

## MPH\_AOMA (Operations Management) – questions Autumn \_ Winter 2017

## MPH\_AOPR (Operations Research and ERP) – questions 2017

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All questions could be studied with the help of related study materials handed over to students during lessons held in Brno (Autumn-Winter 2017). This is valid for both courses which have separate study material folders.

Will be shortly reviewed (explained) during two remaining lessons (22.11.2017 or 29.11.2017) taking into consideration, that partly date 29.11.17 and the whole lesson on 6.12.17 is assigned to seminar work presentation. Next week starting on 11.12.17 are so far assigned for the final exams (preliminarily). Important parts of below specified questions (TOC and CCMP) may be found in your Seminar works, which was assigned to you and I hope handed over, presented and defended and remarked (revised) by your tutor.

**Resources** (actual to 22.11.2017). All files in below presented study material list were used during theoretical and practical lessons of or will be still used till the end of courses MPH-AOMA and MPH\_AOPR. The other files related to session which will be held on 29.11.2017 will be added to this material and can be accessed directly from Study materials after upload.

Below listed material corresponds to all MS Dynamics NAV 2016w1 functions and its impact to operation management during practical lessons. This list have to be used for MS Dynamics NAV 2016w1 studies.

Mind you, that **access to MS Dynamics NAV 2016w1** English version (British local currency and English database) **is possible also in in web version and the way how to access has been presented at the beginning of the course. (ID=student and password=P@ssword1)**. From this table mentioned below it is visible and clear that all listed passages were trained and shown during MS Dynamics NAV 2016w1 system hands on seminars.

For both courses it represents all in all slides from below mentioned table. . The number of slides in theoretical was not calculated so far.

All student are kindly asked to check if all listed files have been uploaded to Study material folders. If not, report immediately to tutor.

**Listing of Practice Resources (ERP MS Dynamics NAV 2016w1)**  
*(mapping questions-resources – see list of questions below)*

<b>Statistics of the slides for AOMA and AOPR courses</b>
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Number	Description	230
1	MS Dynamics NAV Introduction	18
2	Filtering searching working space	14
3	Introduction MS Dynamics NAV Purchase Orders	24
4	Introduction MS Dynamics NAV Sales Orders	33
5	Introduction MS Dynamics NAV Transfers Orders	17
6	Introduction MS Dynamics NAV Financial Journal	14
7	Introduction MS Dynamics NAV CRM I	32
8	Reserved clause (not used for these course)	0
9	Introduction MS Dynamics NAV Discounts	14
10	Introduction MS Dynamics NAV Account schedules	20
11	Introduction MS Dynamics NAV Budgets	14
12	Introduction MS Dynamics NAV Dimensions (will be added)	14

As it was already mentioned, all presented functionalities and principles are covered 122 listed files step-by-step. These materials serve as ERP MS Dynamics NAV 2016w1 “cookbook”.

## Practice Questions MS Dynamics NAV 2016xw1 (RTC) for both courses

1. Modularity of the ERP systems. What areas can be controlled by ERP MS Dynamics NAV 2016.
2. Use of searching window to find application areas.
3. Main windows (forms) used in ERP and syntax for Debits and Credits (*posted General Ledger Entries*) – card window, line window, matrix window (*e.g. Item by location from Item cards*) header and line window (form and sub-form, which is basic structure for every NAV document (*Sales Order, Purchase Order, Credit Note, Contact Card (CRM), Transfer Order,..*))
4. Main tables (*Item, Customer and Vendor- basic data field such as **Balance**, Basic unit of measure, Payment condition, Costing Methods and so on. You can use any time Help which can be accessed by key F1 from filed in questions for better and more concise presentation!!*)
5. Purchase of an item and impacts of F9 (posting) -> item and vendor entries, G/L entries. *Create new Purchase Order and show all impacts (Item ledger entries, General Ledger entries and Vendor Ledger Entry!*

6. Sale of an item and impacts of F9 (posting) -> item and customer entries, G/L entries *Create new Sales Order and show all impacts (Item ledger entries, General Ledger entries and Customer Ledger Entry!*
7. Payment of the open entry (Customer or Vendor) by use of the Financial Journal and impacts. Show how to get payment from chosen Customer with non-zero Balance on Customer Card. Explain what is the meaning of Open entry!
8. All presented discounts (price, line in % and invoice) and the use of this incentives! *What kind of discounts do we have in MS Dynamics NAV 2016w1? Show setup of discount specified by examiner and impact of applied discount in sales lines!*
9. Contact Card and its profile and use of it. Connection to Customer (Vendor) card. *What is use of contact card profile? How the contact card is connected to Customer?*
10. What is an Opportunity and Sales cycle? *(Show from Contact card or Salesperson card) and how to create a new interaction from the contact card (use of wizard)? Use already created Opportunities, where you can easily access Sales Cycles from the opportunity lines (see main hotkeys short-hands). Explain how you can create profile which can split up customers into 3 levels (A,B and C- simple example of Pareto analysis- this can be use also in question18 in theoretical section)*
11. Transfer Order *(Present to examiner transfer of chosen item from Blue to Red Location). After Transfer Order will be posted (F9) show by use Ctrl-F7 created item entries! How many item entries will be created during transfer?*
12. Account schedule. Start chosen Account schedule. *Name of the analysis and its template and how to edit it and see data by overview). Explain benefits and use of it.*
13. Explain and show basic use and benefits of Budgets.
14. Explain basic use of use of dimensions and related analysis.

**Listing of Theory Resources** – will be used below to show you mapping knowledge –resources. If some resource was presented only for MPH\_AOPR, then it will be marked by **RED TEXT ONLY MPH\_AOPR** !!!!

- A. [Operation Management Introduction.](#)
- B. [Theory of Constraints](#)
- C. [Critical Chain \(CCPM\)](#)
- D. [Boston Matrix and Product Life Cycle \(PLC\)](#)
- E. [Ishikawa fishbone diagram and its combination with Pareto Analysis \(2.11.\)](#)
- F. [Pareto Analysis Simplified](#)
- G. **Reserve clause (not used so far)**
- H. [OLAP and Business Intelligence](#)
- I. [Magic Quadrant Matrix from Gartner company](#)
- J. [Kepner -Tregoe Methodology](#)
- K. [Total Quality Management](#) - **ONLY MPH\_AOPR**
- L. [Drum-Buffer-Rope \(will be uploaded after tuition\)](#) - **ONLY MPH\_AOPR**
- M. **Reserve clause (not used so far)**
- N. [Balanced Scorecard](#)
- O. [Linear programming](#) - **ONLY MPH\_AOPR**
- P. [Yield management](#) - **ONLY MPH\_AOPR**
- Q. [Decision trees](#) - **ONLY MPH\_AOPR**
- R. [Little's law](#) - **ONLY MPH\_AOPR**

## Theory Questions (resources A-R):

### Structure of the theory question:

*Comment: Indicative questions which are written below in italics are only ancillary issues!!!!  
It is assumed that your answers will be much more complex!!!*

Number	Description:	Resource (slides if required )
1.	Name key OM activities and use of OM :	<b>A</b>
2.	Name key skills, which should be part of OM knowledge portfolio :	<b>A</b>
3.	What is a Deming cycle? What supposed to be your main task in order to improve company processes? :	<b>A, B and N.</b>
4.	Evaluation of the project result. How we can know, that the Project was successful? Consider time, due date, capacities of resources, budgets limits, required knowledge portfolio, changes, and so on:	<b>A, B and C</b>
5.	Reserve clause (not used so far)	
6.	Specify the basic concept of the Theory of Constraints:	<b>B and C</b> <i>Very complex question! It covers among others questions 7,8,9 and also 10.</i>
7.	TOC metrics:	<b>B</b> <i>Name three main metrics and their trends, explain benefits of using this metrics. How to calculate NET Profit and ROI by using these metrics?</i>
8.	Cost World and Throughput World:	<b>B</b> <i>Define and explain differences</i>
9.	TOC five steps:	<b>B</b>
10.	<b>Drum-Buffer- Rope.</b> (explain simply principles):	<b>L ONLY MPH-AOPR</b>
11.	Basic trees (Thinking process tools) – Current Reality Tree, Evaporating Cloud Tree and Future Reality Tree:	<b>B</b> <i>Explain main use and how these trees are constructed. This question is more and less also related to you seminar work!</i>
12.	What is bad multitasking? :	<b>C</b>
13.	Critical path and Critical Chain differences:	<b>C</b> <i>Specify differences between CP and CC!</i>
14.	Use of project buffer (buffer management concept and graph with three zones):	<b>C</b> <i>Specify use of buffers, how the size of buffer is set.</i>
15.	<b>Total Quality Management Basics:</b>	<b>K ONLY MPH_AOPR</b>
16.	Ishikawa fishbone diagram:	<b>E</b>
17.	Boston matrix and Product Life Cycle (PLC). State some examples of PLC:	<b>D</b>
18.	Pareto analysis and its applications (use of PWP presentation Ishikawa allowed):	<b>E –You can show already created PARTEO example in 2016w1(see PWP NAV number 7 (CRM)</b>
19.	OLAP (Business Intelligence):	<b>H</b> <i>Basic principles and use of using BI (Business Intelligence). What is N-dimension cube?</i>

20. Basic principles of Kepner –Tregoe method supporting decision making: J  
*Must and Want criteria and its use, principles of WHO, WHAT, WHEN, WHERE and EXTENT and Why to distinguish between It Is and It Is Not.*
21. Magic Gartner Quadrant Matrix: I
22. Balanced Scorecard (BSC) basic principles and use. What is KPI? Name all four sections of BCS : N
23. **Basic use of Linear programming** ( Target function and constraints. Reason of using Solver Explain by use of PWP) O – **ONLY MPH\_AOPR**
24. **Basic rules of Yield management** (areas where this part of revenue management methodology can be used, show not show, Cu Co, calculations – presented examples in PWP can be used during exam) P – **ONLY MPH\_AOPR**
25. **Little’s law formulation and use** R – **ONLY MPH\_AOPR**
26. **Decision tree – basic use** - Q - **ONLY MPH\_AOPR**