Adaptation of Advanced Analytics in Latvian Educational institutions

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INTRODUCTION

This study reflects advanced analytics as one of the most important resources for achieving the goals of sustainable education. The OECD points to the trend of increasingly complex education systems in OECD countries. Strategic, long-term thinking and approaches to the management of a complex education system in the context of the future are essential, with regular and targeted evaluation of the functioning of the system using so-called big data. Higher education institutions should be able to adapt to change and be prepared to proactively respond to crises and contingencies. Effective governance of educational institutions requires data collection and analysis, as well as the use of results for further decision-making. For the planning and successful implementation of education policy, it is necessary to increase the competence of the heads of educational institutions in the processing of large data and the ability to perform analytical work at a higher strategic level. Large data processing and analysis, as well as situational forecasting and context mapping require the use of sophisticated and up-to-date tools.

MATERIALS AND METHODS

The quantitative survey contains a questionnaire with 40 questions – single choice, multiple choice, text entry, matrix table, constant sum type questions, allowing one to collect wide ranging and structured information. The main blocks are Demographics, Data management, Analytics, Process around data and analytics, People, Technologies, Culture, Leadership, Success drivers, Barriers.

The data of this study were obtained using the online survey platform Qualtrics. The majority of respondents were attracted using the online panel provider https://intraresearch.com. An additional channel was created to attract respondents on the homepage http://www.raaconsulting.eu/ with the help of Google Ads. For quantitative data processing, the descriptive and statistical analytics R and MS Excel software were used. Mostly descriptive and statistical analyses were used to explore the survey outcome and describe the findings.

DISCUSSION

Some of the key questions to consider in the context of educational sustainability: What is the overall level of advanced analytics in Latvian educational institutions?

Analysis of literature suitable for the subject of the study reveals that advanced analytics is a process of turning huge volumes of structured or unstructured data, statistical and predictive analytics into decision-making with a value to business. To ensure sustainable decision-making, organisations should use advanced analysis to analyse past, understand current behaviours, and predict and influence future events, actions, decisions, and behaviours. Several studies have shown that to create data-driven decision-making, organisations need to put maximally automated processes in place to manage and utilise all different and fast-moving data from internal and external sources. New approaches, algorithms, tools and platforms help derive meaning from large amounts of unstructured and structured data and techniques that provide so-called advanced analysis. Data, analytics, related tools and the overall analytics ecosystem become more and more crucial topics in any organisation taking high digitisation demand into account.

CONCLUSIONS

The authors found that most Latvian educational institutions are not ready for the challenges of turning huge volumes of structured or unstructured data, statistical and predictive analytics into decision-making with a value to the organisation. Advanced analytics is a realistically underestimated tool for the sustainable effective governance of educational institutions.