

Guest Editorial Preface

Emerging Approaches for Business Intelligence and Analytics in Organizations

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The special issue encompasses latest concepts, methods and approaches of Business Intelligence (BI) Systems from an organisational perspective. Business organizations are increasingly involved in complex, rapidly changing, multi-criteria, collaborative and virtual action-taking environment. These dynamisms and agility became now “business as usual”, where the decision making is often reliant on processing and analyzing enormous data types, their contextual meta-data, and situation-specific realities such as location or geo-information/data.

Emerging Business Intelligence techniques, decision support methods such as analytics technologies involving mobility, locational decision support, big-data analytics both on cloud and non-cloud computing environment are becoming mainstream in processing, analyzing and handling the varieties of data both for real-time decision support and production of intelligence. The example application areas can be for instance, supply chain management, tourism, healthcare management, workforce management and agricultural management.

Many organizations have invested in developing BI-oriented problem-solving methods, decision support mechanisms, models and instantiations to better leverage their soft assets - day to day data, transaction logs, social media data, and any form of stored information to achieve effective decision support to transform their business strategies, operational processes, optimization of production and customer value propositions. Data-driven discovery or intelligence and analytics around demand-oriented technologies for effective information support services already reinforced to change traditional system development practices, and as a result, newer forms of business intelligence, analytics, knowledge-based and decision-support development and acquisition practices are emerging to leverage new technologies. Although recent design studies have discussed relevant issues, approaches and methodologies around the use of these technologies, very few have identified requirements for combining them to meet the demand of decision support and creation of intelligence in the era of big data. This presents a new challenge: to develop decision systems, its effective practices and relevant design theory for Business Intelligence (BI), Business Analytics (BA), Data or Knowledge-based Analytics, and decision support systems (DSS) techniques, methods, models and applications development in the current dynamic digital ecosystems.

The elected articles in the special issues are somehow attempted to address such broader requirements in organisations. The special issue would be contributing in the area of BI design for organisations as it aimed to consolidate some original research articles that embrace promises to effective technique development, relevant design methodologies and practices in the BI field. The articles that are included in the special issue also contribute in identifying requirements for designing dynamic and evolving decision support and useful analytics and to guide future development of new data-driven DSS, analytics and intelligence and relevant strategies.

It will be a great pleasure if this special issue contributes to developing better human and social systems in the planet for the effective use and time and cost saving manner. I would like to thank the editor in chief, administration staff members, reviewers and all authors in particularly who have directly involved in supporting this great initiative.

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