

Process Mining and BPM

Business Process Management or Process Improvement, or whatever you call it at your organization, is a collection of practices and techniques that organizations use to improve the way they arrange to get work done. Process improvement can be incremental and affect specific activities, or it can be transformational, and affect the very nature of the business. It can involve changes in management techniques and be a very employee-focus intervention, or it can involve new technologies that utterly change the way work is done. Most organizations are changing in many ways all at once and have a variety of different initiatives underway.

Process Mining is by no means the most powerful nor the most comprehensive technology currently available to process change agents. In essence, process mining involves applying statistical tools to stored data and drawing useful insights about the existing processes described by that data. Process Mining is an Artificial Intelligence-derived technique and a variation on the much-promoted analytics. As I say, it involves the use of smart algorithms to analyze data. A process mining application could be developed by a bright programmer, but most who use process mining techniques will prefer to use one of the several popular tools available to help process analysts apply process mining techniques to specific situations.

Consider the limits of Process Mining. Its use depends on the pre-existence of data about the working of a set of activities. You can't mine data you don't have. So, Process Mining isn't going to help with the design of new processes. It won't even help if you try to analyze an existing situation where there is no existing data.

That said, much of the day-to-day work of many process analysts involves trying to analyze how existing processes are working and identifying opportunities for incremental improvements. Imagine, for example, that your organization has a number of ERP applications grinding away, tracking how inventory flows through your organization. These ERP applications are keeping track of lots of data, carefully storing it as they run. You can turn one of the better Process Mining tools loose on these applications and it will generate a map showing inventory flows from point to point within your organization. It will also show you points at which there are problems, where items are rejected and flow backwards, or where bottlenecks occur. If you don't have a diagram of your existing process, most Process Mining tools can propose one by noting where data is gathered and stored.

As a process analyst who has spent a lot of time trying to teach new analysts about the many options they need to consider when they review processes, advocating a tool that seems to automate the task may seem a contradiction, but it isn't. Process

work takes time and there is a lot of it. Wasting time analyzing flows and bottlenecks on numerous day-to-day processes can be very time consuming, Having tools that let an analyst review many different processes looking for the few opportunities that offer large returns for intervention is a very cost-effective approach. I'm all for any automation can achieve, leaving the hard problems for human analysts.

So, if you are responsible for large numbers of existing processes, you owe it to yourself to check out Process Mining and to use this valuable technique where you can – to save your organization time and money.

If you are a senior process analyst, you should probably put some more time into studying process mining. To automate, computer developers need to understand a take pretty well. Thus, in essence, process mining algorithms represent some of the best models for process analysis that we currently have. A deeper understanding of what's involved in Process Mining is a deeper understanding into the essence of process analysis.

There are lots of ways to learn more about Process Mining, but the best one on the horizon at the moment is the International Conference on Process Mining (ICPM). This is a conference that will bring together the thought leaders of the field and those who are implementing the tools in a series of sessions that will help everyone understand what we know today and where the field is trending. The conference takes place on June 24-26, 2019 in Aachen (Germany) right near the center of much of the world's Process Mining work. For more information, check https://icpmconference.org/wp-content/uploads/icph_trailer_final.mp4 to register, see <https://icpmconference.org/registration/>

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