

People and Organizational Analytics

(MNGT-E1013, 3 ECTS)

SYLLABUS

Version 2, 10.02.2023, A Koulouri

Instructor's contact information	Course information
<p>Responsible Teacher: Dr Anastasia Koulouri, Senior University Lecturer</p> <p>Email: anastasia.koulouri@aalto.fi</p> <p>Office: Business School, Department of Management Studies</p> <p>Office hours: By appointment</p> <p>Teaching Assistant: Hanh Thi Duc Doan, Doctoral Researcher</p> <p>Email: hanhthiduc.doan@aalto.fi</p>	<p>Status of the course: Core for MSc People Management and Organizational Development</p> <p>Academic Year, Period: 2022-23, IV</p> <p>Language of instruction: English</p> <p>Location: On-campus/in person, V002 SAASTAMOISEN SÄÄTIÖ (Ekonominaukio 1) and U344 (Undergraduate center, Otakaari 1) except 13.04.2023 online</p> <p>Course website: Course: MNGT-E1013 - People and Organizational Analytics, Lecture, 28.2.2023-13.4.2023 (aalto.fi)</p>

1. OVERVIEW

The aim of the course is to create an overall understanding of key considerations when combining people management with analytics and data. It provides an overview of the areas where analytics can and have been used in combination with people management, the emergence and evolution of the field of people analytics, the challenges in implementing and using people analytics in practice, and the different types of analytics (descriptive, diagnostic, predictive and prescriptive). The course then focuses on applying different statistical techniques in the context of people management to analyze and visualize data, as well as on interpreting findings and drawing conclusions in order to gain insights.

You will gain a strong set of transferable skills including conceptual, critical and creative thinking; analytical thinking to understand business/people management and data requirements and to analyze, interpret and visualize data; quantitative skills to undertake these tasks; and skills to effectively communicate insights gained.

Different analyses will be applied to people management issues with lectorials introducing theoretical concepts and techniques and providing hands-on experience in applying these in practice; and directed

and undirected study and assignments providing opportunities for knowledge and skills gained to be further embedded.

2. LEARNING OUTCOMES

Upon completion of the course, you will be able to:

- Understand the basic principles and applications of analytics methods applied in the context of people management, and the difference between and value of descriptive, diagnostic, predictive and prescriptive analytics.
- Identify people questions and problems that can be addressed using data, and understand the contextuality of a given problem and thus the data required - what is meaningful data.
- Identify and use metrics that grant insight into people questions.
- Measure, analyze, visualize and interpret people-related data for a given question / problem.
- Utilize analytical skills for answering people questions in an organizational context, as well as in your Master's thesis.

3. PRE-REQUISITES

The course has no formal pre-requisites.

Students are admitted to the course in the following priority order: 1) MSc People Management and Organizational Development students, 2) other students.

4. COURSE PRACTICALITIES

*The course will be conducted **only on campus and in person with the exception of the last optional lab on Thursday 13 April 2023.***

The *course delivery* comprises:

- Weekly 3-hour lectorials during which you will be introduced to theoretical concepts and techniques and have the opportunity to apply them in practice-using SPSS-for the analysis of people management issues.
- Weekly 3-hour optional lab sessions to address any individual questions/difficulties you might have, and re-cap on the use of SPSS to apply in practice theoretical concepts and techniques.

As this is a core course, *attendance to 70% of the lectorials is mandatory* to pass. In practice this means that you should attend a minimum of *4 out of the 6 lectorials*.

For the lectorials as well as for the course assignments (see sections 5 and 6 for further details), you will need *your own laptop and SPSS*.

*Please ensure that you download and install SPSS **before** the start of the course.*

To download and install SPSS:

1. Click on <https://download.aalto.fi>
2. Choose "Software for students' home computers".
3. Download and install "IBM SPSS Statistics Desktop". Please ensure that you choose "authorized user license" when installing SPSS.
4. Any issues, contact servicedesk@aalto.fi as soon as possible.

To make the most of this course, you need to take responsibility for your learning and fully engage in the learning process by:

- Attending all lectorials and actively participating in the in class activities;
- Attending the optional lab sessions if you have any questions or require a re-cap of the practical element from each week's lectorial;
- Keeping up with the work by completing all reading and using the lab notes and exercises to practice and develop your competence in applying in practice the theoretical concepts and techniques introduced, and in undertaking analysis using SPSS;
- Working independently on the course's individual assignments (see sections 5 and 6 for details);
- Proactively seeking assistance and clarifications.

If in doubt, please contact the Responsible Teacher (anastasia.koulouri@aalto.fi).

5. ASSESSMENT AND GRADING

The course assessment will be based on the following components:

Assignment 1: Reflection paper (10%)

Assignment 2: Data analysis exercise 1 (10%)

Assignment 3: Data analysis exercise 2 (10%)

Assignment 4: Small people analytics project (70%)

All assignments are to be conducted *individually*.

The final grade (0 to 5) is based on the cut-off points below:

0-49 points = 0

50-59 points = 1

60-69 points = 2

70-79 points = 3

80-89 points = 4

90-100 points = 5

All assignments must be submitted and achieve a passing grade to pass the course. This means that for assignments 1-3 you need to achieve at least 5%, and for assignment 4 you need to achieve at least 35%.

No late submissions are accepted unless there is a valid reason supported by evidence (e.g. doctor's certificate).

For assessments 1-3, general feedback will be provided during the lectures and/or on MyCourses after completing the marking of submissions. Individual feedback will be given upon request.

For assessment 4, individual feedback will be provided via MyCourses or by email.

Note that submitting course assignments is considered acknowledgement of the guidelines on scholastic honesty and academic integrity (see section 10).

6. ASSIGNMENTS

Assignment 1: Reflection paper (10%)

This assignment aims at enabling you to reflect on the knowledge you accumulated from reading background papers on people analytics, including on the evolution of the field, the value their application can bring to organizations, and the challenges associated with their implementation and use in practice.

In your reflection paper you will have to summarize the key points raised in the papers and bring your own perspective to them. The aim is to summarize the key points-lessons for *you*, by reflecting, for example, on what you found surprising, particularly interesting, or on points that you do not agree with. Excellent papers are those that not only describe what has been learned but also demonstrate critical and analytical thinking.

You have to use academic referencing (in-text citations as well as a reference list) to support your arguments. You also have to follow academic writing standards. Please use APA referencing style: <https://apastyle.apa.org/>

More details on the task and assessment criteria will be provided in the individual assignment brief to be released on 28.02.23.

Length: 800 words, excluding reference list

Deadline: Uploaded on the assignment submission box in MyCourses by **Friday 10.03.23, 23:00**

Evaluation: Maximum number of points is 10

File type: Microsoft Word or pdf

File name: 1_surname_initial_student number

Presentation: No cover page; name, student number and assignment number on top of page 1

Formatting: Times New Roman, font size 12, line spacing 1,5

Assignments 2-3: Data analysis exercise 1 and 2 (10% each)

These assignments aim at enabling you to apply in practice the theoretical concepts and techniques as well as SPSS procedures learned. Each exercise involves analyzing a dataset using SPSS and the knowledge you have accumulated during the lectorials. Assignment 2 will be based on material covered in lectorials 1-3, and assignment 3 will be based on material covered in lectorials 4-6.

More details on the task and assessment criteria will be provided in the individual assignment brief to be released on 14.03.23 (assignment 2) and 28.03.23 (assignment 3).

Length: each assignment 500 words excluding SPSS outputs referred to in the answers

Deadline: Uploaded on the assignment submission box in MyCourses by **Friday 24.03.23, 23:00** (assignment 2) and **Thursday 13.04.23, 23:00** (assignment 3)

Evaluation: Maximum number of points, for each data analysis exercise, is 10.

File type: Microsoft Word or pdf

File name: 2_surname_initial_student number (assignment 2), and 3_surname_initial_student number (assignment 3)

Presentation: No cover page; name, student number and assignment number on top of page 1

Formatting: Times New Roman, font size 12, line spacing 1,5

Assignments 4: Small people analytics project (70%)

This assignment offers you the opportunity to apply all the knowledge and skills you have developed through the course.

It involves considering a people management issue from a selection of issues (and accompanying datasets) that will be provided to you together with a detailed assessment brief. In considering the selected issue, you will need to provide background and context for your analysis; outline the analysis you undertook and provide a rationale for your methodological choices; discuss your findings in the context of the relevant literature and consider their implications; comment on legal, ethics and governance issues; and make potential recommendations.

You have to use academic referencing (in-text citations as well as a reference list) to support your arguments, provide background to your analysis, contextualize your findings, and underpin any recommendations you make. You also have to follow academic writing standards. Please use APA referencing style: <https://apastyle.apa.org/>

More details on the task and assessment criteria will be provided in the individual assignment brief to be released on 21.03.23.

Length: 2500 words excluding reference list and figures

Deadline: Uploaded on the assignment submission box in MyCourses by **Friday 21.04.23, 23:00**

Evaluation: Maximum number of points is 70.

File type: Microsoft Word or pdf

File name: 4_surname_initial_student number

Presentation: No cover page; name, student number and assignment number on top of page 1

Formatting: Times New Roman, font size 12, line spacing 1,5

7. READING AND OTHER MATERIALS

The course materials will be placed on MyCourses, including:

- Lectorial slides (on Tues)
- SPSS lab notes detailing how to carry out different procedures (on Tues)
- Tasks to practice (on Tues) and notes on practice tasks (on Thurs).

Core books for the course

Each week-at the end of the lectorial-you will be directed to additional reading from these books (available via Aalto Library).

Edwards, M. R. and Edwards, K. (2019) *Predictive HR Analytics: Mastering the HR metric* (2nd ed.). Kogan Page Limited.

Black, K. (2014) *Business statistics for contemporary decision making* (8th ed.). Wiley.

Field, A. (2014) *Discovering statistics using IBM SPSS Statistics* (4th ed.). Sage.

Additional background reading

Evolution of the people analytics field

Fecheyr-Lippens, B., Schninger, B. And Tanner, K. (2015, March). Power to the new people analytics. *McKinsey Quarterly*.

McCartney, S. And Fu, N. (2022). Promise versus reality: A systematic review of the ongoing debates in people analytics. *Journal of Organizational Effectiveness: People and Performance*, 9(2), 281-311.

Tursunbayeva, A., Di Lauro, S. And Pagliari, C. (2018). People analytics-A scoping review of conceptual boundaries and value propositions. *International Journal of Information Management*, 43, 224-247.

Applying people analytics

Green, D. (2017). The best practices to excel at people analytics. *Journal of Organizational Effectiveness: People and Performance*, 4(2), 137-144.

Nielsen, C. And McCullough, N. (2018, May 17). How people analytics can help you change process, culture and strategy. *Harvard Business Review*.

Peeters, T., Paauwe, J. and Van De Voorde, K. (2020). People analytics effectiveness: Developing a framework. *Journal of Organizational Effectiveness: People and Performance*, 7(2), 203-219.

Ethics of people analytics

Bodie, M. T., Cherry, M. A., McCormick M, L. and Tang, J. (2016). The law ad policy of people analytics. University of North Caroline School of Law. Carolina Law Scholarship Repository.

Gal, U., Jensen, T., B. and Stein, M.-K. (2020). Breaking the vicious cycle of algorithmic management: A virtue ethics approach to people analytics. *Information and Organization*, 30, 100301.

Tursunbayeva, A., Pagliari, C., Di Lauro, S. and Antonelli, G. (2022). The ethics of people analytics: Risks, opportunities and recommendations. *Personnel Review*, 51(3), 900-921.

8. COURSE SCHEDULE

Session	Input: Date, Time	Topic(s) covered	Deliverable
1a	Lectorial: Tues 28.02.23 14:15-17:00	Introduction to the course People Analytics: emergence and evolution of the field Types of analytics, types of metrics in HR Key concepts, types of data, types of variables, descriptive versus inferential statistics Descriptive statistics: Exploring a single categorical and a single numerical variable Preparing data and using SPSS	Assessment 1: Issued on 28.02.23 Due 10.03.23, 23:00
1b	Lab (optional): Thurs 02.03.23 14:15-17:00		
2a	Lectorial: Tues 07.03.23 14:15-17:00	Descriptive statistics: Exploring two categorical variables Hypothesis testing: Drawing inferences using sample data about the population of interest Exploring further the relationship between two categorical variables: Chi-square Test for Association, and Spearman's Rank Correlation Coefficient	
2b	Lab (optional): Thurs 09.03.23 14:15-17:00		
3a	Lectorial: Tues 14.03.23 14:15-17:00	Descriptive statistics: Exploring a single numerical variable between groups Exploring further a numerical variable between two groups: Independent Samples t-Test, Paired Samples t-Test.	
3b	Lab (optional): Thurs 16.03.23 14:15-17:00		

4a	Lectorial: Tues 21.03.23 14:15-17:00	Exploring a numerical variable between more than two groups: One Way Analysis of Variance ANOVA Test	
4b	Lab (optional): Thurs 23.03.23 14:15-17:00		
5a	Lectorial: Tues 28.03.23 14:15-17:00	Exploring the relationship between two numerical variables: Scatter Diagram, Pearson's Product Moment Correlation Coefficient, Simple and Multiple Linear Regression	Assessment 3: Issued on 28.03.23 Due 13.04.23, 23:00
5b	Lab (optional): Thurs 30.03.23 14:15-17:00		
6a	Lectorial: Tues 04.04.23 14:15-17:00	Small sample analysis using non-parametric tests: Mann-Whitney Test, Kolmogorov Smirnov Test, and Kruskal Wallis Test	
6b	Lab (optional): Thurs 13.04.23 14:15-17:00	Note: This optional lab will be online; details to follow.	
			Assessment 4: Issued on 21.03.23 Due 21.04.23, 23:00

9. COURSE WORKLOAD

Class contact, lectorials	18h
Class contact, optional labs	18h
Self-study, directed/undirected	12h
Assignments	32h
Total	80h (3 ECTS)

10. ACADEMIC INTEGRITY

Aalto University Code of Academic Integrity and Handling Thereof:

<https://into.aalto.fi/display/ensaannot/Aalto+University+Code+of+Academic+Integrity+and+Handling+Violations+Thereof>