Application of Bayesian Networks to Recommendations in Business Process Modeling⋆

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Its purpose is mainly to present the application of Bayesian Networks in business process modeling by providing recommendations. First types of recommendation are the subject based ones. They are made of attachments to a process model or textual pieces of information. Generally this kind of algorithm recommendation produces more precise results while using the context. Second types of recommendation methods are the position-based classification. There are three types of position-based classification: the forward completion, the backward completion and the autocomplete. For all the classification, a part of the process is known, the only difference between them is that for the forward completion, the future fragment of the process should be proposed, for the backward competition, the former fragment of the process should be proposed and for the autocomplete, the other part of the process should be proposed. Both types of recommendations complete each other.

While reading this paper, the recommendation provides a ranking of probabilities, from the most possible one to occur to the least possible one and we understand that the biggest strength of Bayesian network models is that it allow direct use of the graphical representation of BP diagrams.

In conclusion we can say that the use of the Bayesian Networks leads to a faster model process.