

Summary article : **Business process modeling using petri nets**

Petri Nets, also known as Petri nets in English, are a graphical modeling method used to represent and analyze interactions between different stages of a process. Petri nets provide a formal and visual representation of processes, facilitating understanding and communication among stakeholders involved in business process analysis. Indeed, in this particular article, an absolutely fascinating and immersive approach to the vast universe of business process modeling is represented, a discipline that has become crucial within contemporary businesses. Delving further into history, this article offers an in-depth exploration of the origins of business process modeling, revealing the main forces that have shaped its development and widespread adoption at the heart of organizational management. This journey through time not only allows us to understand the reasons for the rapid rise of this practice but also to fully grasp its significant impact on strategies and business operations. By examining the context in which this activity takes place, the article brings us to the core of the challenges and issues faced by businesses in an ever-changing world, thereby highlighting the imperatives and opportunities that form business process modeling. Once the groundwork is laid, the article explains how techniques in this discipline blend, offering a clear and serious presentation of the various methods and approaches used in business process modeling, covering a wide range of techniques, from innovative methodologies to bold and unorthodox approaches. By emphasizing the development of models through construction, the article underscores the crucial importance of soundness, or weak termination, of processes, thus emphasizing the need to ensure the coherence and operational efficiency of business processes. This thorough exploration of soundness leads us to deep reflection on its central role in validating and verifying business processes, thus providing an essential basis for ensuring their reliability and robustness. Finally, the article turns to the future, exploring the affinities between business processes and software services, thus offering an innovative perspective on the application and adaptability of modeling techniques in the field of services. This article, with its meticulous and rigorous analysis, represents a fairly comprehensive work that provides an in-depth and profound analysis of business process modeling, offering an interesting perspective on its evolution, context, and impact on the managerial and strategic practices of modern businesses..