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SUMMARY:

Title : Leveraging Artificial Intelligence for Business Process Management

This article emphasizes how important artificial intelligence (AI) is to business process management (BPM) in the digital age. It highlights how contemporary technology developments, especially artificial intelligence (AI), have a significant impact on digitization, the megatrend of the twenty-first century. AI is thought to be the main force behind this development, with the potential to completely transform how people live, work, study, and interact.

According to the article, artificial intelligence (AI) has the ability to completely change business. It presents both enormous development prospects and threats, as seen by the fact that many organizations are outperforming their more technologically advanced rivals. This competitive landscape will probably continue to be shaped by the automation and innovation made possible
The paper, which focuses on business process management (BPM), emphasizes how data-centric modern, digital processes are, impacting not just how they are executed but also the choices that lead to the process's ultimate objective. Because of the increasing availability of data and the improvements in technology, BPM is considered a subject that is well-suited for the application of AI.

The paper then explores Reference Model Mining (RMM), Predictive Process Monitoring (PPM), and Process Discovery (PD), three BPM subtopics where AI can be used. It looks at recent advancements and difficulties for each subtopic and presents particular research issues.

For instance, the paper highlights existing obstacles in the field of RMM and suggests fresh approaches to solve them, with a special emphasis on using event log data to extract reference models.
In reference to process discovery, the paper looks at many aspects that affect evaluation validity and provides suggestions for standardizing quality standards in this area.

The main research question in process discovery (PD) concerns the validity of process discovery assessments, separated into two sub-questions (RQ 3: What influences can threaten the validity of process discovery assessments?). This question differs from the

other two because it is a knowledge question rather than a design question. It is motivated by existing artifacts (process discovery methods and quality measures) and contributes to the investigation of a problem context, so that ultimately new design questions can be asked and new artifacts created .

The first sub-question (RQ 3.a: How is the quality of process discovery assessments influenced by unobserved process behavior?) concerns the potential influence of unobserved behavior in an event log on the evaluation of the quality of the discovered model. They are conducting an empirical study examining how the epistemological problem of induction (generalization of singular observations) influences established notions of measuring the quality of discovered models. The results confirm their initial hypothesis that the more unobserved behavior there is, the less reliable the quality measure becomes.

The article's conclusion highlights that, despite its great potential for BPM, AI is not without its limitations. The authors provide a warning regarding difficulties in gathering and using data as well as the requirement to take "soft factors" into account when making decisions.They also point out that there are a variety of shapes and goals that AI research for BPM can take, all of which can benefit business processes and the organizations that use them.