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Metrics for ADA

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Abstract	This report defines metrics for master study program of advanced data analytics in business, i.e. it defines relevant metrics and indicators for the accreditation of study programs, training of teachers, student enrollment, operation of the master programs, learning analytics, cooperation with companies and student internships, LLL courses, defining metrics for cooperation with companies, satisfaction of attendees with the programs, and employability of students. Final list of the indicators was set during the Workshop on ADA metrics, held at Vienna University of Economics and Business Administration, on March 10, 2020.
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Metrics for ADA

In order to allow for quantification of progress and success of project activities ADA project quality plan will rely on certain metrics, in line with the practices and experiences of the successful management of business analytics study programs and LLL courses. As this is the most important outcome of the ADA project, a special workshop was organized to introduce the institutions organizing master study programs and LLL courses to set quality metrics. Prior to the workshop, draft set of metrics was prepared by WP5 Leader and presented to all project partners for a discussion and suggestions. The final set of indicators was fine-tuned and adopted during the Workshop, and formatted as a Report-deliverable of 5.2.

The following metrics is set as part of this activity:

1. Metrics for of the degree of completion of Accreditation process,
2. Metrics for training of teachers,
3. Metrics for the student enrollment,
4. Metrics for operation of the master program,
5. Metrics for learning analytics (measurement of students' performance at study program and courses),
6. Metrics for cooperation with companies and student internships,
7. Metrics for LLL courses,
8. Metrics for satisfaction of attendees with the programs,
9. Metrics for employability of students, etc.

Indicators based on established metrics will be followed and reported on a regular basis as part of internal project reporting.

Metrics for of the degree of completion of Accreditation process				
No.	Indicator	How indicator will be measured	Who is responsible for measurement and reporting	When to measure
1	Number of accredited ADA study programs	Decisions of NEAQA	UNS, UB, UNI	At the end of accreditation process
2	Difference between planned and actually accredited ADA study programs	ADA project proposal and Decisions of NEAQA	QCC and PC	At the end of accreditation process
3	Number of accredited modules within study program	Decisions of NEAQA	UNS, UB, UNI	At the end of accreditation process
4	Number of accredited courses	Decisions of NEAQA	Each Serbian HEI partner	At the end of accreditation process
5	Number of accredited (confirmed, verified) lecturers	Decisions of NEAQA	Each Serbian HEI partner	At the end of accreditation process
Metrics for training of teachers				
No.	Indicator	How indicator will be measured	Who is responsible for measurement and reporting	When to measure
1	Number of organized trainings for teachers	Event reports	WP2 Leader	After every training visit to EU partners
2	Number of teachers trained during study visits abroad	Individual travel reports; Event reports	Each Serbian HEI partner	After every training visit to EU partners
3	Number of courses covered by teachers trained during study visits abroad	Individual travel reports; Event reports	Each Serbian HEI partner	After every training visit to EU partners

Metrics for the student enrollment				
No.	Indicator	How indicator will be measured	Who is responsible for measurement and reporting	When to measure
1	Number of published enrollment calls per year (Number of Serbian HEI partner who published enrollment calls per year)	Enrollment calls	WP3 Leader	After the enrollment period for master studies in Serbia (in November each year)
2	Number of open positions for students (per institution)	Enrollment calls	UNS, UB, UNI	After the enrollment period for master studies in Serbia (in November each year)
3	Number of candidates applied (per institution)	Enrollment documents	UNS, UB, UNI	After the enrollment period for master studies in Serbia (in November each year)
4	Number of candidates applied from Serbia (per institution)	Enrollment documents	UNS, UB, UNI	After the enrollment period for master studies in Serbia (in November each year)
5	Number of candidates applied from abroad (per institution)	Enrollment documents	UNS, UB, UNI	After the enrollment period for master studies in Serbia (in November each year)
6	Number of candidates who don't meet enrolment requirements (per institution)	Enrollment documents	UNS, UB, UNI	After the enrollment period for master studies in Serbia (in November each year)

7	Number of enrolled students (per institution)	Enrollment documents	UNS, UB, UNI	After the enrollment period for master studies in Serbia (in November each year)
8	Number of enrolled students from Serbia (per institution)	Enrollment documents	UNS, UB, UNI	After the enrollment period for master studies in Serbia (in November each year)
9	Number of enrolled students from abroad (per institution)	Enrollment documents	UNS, UB, UNI	After the enrollment period for master studies in Serbia (in November each year)
Metrics for operation of the master program				
No.	Indicator	How indicator will be measured	Who is responsible for measurement and reporting	When to measure
1	Number of students per study program (per institution)	Student records	UNS, UB, UNI	At the end of each semester
2	Number of students per module (per institution)	Student records	UNS, UB, UNI	At the end of each semester
3	Number of students per course (per institution)	Student records	Each Serbian HEI partner	At the end of each semester
Metrics for learning analytics				
No.	Indicator	How indicator will be measured	Who is responsible for measurement and reporting	When to measure
1	Number and % of students who successfully passed the course	Student records	Each Serbian HEI partner	Cumulative, after each exam term
2	Success rate per module (% of students who passed all courses)	Student records	UNS, UB, UNI	At the end of school year
3	Success rate per course (% of students who passed the course)	Student records	Each Serbian HEI partner	At the end of school year

4	Average grade per course	Student records	Each Serbian HEI partner	At the end of school year
5	Total number of submitted master thesis applications	Student records	UNS, UB, UNI	At the end of school year
6	Number of submitted master thesis applications per course	Student records	UNS, UB, UNI	At the end of school year
7	Total number and % of approved master thesis applications	Student records	UNS, UB, UNI	At the end of school year
8	Number and % of approved master thesis applications per course	Student records	UNS, UB, UNI	At the end of school year
9	Total number and % of completed master thesis	Student records	UNS, UB, UNI	At the end of school year
10	Number and % of completed master thesis per course	Student records	UNS, UB, UNI	At the end of school year
11	Number of students who left studies – dropout rate (per institution)	Student records	UNS, UB, UNI	Cumulative, at the end of each semester
12	Average duration of studies	Student records	UNS, UB, UNI	At the end of school year
Metrics for cooperation with companies and student internships				
No.	Indicator	How indicator will be measured	Who is responsible for measurement and reporting	When to measure
1	Number of companies contacted for cooperation	Communication records	UNS, UB, UNI	At the end of school year
2	Number of companies agreed to cooperate	Communication records	UNS, UB, UNI	At the end of school year
3	Success rate of cooperation invitation	Communication records	UNS, UB, UNI	At the end of school year
4	Number of granted internships	Communication records, signed agreements	UNS, UB, UNI	At the end of school year
5	Number of students applied for internship (per internship)	Application records	UNS, UB, UNI	At the end of school year

6	Number and % of students granted an internship	Application records, internship agreements	UNS, UB, UNI	At the end of school year
7	Number and % of students started an internship	Internship reports	UNS, UB, UNI	At the end of school year
8	Number and % of students successfully completed an internship	Internship reports	UNS, UB, UNI	At the end of school year
9	Average duration of internships	Internship reports	UNS, UB, UNI	At the end of school year
Metrics for LLL courses				
No.	Indicator	How indicator will be measured	Who is responsible for measurement and reporting	When to measure
1	Number of LLL courses	LLL course list	WP3 Leader	When LLL course list is approved by SC
2	Number of LLL courses per institution	LLL course list	Each Serbian HEI partner	When LLL course list is approved by SC
3	Number of candidates applied for LLL course (per course)	Application records	Each Serbian HEI partner	After application process for LLL courses
4	Number and % of candidates attended LLL course (per course)	Application records	Each Serbian HEI partner	After application process for LLL courses
5	Success rate (% of attendees who finished LLL course)	Event reports	Each Serbian HEI partner	After finish of LLL courses
Metrics for satisfaction of students				
No.	Indicator	How indicator will be measured	Who is responsible for measurement and reporting	When to measure
1	Satisfaction with premises (space, equipment)	Student feedback form (Satisfaction questionnaire)	Each Serbian HEI partner	At the end of the semester
2	Satisfaction with course description (objectives, structure, requirements)	Student feedback form (Satisfaction questionnaire)	Each Serbian HEI partner	At the end of the semester

3	Satisfaction with clarity of presentation	Student feedback form (Satisfaction questionnaire)	Each Serbian HEI partner	At the end of the semester
4	Satisfaction with teaching materials	Student feedback form (Satisfaction questionnaire)	Each Serbian HEI partner	At the end of the semester
5	Satisfaction with communication with lecturer	Student feedback form (Satisfaction questionnaire)	Each Serbian HEI partner	At the end of the semester
6	Satisfaction with gained knowledge	Student feedback form (Satisfaction questionnaire)	Each Serbian HEI partner	At the end of the semester
Metrics for satisfaction of LLL course attendees				
No.	Indicator	How indicator will be measured	Who is responsible for measurement and reporting	When to measure
1	Satisfaction with premises (space, equipment)	LLL course feedback from (Satisfaction questionnaire)	Each Serbian HEI partner	At the end of LLL course
2	Satisfaction with course description (objectives, structure, requirements)	LLL course feedback from (Satisfaction questionnaire)	Each Serbian HEI partner	At the end of LLL course
3	Satisfaction with clarity of presentation	LLL course feedback from (Satisfaction questionnaire)	Each Serbian HEI partner	At the end of LLL course
4	Satisfaction with teaching materials	LLL course feedback from (Satisfaction questionnaire)	Each Serbian HEI partner	At the end of LLL course
5	Satisfaction with communication with lecturer	LLL course feedback from (Satisfaction questionnaire)	Each Serbian HEI partner	At the end of LLL course
6	Satisfaction with gained knowledge	LLL course feedback from (Satisfaction questionnaire)	Each Serbian HEI partner	At the end of LLL course
Metrics for employability of students				
No.	Indicator	How indicator will be measured	Who is responsible for measurement and reporting	When to measure
1	Number and % of students employed 6 months after graduation	Communication records	Each Serbian HEI partner	6 months after graduation
2	Number and % of students employed a year after graduation	Communication records	Each Serbian HEI partner	A year after graduation