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Self Assessment

1. With the funnel approach you start with general questions and go towards more specific questions, the pyramid approach is the exact opposite.
2. Closed questions are useful for quantitative analysis, you can add the answers of these questions on top of each other much easier.
3. With a questionnaire you can ask far more people than you can with interviews so you’ll get a better overview of what the user requirements are.
4. The system does not make use of these information flows there for it is unnecessary to record this in the diagram.
5. An information flow diagram is a type of data flow diagram, so an information flow diagram is always a data flow diagram. However data flow diagrams can be levelled up no longer making it an information flow diagram but something else.
6. Levelling up a DFD means adding more detail to the diagram.

Hoofdstuk 11

Self Assessment

1. System design is the production of an appropriate design that results in a good quality information system that is easy to use, provides correct functions for end-users, is rapid in retrieving data, is reliable, is secure and is well integrated with other systems.
2. System analysis is the act of investigating an information system in order to find its strengths and weaknesses while system design is the act of producing a new system.
3. Validation and verification are used in order to make sure that the system that is being created is actually what is required.
4. Process and data modelling is used to understand what the system needs to do and how it needs to do it. Process modelling is usually done by making ERDs and data modelling is done by making DFD.

Bijlage 2

Questions

1. System design
2. For the management as well as the technical staff
3. a. a determination which data is important and what relationship the data has with each other.

b. a type of data that is present in the system

c. a piece of information belonging to an entity

d. a file that forms a link between two systems

1. input tasks and output tasks
2. you must have knowledge of the output products since they determine the required input.
3. By using an authorization structure.

Bijlage 2

Assignments

1. Name: Product

Description: An item or service that is provided by the company that is delivered alongside an invoice.

Number of records: 1000, 25 new every day

Attributes Product: description: type:

Code an 8 digit code that represents (8)

the product

Name name of the product or service that (X)(99)

is for sale

Price the cost of purchasing the product (8)

Storage location system code that represents the (8)

Storage location used for storing

The product.

1. Name: Invoice

Description: a document that provides information on the purchase of a

Product or service.

Number of records: 500, 5 new every day

Attributes Product: description: type:

Code an 8 digit code that represents (8)

the invoice

invoice line code an 8 digit code that represents the (8)

Product or service involved in the

Purchase.

Customer an 8 digit code that represents the (8)

Customer involved in the purchase.

Name: Invoice line

Description: a document that provides information on the purchase of a

Product or service.

Number of records: 500, 5 new every day

Attributes Product: description: type:

Code an 8 digit code that represents (8)

the invoice line

Product an 8 digit code that represents the (8)

Product or service involved in the

Purchase.

Amount the amount of products involved (8)

in the purchase.

|  |  |
| --- | --- |
| Code output product | 120304 |
| Name | Invoice |
| User | Customer |
| Objective | Inform the customer about the details of the purchase. |
| Frequency | Every purchase |
| Sorting | Invoice ID |
| Selection | Date |
| Data to be printed | Customer id  Product id  Product amount  Product price |
| Remarks | Printed according to standardized invoice documentation. |

Activity 1.1

1. Information
2. Information
3. Data
4. Data
5. Information
6. Information
7. Data

Activity 1.2

1. An improved inventory control is a tangible value because you can measure the speed at which inventory is controlled and how much the improvement benefits you.
2. Enhanced customer service is an intangible value because you can not directly measure the financial value however an enhanced customer service might attract more customers and therefore still being of use.
3. Tangible, you can easily measure how much you increase the production and how much it will benefit you.
4. Tangible, an obvious drop in costs and can is already measured in the cost reduction itself.
5. Intangible, you can not calculate how much a customer will purchase more just cause he has more loyalty.
6. Intangible, again it will benefit indirectly but can not be measured how much it will improve.

Activity 1.3

<https://globenewswire.com/news-release/2016/10/11/878715/0/en/Holding-Company-of-FNCB-Bank-Undergoes-Name-Change.html>

here the company changes its name in order to reflect itself better and there for has an intangible value to the company.

Activity 1.4

Activity 1.5

Amazon.com:

I would say the information quality is very good for amazon.com.

The information provided is concise, up to date and always up for change when necessary. There are little to no errors to be found and all information Is relevant, there may be a few things missing here and there so I can’t give it full marks for completeness. The information is ordered well and clear with fully detailed information.

Audible.com:

I would say the information quality is decent for audible.com

There is some unnecessary information which doesn’t bode well for the relevance of the information, most of it is however accurate and complete so that provides some quality. It’s all up to date information so there is no problem there. Some information is a little difficult to understand with how It is presented so in the end I could only say it’s decent.

Activity 1.6

facts, information, and skills acquired through experience or education; the theoretical or practical understanding of a subject

 the fact or condition of [knowing](http://www.merriam-webster.com/dictionary/knowing) something with familiarity gained through experience or [association](http://www.merriam-webster.com/dictionary/association) (2) **:**  acquaintance with or understanding of a science, art, or technique

Knowledge is a familiarity, awareness or understanding of someone or something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering, or learning.

they all mention facts and information as an important part of knowledge.

Activity 1.7

1. Semi-structured, tactical, should not be automated,
2. Structured decisions, operational, should be automated,
3. Unstructured, strategic, should not be automated,
4. Structured, operational, should not be automated,
5. Semi-structured, tactical, should not be automated
6. Structured, operational, should not be automated
7. Semi-structured, tactical, should not be automated
8. Semi-structured, tactical, should be automated
9. Structured, operational, should be automated

Discussion 1

I believe some information should be restricted for certain employees. Some information is just unnecessary for some employees and there could be information leaks far more often if all employees have full access.

<https://www.youtube.com/watch?v=lc7scxvKQOo>

<http://www.csoonline.com/article/2124681/leadership-management/security-awareness-social-engineering-the-basics.html>

not only that some employees can’t be trusted 100% there for it might hurt the company if they have full access.

## Chapter 2

**Activities**

1. Bothe ebay and amazon ask you for an email so you can get an online newspaper from that moment
2. Often an airline will have systems in place that will allow you do make purchases or upgrades on your flights with the use of the accumulative miles that you have travelled with that specific airline

Activity 2.4

You can now connect your phone to payment services that allow you to buy many different kinds of applications for your phone or even order physical objects with your phone.

You can also easily purchase groceries, electronic devices, clothes and pretty much anything in between using different websites.

**Discussion**

1. Human: you input oxygen and fuel (food, water). Processes include a beating hart and oxygen transport in your bloodcells. You output carbondioxide and urine. For feedback we have pain receptors that indicate damage to the body.

Plant: input light and carbondioxide. Creates sugar and oxygen in their cells. Outputs oxygen.

House: inputs can include electricity and water. Processes could be protect people within and keep them healthy. Outputs could be garbage and warmth.

Country: input could include imports and humans. Processes could be law systems and military systems. Output could be exports and money.

Computer: input: electricity, internet. Processes: work, entertainment. Output: light, data. Feedback: error messages. Control mechanisms: operating systems.

1. Speed increases immensely and precision in the data is far more reliable. Could improve financial gains since there is less time being put in keeping track of the financial business.

Chapter 7

**Self-assessment exercises**

1. **Explain what the main similarities and differences are between bespoke development and end-user development.**

The differences between the two are on what kind of scale they are performed, they are also used in different areas within the organisation, bespoke development is used corporate wide while end-user development is used departmentally.

1. **Why would a small business be more constrained in its choice of software acquisition method than a large one?**

Smaller businesses will most likely have lower IT skills in their employee therefor will have less choice than a big business with many more and better skilled IT personnel.

1. **What are the main differences between the analysis and design steps of the traditional waterfall model of systems development?**

Analysis is about figuring out what the new system has to be capable doing, design on the other hand is figuring out how it will do these things.

1. **What are the main components of the systems build stage?**

**Programming**. Here the proposed system is turned in to code using the language best suited for the system.

**Testing**. the program created in the previous stage will then be tested.

**Conversion**. Here the information based on the old system is now converted to the new system.

1. **Explain how the application of the waterfall model differs between (a) the purchase of an off-the-shelf package and (b) an end-user-developed application.**

With end-user development will more likely have developers that will experiment causing the design and analysis stages to become combined. End-user development is also more often used for smaller scale projects.

1. **Briefly review the main advantages and disadvantages of bespoke development when compared with off-the-shelf packages.**

**Bespoke development:**

**Advantages:**

1. Far more flexible, during the test stage you will have a better opportunity to change the system to fit the requirements more specifically.
2. It’s also far easier to maintain a system created by your own developers.
3. Quality is often higher when developers in your employ develop the program themselves.

**Disadvantages:**

1. Takes more time to create the system yourself.
2. It’s often more pricey to use your own developers.

**Off-the-shelf packages:**

**Advantages:**

1. It is far quicker to get an off-the-shelf package then it is to go through bespoke-development.
2. Since you’ll more likely spend less time implementing the new system this way it will cost less considering the man hours.

**Disadvantages:**

1. Not as flexible when you get an off-the-shelf package.
2. Might be more difficult to maintain.
3. Since the system isn’t created by your own developers specifically for the requirements set the quality might not be as high.

**Discussion questions**

1. **‘The rise of rapid applications development is mainly a response to the failure of traditional systems development methodologies to deliver the right system at the right price and at the right time.’ Discuss.**

Since during the process rapid application development it is far easier to change any things that might be decided upon later instead of before the development starts it will produce a system better suited for the organisations needs. The development cycle is also far quicker with rapid application development so system upgrades could potentially be done more often.

1. **‘End-user applications development would be far less popular if central IS/IT departments did not have such a large applications development backlog.’ Discuss.**

Not true, because there will always be a need for end-user applications, this will always be popular. The backlog doesn’t matter concerning this.

1. **Explain the terms ‘bespoke development’, ‘off-the-shelf package’ and ‘end-user computing’. Illustrate your answer with some of the reasons cited in favour of each of these methods of application software acquisition.**

**Bespoke development:** The software is tailored to the organisation’s specific requirements. Bespoke solutions are required where packaged software cannot be procured which offers the necessary functionality and/or would require changes in working practices that are unacceptable to the organisation.

**An off-the-shelf package:** Is a software product that has been written by a company with the intention of selling it to many customers. Benefits include the ability to purchase sophisticated software solutions at a much lower cost than bespoke development, the increased probability that the software will be free from bugs when implemented and access to upgraded versions of the software in return for an annual maintenance charge.