rankings and wages.

Duty to Relevant Authority

- a. carry out your professional responsibilities with due care and diligence in accordance with the Relevant Authority's requirements whilst exercising your professional judgment at all times.
- b. seek to avoid any situation that may give rise to a conflict of interest between you and your Relevant Authority.
- c. accept professional responsibility for your work and for the work of colleagues who are defined in a given context as working under your supervision.
- d. NOT disclose or authorize to be disclosed, or use for personal gain or to benefit a third

party, confidential information except with the permission of your Relevant Authority, or as required by Legislation.

e. NOT misrepresent or withhold information on the performance of products, systems or services (unless lawfully bound by a duty of confidentiality not to disclose such information), or take advantage of the lack of relevant knowledge or inexperience of others.[1]

Problem: Because of a disagreement with the company over wages, system developers have demolished some of the terms of contracts signed and he can copy some of the system functions for developing NightWatch other systems that do not belong NightWatch.

In this situation, the system developer has violated the rule (b) and (c) the duties and powers concerned because he had not finished his job in a professional manner and this will increase conflict with the company. Besides, he has also violated the rule (d) and (e) because he disclosed information NightWatch system without permission of the organization. As an expert, he will handle all disputes with the company early and permission of the competent department to develop similar functionality.

Duty to the Profession

d. act with integrity and respect in your professional relationships with all members of BCS and with members of other professions with whom you work in a professional capacity.

f. encourage and support fellow members in their professional development. [1]

Problem: The system developers ignore the bad behavior of colleagues such as removing an important function of the system to meet the deadline because he thought it was not his concern

In this case, the system developer will breach the rules (d) and (f) of the occupational tasks. Rather than ignore, he should make some suggestions to a person with bad behavior and more, he should report to the project manager for some action.

Reference

British Computer Society (BCS), 2014. British Computer Society (BCS). [Online] Available at <http://www.bcs.org> [Accessed 6 November 2014]

Information Commissioner's Office (ICO), 2014. Guide to data protection. [Online] Available at: http://ico.org.uk/for_organisations/data_protection/the_guide [Accessed 6 November 2014].