TABLE 9.4: Tools for Process Analysis and Redesign

TOOLS	DESCRIPTION	USES
Assembly drawing	An enlarged view of the product that has detailed listing of all parts and subassemblies.	Enables the user to understand how various parts of a product can be put together quickly and easily.
Assembly chart	A step-by-step pictorial representation of the assembly process.	Facilitates the assembly of a product through a well-defined sequence of steps.
Process route sheet	A document that describes the sequence of different operations, places, or people involved in a process.	Enables anyone to see all of the details of a work or customer order.
Process mapping	A graphical technique that shows all process-related activities, including inputs and outputs, decision points such as approvals and exceptions, and any cross-functional relationships.	Provides an integrated and unifying view of business processes, so that all stakeholders have a clear understanding of the individual roles they play in the overall system.
Value stream mapping (VSM)	A process mapping technique used to analyze and design the flow of materials and information across multiple processes required to bring a product or service to a consumer.	Enables a process analyst to identify activities that do not add value so that that they can be eliminated to reduce waste and improve efficiency.
Process simulation	A technique that uses computer software to provide a dynamic view of the actual process.	Enables a process analyst to estimate the variability of task times and explore several what-if scenarios without changing or disrupting the actual process.
Service blueprinting	A technique used to analyze service processes, particularly those that have high service content and require customer interaction, such as hospitality services, teaching, and counseling.	Enables a service provider to focus on customer interaction as an integral part of the design process so that overall service quality can be improved.