Interactive Process Visualization in Drilling Operations

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Creating visualizations targeted to operators of processes require a thorough knowledge on both the operator and the process that should be monitored. Based on the pace of the process, the complexity of the process, and users other tasks, there are strict limitations on how much information one can display. The field of process visualization define several rules on exactly what and how much information to display, but since these factors are subject to change, we define a visualization that smoothly scales according to change in pace, or users attention, called *Interactive Process Visualization*. Eg. supporting the operator monitoring the real time data, to analysts looking into longer term trends to determine change of course.

This combination of the fields of Interactive Visual Analysis and Process Visualization is an largely unexplored area. Interactive Process Visualization, drawing on extensive research from both fields, requires a new way of looking into the data. Introducing interactivity to existing process visualizations and thereby inverting the famous visual information mantra to *Details first, overview on demand*.

In this presentation we will give an overview on how to define process pace, how to implement the, details first, overview on demand, pattern, and finally how to apply this to drilling operations.