- Extend the approach with other advanced intermediate structures, such as the intermediate structures of declarative process mining.
- Apply the event removal feature in database while keeping the intermediate structures live under insertion and deletion of event data.
- Optimize the query performance through indexing and possibly apply more advanced big data technologies, such as Spark SQL.
- Implement conformance checking in the context of DB-XES.

References

1. W.M.P. van der Aalst. Decomposing Petri Nets for Process Mining: A Generic Approach. *Distributed and Parallel Databases*, 31(4):471–507, 2013.
2. A. Azzini and P. Ceravolo. Consistent process mining over big data triple stores. In *2013 IEEE International Congress on Big Data*, pages 54–61, June 2013.
3. Diego Calvanese, Marco Montali, Alifah Syamsiyah, and Wil MP van der Aalst. Ontology-driven extraction of event logs from relational databases. In *Business Process Intelligence 2015*. 2015.
4. C.W. Günther. XES Standard Definition. www.xes-standard.org, 2014.
5. Sergio Hernández, Sebastiaan J. van Zelst, Joaquín Ezpeleta, and Wil M. P. van der Aalst. Handling big(ger) logs: Connecting prom 6 to apache hadoop. In *BPM Demo Session 2015*.
6. Sander J. J. Leemans, Dirk Fahland, and Wil M. P. van der Aalst. Discovering block-structured process models from event logs - A constructive approach. In *PETRI NETS 2013*.
7. Antonella Poggi, Domenico Lembo, Diego Calvanese, Giuseppe De Giacomo, Maurizio Lenzerini, and Riccardo Rosati. Journal on data semantics x. chapter Linking Data to Ontologies, pages 133–173. Springer-Verlag, Berlin, Heidelberg, 2008.
8. Hicham Reguieg, Boualem Benatallah, Hamid R. Motahari Nezhad, and Farouk Toumani. Event correlation analytics: Scaling process mining using mapreduce-aware event correlation discovery techniques. *IEEE Trans. Services Computing*, 8(6):847–860, 2015.
9. W. v. d. Aalst and E. Damiani. Processes meet big data: Connecting data science with process science. *IEEE Transactions on Services Computing*, 8(6):810–819, Nov 2015.
10. W. van der Aalst, T. Weijters, and L. Maruster. Workflow mining: discovering process models from event logs. *IEEE Transactions on Knowledge and Data Engineering*, 16(9):1128–1142, Sept 2004.
11. Wil M. P. van der Aalst. Distributed process discovery and conformance checking. In *FASE 2012*.
12. W.M.P. van der Aalst. *Process Mining: Data Science in Action*. 2011.
13. Boudewijn F. van Dongen and Shiva Shabani. Relational XES: data management for process mining. In *CAiSE 2015*.
14. Meenu Dave Vatika Sharma. Sql and nosql databases. *International Journal of Advanced Research in Computer Science and Software Engineering*, 2(8):20–27, August 2012.
15. H.M.W. Verbeek, J.C.A.M. Buijs, B.F. van Dongen, and W.M.P. van der Aalst. XES, XESame, and ProM 6. In P. Soffer and E. Proper, editors, *Information Systems Evolution*, volume 72, pages 60–75, 2010.