Leveraging A-Priori Knowledge for Multi-Attribute Sequence Prediction in Business Process monitoring

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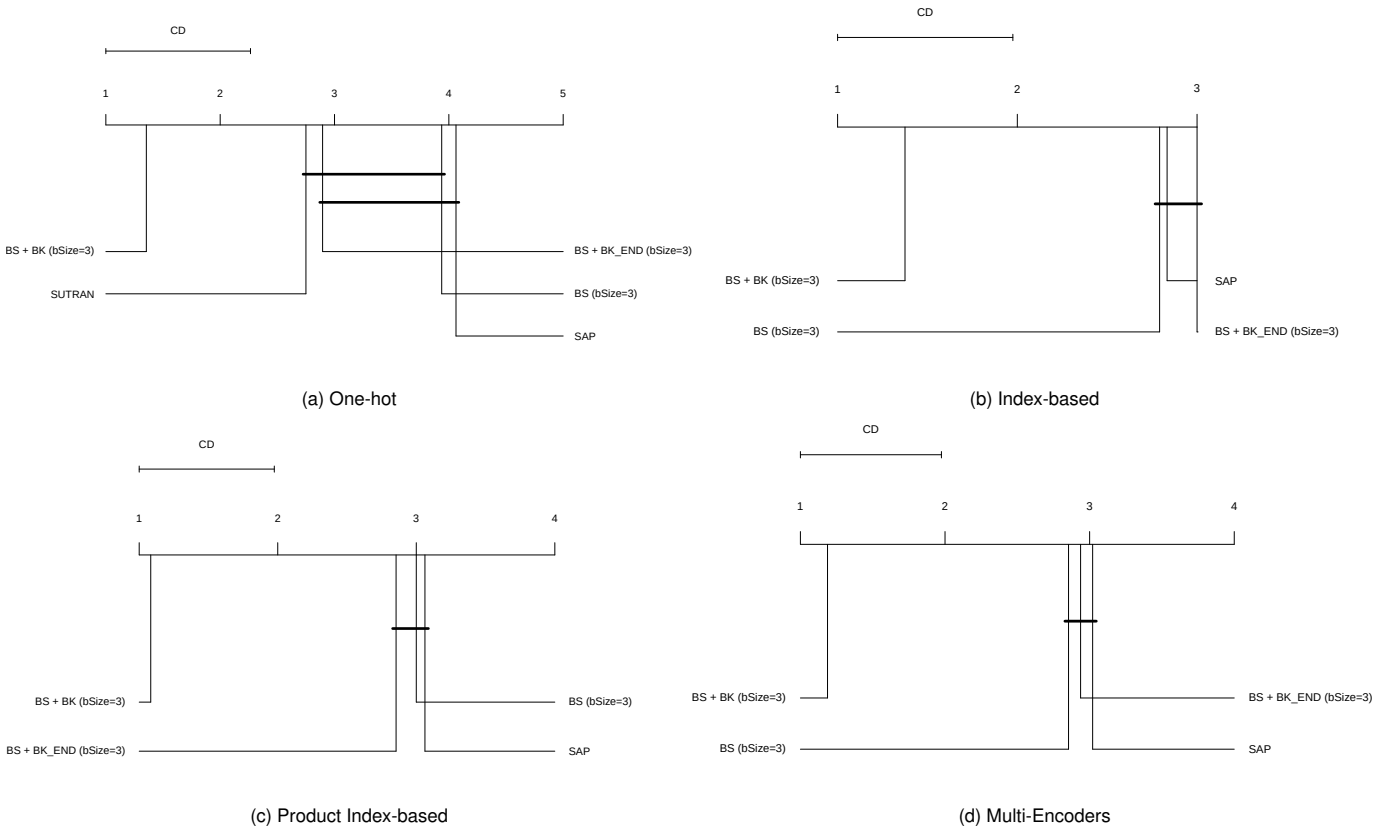
I. Performance plots

This appendix reports the following:

- The critical difference diagram reporting the average ranking of multi-attribute sequence prediction methods across different encodings (Figure 1).
- The average DLS for Activity sequence predictions for each dataset and each encoding method across different prefix lengths (Figure 2).
- The average DLS for Resource sequence predictions for each dataset and each encoding method across different prefix lengths (Figure 3).



(a) One-hot

(b) Index-based

(c) Product Index-based

(d) Multi-Encoders

Fig. 1: Comparison of all multi-attribute sequence prediction methods against each other with the Nemenyi test. The methods are compared in terms of the best DLS across different encodings. Groups of methods that are not significantly different (at $p < .05$) are connected.

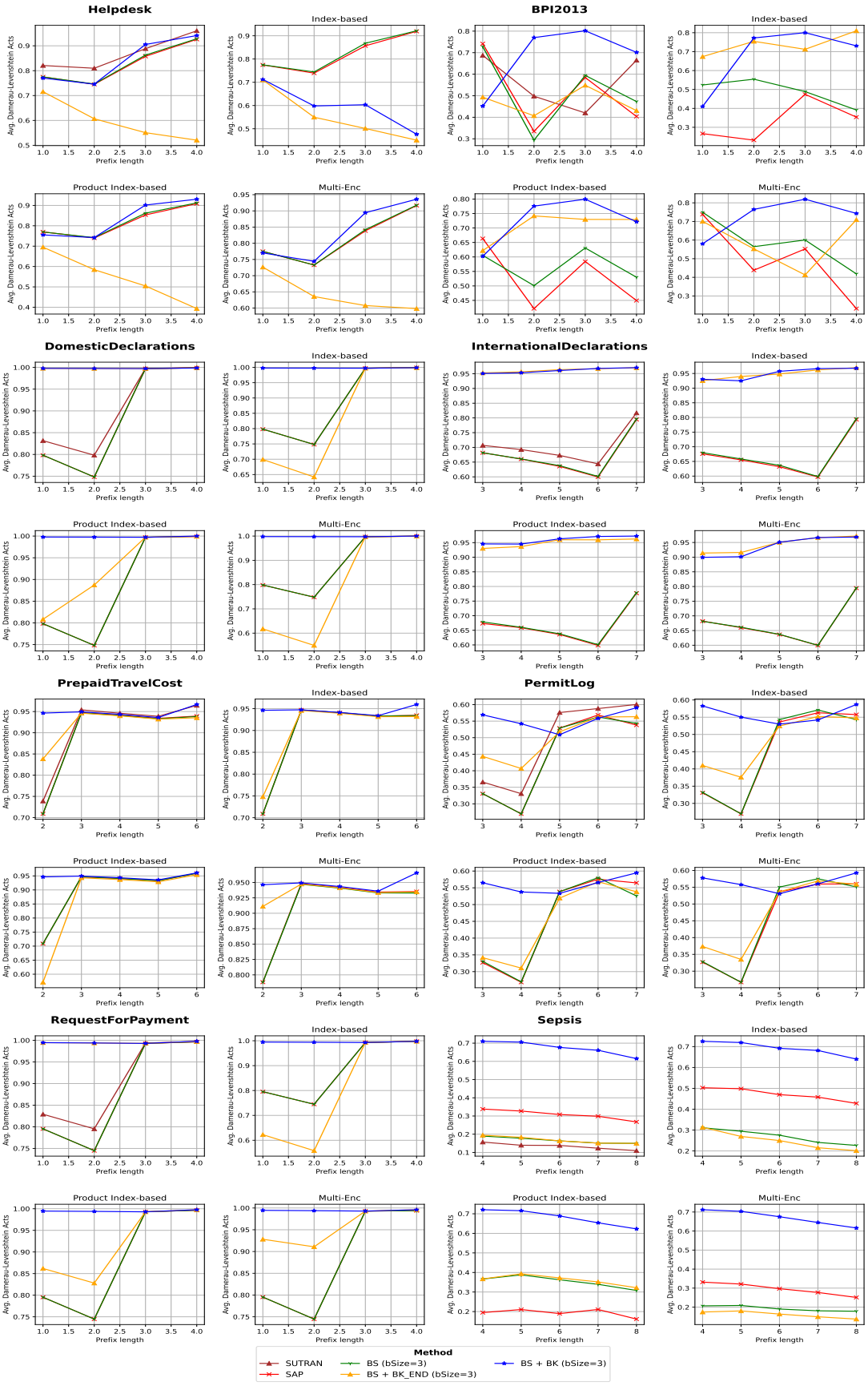


Fig. 2: Average DLS for Activity sequence predictions

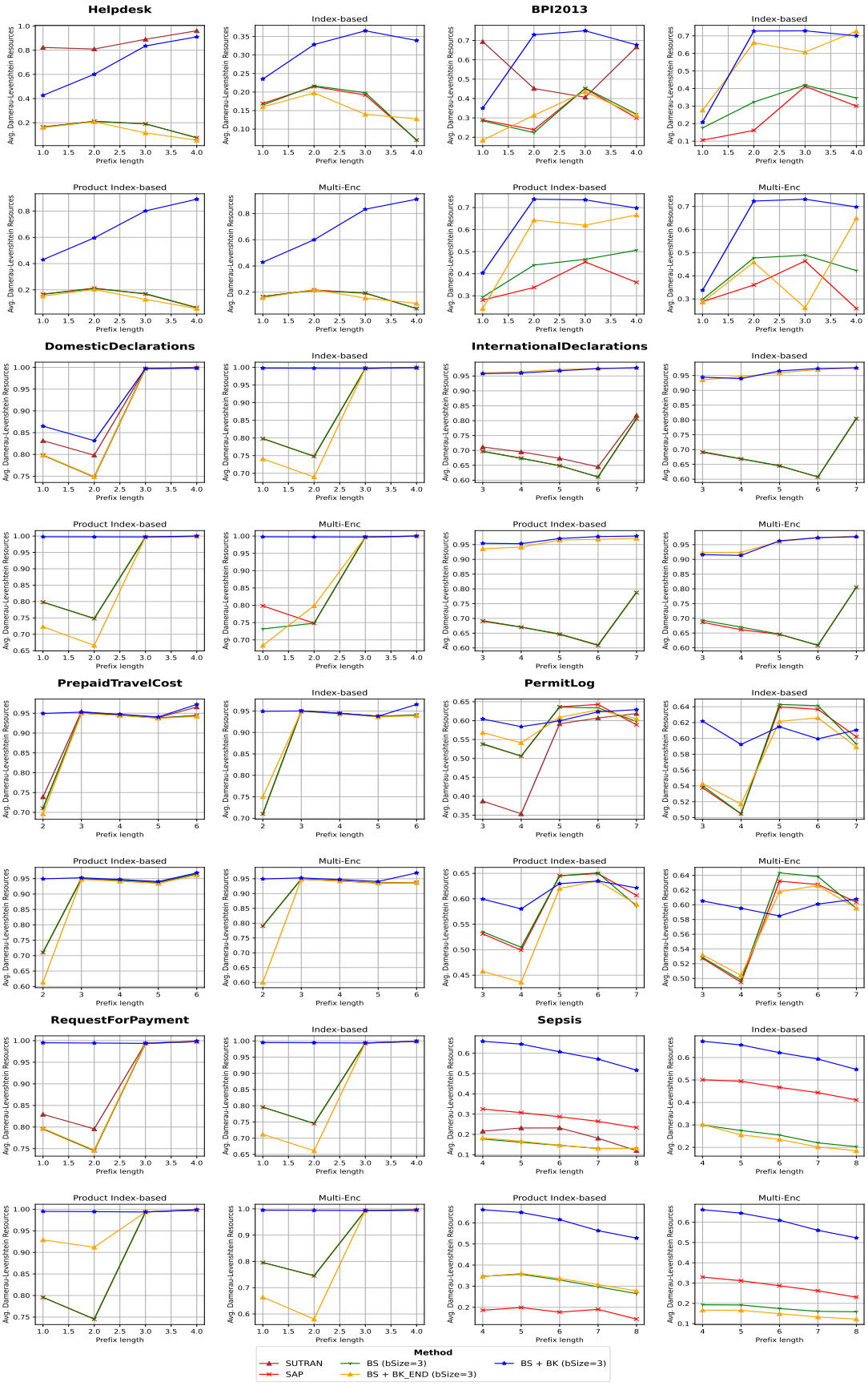


Fig. 3: Average DLS for Resource sequence predictions