Agata Majchrowska, Ph.D.

Data Scientist | CODR.PL Research Lab

AI AND BUSINESS DECISIONS

The Business Decision Making with AI

WORKSHOP

Track 3 – INNOVATION | 17 March 2021

ENDORSE.

THE EUROPEAN DATA CONFERENCE ON REFERENCE DATA AND SEMANTICS

SCOPE

“the combination of big data and AI
could dramatically transform business and industry
by blurring the line between
quantitative and qualitative. ”

H.O. Moycotte, “Be Data-Informed, Not Data-Driven, For Now”, Forbes 2015

MAIN POINTS OF THE PROCESS

we’re about to undertake

Data Modelling approach

vs.

Process-based management

METHODOLOGY

FUNDAMENTAL QUESTIONS OF SCENARIO THINKING

What?

Why?

How?

CASE STUDY

GOALS

MAIN FACTORS

MODELLING DECISIONS

CASE STUDY

DATA OR PROCESSES APPROACH ?

CONCEPTUAL REFERENCE MODEL

Project: **„THE ADEQUATE HEALTH CARE UNIT"**

(academic)

GOAL:

Deployment of the CS APP, allowing an effective way of searching the most adequate health care unit for the COVID-19 patient

Main requirements & limitations:

(R) QoS and UX suggestions

(L) unclear or non-existing procedures, third-parties' data input, LQ API

Project: **„THE UNFAIR CLAUSES IN THE WRITTEN AGREEMENT"**

(commercial)

GOAL:

Deployment of the CS APP, allowing the simple and contextual comparison of written text with the legal authority database content

Requirements & limitations:

(R) High level of accuracy

(L) Scanned documents (mobile photos), old-fashioned DB

DATA PROCESSES

FIRST STEPST

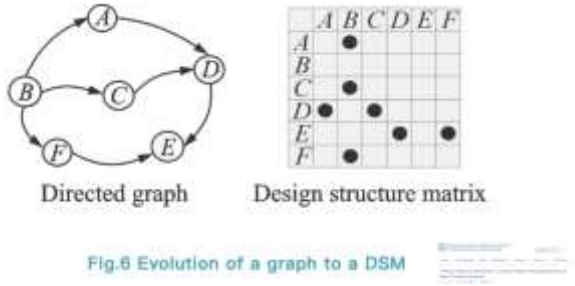


Fig.6 Evolution of a graph to a DSM

DESIGN STUCTURE MATRIX

ACTIVITY BASED GRAPH/MATRIX

TASKS
GROUPS OF TASKS

RELATIONS

MoSCoW

Must

Should

Could

Would

CONTEXT:

Goal (and subgoals)

Cost

Time

Quality

LIMITATIONS

Functional and Non-functional requirements

The central limit theorem

CONTEXT:

Legal requirements

QoS

Inaccuracy

Human errors

Other factors

ASSIGNMENT

WORK PACKAGES

ACTIVITY

HOURS

QUAILITY

COSTS

GOAL

Requirements & Limitations

BRAINSTORMING SESSION (1) | DATA REFERENCE MODELS

Stakeholders' subgroups

Previous experiences

Dilemmas

Open questions

DATA ANALYSYS | CONCEPTUAL REFERENCE MODEL

Cleaning

Organizing

Normalizing

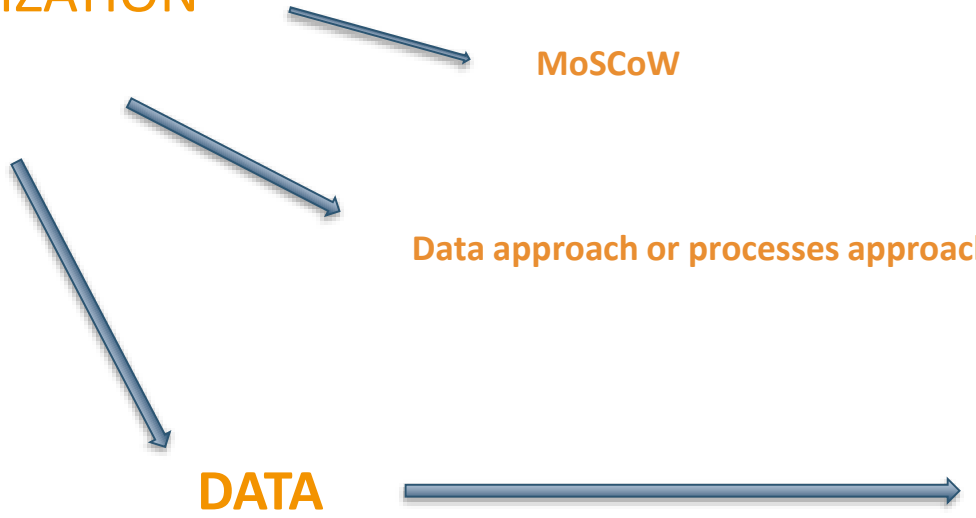
Patterns

Wider Context

Bigger Picture

COOPERATION
COMMUNICATION

PRIORITIZATION



- Data-driven
- Data informed
- Data inspired
- Data centric

DESIGN STUCTURE MATRIX

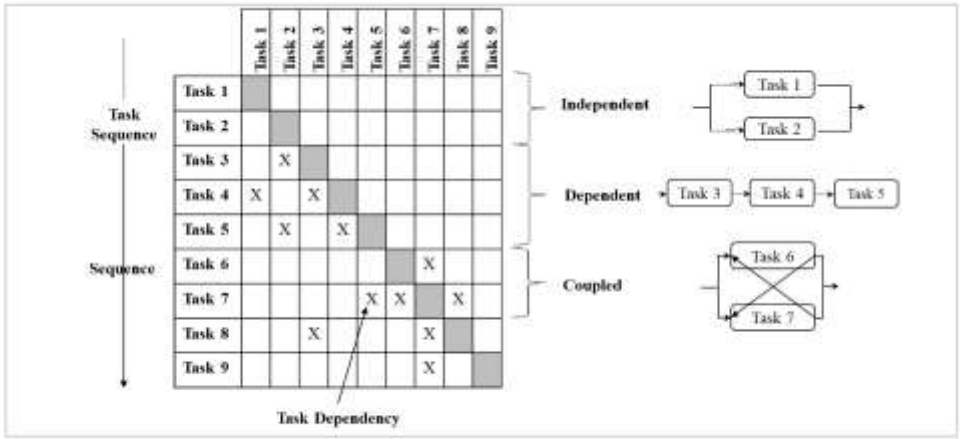


Figure 1. Sample task-based design structure matrix. Source: Chen, Ling and Chen (2003).

DATA MODELLING

TYPES OF DATA MODELLING

CONCEPTUAL

LOGICAL

PHYSICAL

REQUIREMENTS FOR DATA MODELLING

Data accuracy

Up-to-date IT infrastructure

Qualified professionals

ADDTIONAL CONTEXT:

Goals
Legal Requirements
Estimates
UX
QoS
Optimalisation
List Of Deliverables

MODELLING DECISIONS

DATA

PROCESSES

TASKS

ESTIMATES

Software should meet the requirements on accuracy of resulting models

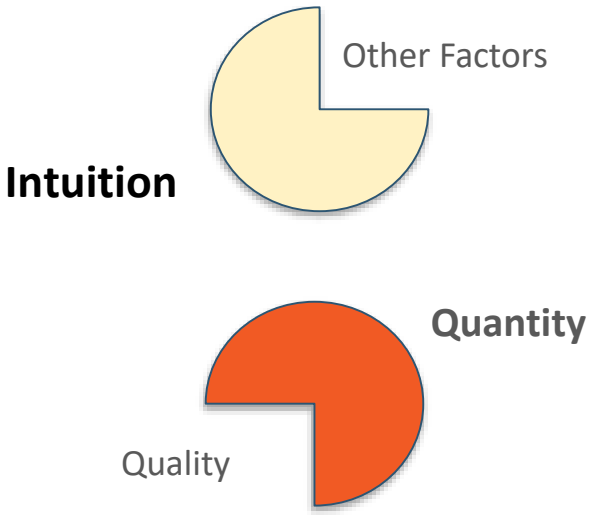
Appropriate choice of adequate and effective algorithms

IMPERFECTION

CHANGE

BRAINSTORMING SESSION (2) | CONCEPTUAL REFERENCE MODEL

Stakeholders' subgroups



Wage Factors

Codes of Best Practices

Codification

Optimalisation

SUMMARY

ANALYTIS JOURNEY | ASUM_DM CRISP | TDSC	NIST Research Data Framework (RDaF)
Business Understanding	Framework
Data Understanding (collection, use, re-use)	Envision
Data preparation	Plan
Modelling	Generate Acquire
Evaluation	Process Analyse
Deployment	Start Use/Reuse
	Preserve Discard

Sprints | Tasks

Thank you !

Should you have any further questions,
do not hesitate to contact me by e-mail: info@codr.pl

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