Introduction
Most business processes have performance targets. In practice, deviations from the targets often occur. Machine learning-based techniques have been proposed to predict various process performance variables. Nirdizati makes them ready to be applied in real-life settings!

Problems
• Processes take longer than necessary
• Process errors occur
• Too many running instances
• Inefficient resource management

Solution
• Predictive process monitoring
• Prioritize process instances
• Draw attention to potential problems
• Act before deviations happen

Advantages
• Keep track of both current and future state of process execution
• Predictions continuously are updated as new information becomes available
• Easy-to-use dashboard with multiple visualization options and responsive design
• Multi-process and multi-user support
• Scalable architecture

Example use cases
• Customer lead management – a certain amount of customers have to be acquired
• User behavior in Web – predict user’s future behavior to enhance browsing experience (e.g. pre-fetch pages)
• Governmental applications for permits – decisions have to be made within a certain timeframe

User interface

Fig. 1. Main dashboard view

Fig. 2. Distribution of process instances by expected/actual duration

Fig. 3. Distribution of process instances by expected/actual outcomes

Technical solution

Fig. 4. Data Flow Diagram

Fig. 5. Architectural overview

Links
Demo: http://nirdizati.com/
Code: https://github.com/nirdizati
Landing page: https://nirdizatimaster.wixsite.com/main
Twitter: https://twitter.com/nirdizati