

The Appian logo is rendered in a white, lowercase, sans-serif font. It is positioned in the lower right quadrant of the page, which is a dark blue background. The logo is composed of the letters 'a', 'p', 'p', 'i', 'a', 'n' in a clean, modern typeface. The background features white geometric lines that intersect to form a large 'X' shape across the entire page.

appian

Glossary of Terms
November 1, 2021

Table of contents.

General Appian terms.	3
Automation terms.	7
Business process management (BPM) terms.	11
Process mining terms.	30

General Appian terms.

low-code

Low-code allows you to program a machine through a visual interface, such as by drawing a workflow diagram. It's a much more intuitive and human way of interacting with a machine than coding. The low-code market is evolving with the convergence of categories. It is bringing together process mining, workflow, and automation, which are the capabilities organizations use to discover, design, and automate their business processes.

low-code development

Low-code development is a way to build software applications faster by reducing the need to write code. With a low-code application development platform, you can use visual development tools—such as drag-and-drop modelers and point-and-click interface creation—to enable the rapid creation, deployment, and maintenance of powerful business apps. It has been found to accelerate app development by 10x or more as compared to traditional development.

low-code applications

Low-code applications are built using a visual development environment with tools like drag-and-drop modelers, smart services, components, and pre-built connectors. They reduce the need to write code and significantly increase the speed at which applications can be built and deployed. They're faster to build, modify, and execute.

low-code data

Low-code data is the fastest and easiest way to access, combine, and take action on data from any source. No need to write code or migrate your data in order to access it. It leverages a visual interface with point and click functionality to access and combine data from your enterprise systems, just like when you're developing a low-code application. It's also automatically optimized for performance, so it's truly fast to run.

General Appian terms.

application programming interface (API)

An application programming interface (API) is a connection that allows software to communicate with other software. It is a method of achieving abstraction, usually (but not necessarily) between lower-level and higher-level software. APIs are implemented by writing function calls in the program, which provide the linkage to the required subroutine for execution. Thus, an API implies that some program module is available in the computer to perform the operation or that it must be linked into the existing program to perform the tasks.

business process management (BPM)

Business process management (BPM) is a change management and system implementation methodology to aid the continuous comprehension and management of business processes that interact with people and systems, both within and across organizations. It is a methodology based on the following assumptions—business processes are ever-changing and developing, processes cross-cut each other, and processes must flow between multiple organizations and interested parties.

case management

Case management is a specific type of knowledge work where processes are less structured, interactions are more ad hoc, and events and milestones are difficult to predict. It is a type of work where lots of different data from different sources must be collected, parsed, summarized for decision-making, and acted upon—often in the absence of prescribed process steps. Addressing support tickets or insurance claims are examples of case management.

digital transformation

Digital transformation is the reinvention and improvement of business processes and digital experiences with technology. Organizations can implement digital transformation initiatives internally to make processes more efficient as well as externally to improve customer experiences.

dynamic offline mobile

Dynamic offline mobile lets fieldworkers check in, accept, and track work using their mobile enterprise app when lacking internet connectivity. When a user is online, the mobile app connects to the server to check for any tasks assigned and downloads them onto the user's device. The user can then access and perform these tasks without any network connection. Any tasks performed offline are queued locally to the device. Once the driver reconnects to the internet, the tasks are automatically sent to the server to process.

General Appian terms.

enterprise low-code application platform (LCAP)

Industry analyst Gartner defines an enterprise low-code application platform this way:

“[Low-code] provides rapid application development and deployment using low-code and no-code techniques, such as declarative, model-driven application design and development together with the simplified one-button deployment of applications. An LCAP typically creates metadata and interprets that metadata at runtime and abstracts the underlying server infrastructure for ease of use; many also allow optional procedural programming extensions. LCAP supports the following:

- UI capabilities via responsive web and mobile apps.
- Orchestration or choreography of pages, business process, and decisions or business rules.
- Built-in database.
- ‘One button’ deployment of applications.”

high availability cloud

High availability cloud is typically required by enterprise organizations, particularly for their critical infrastructures. It assures a high level of operational performance for a given period of time. Appian Cloud High Availability for enterprise-grade deployments provides the following:

- One-minute recovery point objective (RPO), which is the time acceptable for data loss after an unplanned data-loss incident.
- 15-minute recovery time objective (RTO), which is the time to restore process and functionality.
- Data replication across three availability zones.
- Customer data kept in the same geographic region as that customer.
- Load balanced between instances.

multi-experience development platform (MXDP)

Multi-experience development (MXDP) allows you to build engaging experiences across any device or modality for seamless experiences when moving between devices. MXDP apps can include immersive experiences integrated with internet of things (IoT) devices as well as conversational interactions with AI virtual private assistants like Amazon Alexa or Google Assistant.

General Appian terms.

native mobile

An application that is automatically compatible with mobile use. Any application you build with Appian is instantly and natively mobile across all devices at no additional cost and with no additional effort. With Appian Mobile, you build once and deploy anywhere.

Self-Assembling Interface Layer (SAIL)

Appian SAIL (Self-Assembling Interface Layer) is the patented framework that allows designers to drag and drop interface elements onto a visual workspace, and when they're done the result is a working interface. Appian interfaces capture the designer's intent, not their code. SAIL takes that intent and translates it so it will work with various operating systems, even mobile.

Public Portal

A Public Portal is a way to use Appian at scale with anyone, anywhere, at any time, without an account. It allows individual Appian UIs to be made publicly available without any authentication or identification requirements.

workflow

Workflow is the orchestration of people, systems, and data, and it connects capabilities like process mining and automation. Workflow sits at the center of automation and creates synergies across organizations.

Automation terms.

automation

Automation is digital workers doing human-based tasks as part of a process and includes RPA, AI, intelligent document processing (IDP), and business rules. Automation is one of three categories in the converging low-code market, with workflow and process mining being the other two.

artificial intelligence (AI)

Artificial intelligence (AI) is a method of reproducing human intelligence with computers. AI can range in applications from simple cognitive decision-making to machine learning that uses experience and data to improve over time. Examples include intelligent document processing (IDP) that can be used to automatically classify and extract information from paper-based forms and turn it into structured, usable data.

automation life cycle management

Automation life cycle management or “automation governance,” is how an organization methodically manages their enterprise-wide automation program. This includes identifying potential automation opportunities, prioritizing them by the business impact/ROI, figuring out what technologies should be used to automate which parts of the process, and cultivating collaboration between business and IT teams. Automation life cycle management is critical to scaling automation initiatives.

bot

A bot, in the context of robotic process automation (RPA), is a digital worker that completes tasks just like a person would but can run 24/7/365. Bots generally perform high-volume and repetitive tasks helping free people to focus on higher level work.

cognitive automation

In the context of automation, AI and ML are broadly referred to as “cognitive automation” and represent techniques used to automate work that requires “human-like” intelligence. For example, sentiment analysis, speech detection, fraud detection, and others.

decisions

Decisions make it easy to write and visualize business rules. In traditional software development, creating a decision table would require hundreds of lines of code. Building a decision in Appian requires no coding whatsoever. Based on the open Decision Model and Notation (DMN) standard, decisions are easy to use for anyone familiar with decision tables. Designers create decisions by writing a series of if-this-then-that statements for every column of the table. Each row can have multiple incoming conditions as well as result in multiple outputs. A decision's hit policy can also be configured, letting you decide whether results should be unique or not.

Automation terms.

digital process automation (DPA)

Digital process automation is the evolution of business process management (BPM), adding technology to automate specific tasks within a business process to increase efficiency and productivity.

human-in-control

In automation, human-in-the-loop (HIL) is people assisting bots or AI models to complete an activity; human-in-control puts people at the heart of the process, using bots and other digital workers to assist in completing an activity. Human-in-control also includes collaboration and capabilities, including task and case management, to ensure the right people or teams are engaged at the right time.

human-in-the-loop (HIL)

In the context of automation, human-in-the-loop (HIL) represents the involvement of people in assisting robots or AI models to complete an activity. For example, while processing an invoice, a robot may require approval from the CFO for any invoices that are above a certain amount.

hyperautomation

Hyperautomation is a term coined by analyst firm Gartner. According to Gartner, hyperautomation is a business-driven, disciplined approach that organizations use to rapidly identify, vet, and automate as many business and IT processes as possible. Hyperautomation involves the orchestrated use of multiple technologies, tools, or platforms, including the following:

- Artificial intelligence (AI)
- Machine learning
- Event-driven software architecture
- Robotic process automation (RPA)
- Business process management (BPM) and intelligent business process management suites (iBPMS)
- Integration platform as a service (iPaaS)
- Low-code/no-code tools
- Packaged software
- Other types of decision, process, and task automation tools

“Intelligent automation” and “Hyperautomation” are often used interchangeably.

Automation terms.

intelligent automation

Intelligent automation (IA) is the convergence of a spectrum of technologies—artificial intelligence (AI), business process management (BPM), robotic process automation (RPA), and others, to create intelligent workflows and processes. This term has been around for a number of years and was the precursor to terms like “hyperautomation.”

intelligent document processing (IDP)

Intelligent document processing (IDP) provides AI-based data extraction capabilities to eliminate thousands of hours of manual work associated with data extraction, data validation, and data entry. Many business processes are still heavily paper-based, for example, account payable, account receivable, claims management, KYC, and others. For large companies, it is not uncommon to manage millions of documents as part of their business processes. IDP automates and speeds up these tasks.

machine learning (ML)

Machine learning (ML) is a branch of artificial intelligence and describes the “learning” of a digital system on the basis of real data. An algorithm examines large amounts of data according to certain patterns or rules. Based on these findings, IT systems are able to find solutions for specific problems. This information can be used, for example, to solve related problems or to analyze unknown data. This technique is based on self-learning algorithms, which are adapted or changed during the learning process.

optical character recognition (OCR)

Optical character recognition, or OCR, is a technology that enables you to extract data from different types of documents, such as scanned paper documents, PDF files, or images. For example, OCR can be used for extracting an invoice number and invoice amount from an image of an invoice. OCR is a technique used as part of intelligent document processing (IDP).

process analytics and monitoring

Also referred to as “performance monitoring,” process analytics and monitoring is providing data-driven visibility into the end-to-end business process. It is used for identifying process bottlenecks/optimization opportunities, KPI reporting, SLA management, and ensuring process compliance.

robotic desktop automation (RDA)

Also referred to as “attended RPA,” robotic desktop automation (RDA) is a type of RPA that helps employees automate routine, mechanical tasks that are part of their everyday work. RDA bots run on peoples’ desktops and they act like virtual assistants. RDA robots are typically triggered by a person and are generally associated with front-office activities. They are most commonly used in customer service centres.

Automation terms.

robotic process automation (RPA)

Robotic process automation (RPA) is used for automating high-volume, repetitive, and manual tasks that people perform as part of their everyday work. RPA is primarily used for back-office functions. Unattended bots usually run on enterprise servers with little to no human intervention. These bots are digital workers, working 24/7, 365 days a year based on a predefined schedule or trigger.

workflow

Workflow is the orchestration of people, systems, and data and connects capabilities like process mining and automation. Workflow sits at the center of automation and creates synergies across organizations.

workflow automation

Workflow automation uses digital workers and technologies to execute a workflow with as little human intervention as possible. Workflow automation aims to improve efficiency and increase productivity.

Business process management (BPM) terms.

business process management (BPM)

Business process management (BPM) is a change management and system implementation methodology to aid the continuous comprehension and management of business processes that interact with people and systems both within and across organizations. It is a methodology based on the following assumptions: business processes are ever-changing and developing, processes cross-cut each other, and processes must flow between multiple organizations and interested parties.

.NET

.NET is Microsoft's framework for web services and component software introduced in 2000 and pronounced "dot-net." .NET is Microsoft's approach to a comprehensive development and runtime environment similar to J2EE. .NET supports all the web-based features and functions, including XML and web services protocols such as SOAP and UDDI. .NET applications run on intranets as well as public internet sites, thus .NET is an all-inclusive, web-oriented software architecture for internal and external use. Subsequent versions of Microsoft products (browsers, applications, Windows) were enhanced with support for .NET in some manner.

activity

Processes can be subdivided into smaller and smaller units or sub-processes, and we define an activity as the smallest sub-process illustrated on a process diagram. A process, then, is made up of one or more activities. Activities can consist of a single step, like approving a purchase request or placing a cap on a bottle in a production line. Other activities involve multiple steps, like filling out a form or assembling a chair. There is no consistency to how various methodologies use terms like "task" and "step," but increasingly the term "activity" is reserved for the smallest unit of analysis. A given activity could be performed by one or more employees, by a software system, or by some combination of these. In the UML notation, both processes and activities are represented by rectangles with rounded corners (see business process hierarchy). It is sometimes indicated if activities are manual (normal line around rectangle), systems (bold line around rectangle), or mixed and involve both manual activities and systems (dashed line around activity rectangle).

Business process management (BPM) terms.

activity cost worksheet

An activity cost worksheet is a grid or matrix to analyze the various costs of a set of activities. Activities are listed on the vertical axis and data about outputs, costs, times, and problems are described for each activity.

ad hoc workflow systems

Ad hoc workflow systems are workflow systems that wait on users to indicate what should happen next. An insurance system might pull up documents for an underwriter only on request. Compare this with administrative and transaction or production workflow systems.

administrative workflow systems

Administrative workflow systems are workflow systems that keep track of what individuals are doing and assign new tasks according to some set of rules. Compare this with ad hoc and transaction or production workflow systems.

application programming interface (API)

An application programming interface (API) is a set of definitions of ways one piece of computer software communicates with another. It is a method of achieving abstraction, usually, but not necessarily, between lower-level and higher-level software. APIs are implemented by writing function calls in the program that provide the link to the required subroutine for execution. Thus, an API implies that some program module is available in the computer to perform the operation or that it must be linked into the existing program to perform the tasks.

asynchronous process

In an asynchronous process, one activity sends a message to another but does not wait until it gets a response. A phone call to another person is a synchronous process—it can't go forward if the person on the other end doesn't answer the phone. Leaving a message on an answering machine turns it into an asynchronous process. After leaving a message, the caller can go on with their business and the person on the other end will respond when they get the message.

Business process management (BPM) terms.

balanced scorecard

Balanced scorecard is a movement, method, and technique for aligning measures from an organization's strategic goals to specific process measures. It stresses measuring a variety of things to obtain a good overview of what's actually happening. It is usually associated with Robert Kaplan and David Norton.

batch processing

In either human or computer processes, batch processing is a step where lots of items are accumulated and then processed together. This is in contrast to continuous processing, where items are processed as soon as possible.

benchmarks

As used in business process redesign, benchmarks are data about process measures obtained for specific types of processes. Many companies seek benchmark data on processes they seek to redesign in order to determine how well other companies manage the process.

BPM software

BPM is software that automates, executes, and monitors business processes from beginning to end by connecting people to people, applications to applications, and people to applications.

BPM system

According to Gartner, Inc., BPM is "a management practice that provides for governance of a business's process environment toward the goal of improving agility and operational performance." This more holistic view offers a structured approach for optimizing processes and takes into account the software tools discussed above as well as an organization's methods, policies, metrics, and management practices.

business analytics

Aggregated information on business processes that enables managers to analyze process trends, view performance metrics, and respond to organizational change.

business intelligence (BI)

Software systems and tools that seek to extract useful patterns or conclusions from masses of data.

business process

At its most generic, a business process is any set of activities performed by a business that is initiated by an event, transforms information or materials or business commitments, and produces an output. Value chains and large-scale business processes produce outputs that are valued by customers. Other processes generate outputs that are valued by other processes.

Business process management (BPM) terms.

business process automation

Business process automation refers to the use of computer systems and software to automate a process. Processes can be completely automated, so no human intervention is required, or semi-automated, where some human intervention is required to make decisions or handle exceptions. Techniques used for business process automation include workflow, BP-XML languages, ERP, and software development and EAI.

business process design or redesign

Business process redesign focuses on making major changes in an existing process and business process design focuses on creating a new process. Depending on the size of the process, this can be a major undertaking that is done infrequently, and, once done, should be followed by continuous business process improvement. Compared with its definition from the early nineties, business process redesign usually focuses on smaller scale processes and aims for more modest improvements these days.

business process improvement (BPI)

Business process improvement focuses on incrementally improving existing processes. There are many approaches, including the currently popular Six Sigma approach. BPI is usually narrowly focused and repeated over and over again during the life of a process.

business process management (BPM) platform

A more comprehensive approach to BPM, a business process management platform provides all of the process management capabilities of BPM software, plus the following functionality: knowledge management, document management, collaboration tools, business analytics, and a work portal.

business process management initiative (BPML)

A consortium of business process modeling tools vendors and user companies are working together to develop an XML-based business process language (BPML), a notation for the language (BPMN), and a query language (BPQL). The idea is that companies would model their automated processes on BPML and then be able to monitor and change the processes as needed. BPML would primarily be used by those who want to create collaborative internet or web service systems.

business process management software (BPMS)

Business process management software is enterprise application software that enables an organization to streamline processes and gain organizational efficiency through the modeling, execution, and analysis of business processes.

Business process management (BPM) terms.

business process outsourcing

Many companies outsource business processes to other companies to manage and execute. Few companies outsource core business processes that they depend on for their unique position in the market because they fear that the outsourcer won't be able to improve the process quickly enough to respond to market changes. Some companies are now offering to outsource such processes, arguing that they have an approach that will let the owner make changes in the process as needed.

business process reengineering (BPR)

Business process reengineering (BPR) is a term coined by Hammer and Davenport in the early nineties. As originally defined in their books, it emphasized starting from a blank sheet and completely reconceptualizing major business processes using IT to achieve breakthrough improvements in performance. The term became unpopular in the late nineties, and many business people associate BPR with failure. Those who still use the term have redefined it to align with the definition of business process redesign.

business rules

A business rule is a statement describing a business policy or decision procedure. Some programming languages run business rules together into very complex algorithms. In business process analysis, each rule is usually stated independently in the general format: If A and B, then C. Workflow tools and detailed process diagrams both depend on business rules to specify how decisions are made. We generally associate business rules with activities. A decision diamond is adequate to show what happens if a loan is accepted or rejected, but dozens or even hundreds of business rules may need to be defined to clarify when a loan should be accepted or rejected. Training programs, job aids, software systems, and knowledge management systems aim to document business rules either to automate the decision process or to make the rules available to other decision makers.

collaborative business process management (BPM)

Collaborative business process management (BPM) is BPM created using a collaborative business process language (usually ebXML). It is particularly suitable to describe the collaborations between partners that are all considered at the same level.

Business process management (BPM) terms.

collaborative tools

Collaborative tools include discussion forums, dynamic workspaces, and message boards that are provided within the BPM platform framework and are designed to remove intra- and inter-departmental communication barriers.

composite process application

A composite process application is an enterprise application that is developed and deployed using a BPM platform to solve a particular business problem, such as complying with regulatory standards or managing a company's assets. By integrating existing applications, pulling relevant data, and connecting appropriate people, it overcomes the limitations of traditional enterprise applications, offering more flexibility and scalability as well as better collaboration and integration.

continuous process improvement

Continuous process improvement is a strategy to find ways to improve process and product performance measures on an ongoing basis.

core business process

Core business processes are the processes that rely on the unique knowledge and skills of the business owner and that contribute to the owner's competitive advantage. Contrast this with subsidiary business processes.

COULD process

Also sometimes Can-Be Processes, COULD processes describe one of two or more alternative redesigns that are being considered.

dashboard

A dashboard is a user interface that resembles the dashboard of an automobile. Dashboards contain small graphs, charts, and gauges that provide data on key information within an organization.

data warehouse

A data warehouse is a record of an enterprise's past transactional and operational information, stored in a database. Data warehousing is not meant for current "live" data; rather, data from production databases are copied to the data warehouse so that queries can be performed without disturbing the performance or the stability of the production systems.

Business process management (BPM) terms.

database

A database is a collection of records stored in a computer in a systematic way such that a computer program called a database management system (DBMS) can consult it to answer questions. DBMSs can manage many forms of data, including text, images, sound, and video. For better retrieval and sorting, each record is usually organized as a set of data elements. The items retrieved in answer to queries become information that can be used to make decisions that might otherwise be more difficult or impossible to make.

decision point or diamond

A decision point or diamond is a diamond or hexagonal figure used on process diagrams to show when a decision leads to a branching in the flow of information, control, or materials. Technically, all decisions take place within activities and arrows only show the flow between activities. As a convenience, however, if the decisions lead to branching, we often represent them on the process diagram and label them to indicate why a flow would go to one subsequent activity rather than another.

DMAIC (define, measure, analyze, improve, control)

DMAIC is an acronym used by Six Sigma practitioners to remind them of the steps in a Six Sigma improvement project.

document management

Document management is a system for storing and securing electronic documents, images, and other files within an organization. The term used to imply the management of documents after they were scanned into the computer. Today, the term has become an umbrella under which document imaging, workflow, text retrieval, and multimedia fall.

ebXML (electronic business XML)

ebXML is a consortium set up by two other organizations, a United Nations (UN/CEFACT) committee and OASIS, an internet consortium. ebXML is charged with creating an XML architecture that standardizes all of the services companies will need to build web services. One sub-committee of ebXML is focused on business process communication and has proposed BPSS.

electronic data interchange (EDI)

Electronic data interchange (EDI) is a pre-internet system for exchanging data between organizations. EDI requires that organizations standardize terms and invest heavily in computers and the maintenance of the EDI software. Although some companies use EDI systems and will only phase them out slowly, EDI is being replaced by less expensive internet systems and protocols like XML.

Business process management (BPM) terms.

enterprise application

As used by software designers, an enterprise application is a major software application that is designed to be used or accessed by many different departments and is usually maintained at the corporate level. Payroll is a good example of an enterprise application.

enterprise application integration (EAI)

Enterprise application integration is the act of integrating an organization's enterprise applications. As companies seek to link their existing software applications with each other and with portals, the ability to get their applications to exchange data has become critical. EAI is usually close to the top of any CIO's list of concerns. There are different approaches to EAI. Some rely on linking specific applications with tailored code, but most rely on generic solutions, typically called middleware. XML, combined with SOAP and UDDI is a kind of middleware.

exceptions processing

Exceptions processing is the act of adjusting and repairing transactions that were unable to be completed. Without automation, organizations find that exception processing is one of the more costly and time-consuming efforts within their business.

gaps and disconnects patterns

Gaps and disconnects patterns are process redesign patterns that focus on checking the handoffs between departments and functional groups in order to assure that flows across departmental lines are smooth and effective.

IS process diagram

Also commonly AS-IS process diagram, an IS process diagram is a description or diagram of an existing process before changes are made.

ISO (International Standards Organization) 9000

ISO 9000 is an international standard for how organizations should document their processes. In effect, it is an early effort to encourage organizations to create a well-defined process architecture. In practice, it's too often simply an exercise in creating documentation to satisfy a requirement for getting on a bidding list.

Business process management (BPM) terms.

intelligent business process management suite (iBPMS)

Per analyst firm Gartner, “The intelligent business process management suite (iBPMS) market is the natural evolution of the earlier BPMS market, adding more capabilities for greater intelligence within business processes. Capabilities such as validation (process simulation, including ‘what if’) and verification (logical compliance), optimization, and the ability to gain insight into process performance have been included in many BPMS offerings for several years. iBPMSs have added enhanced support for human collaboration, such as integration with social media, mobile-enabled process tasks, streaming analytics, and real-time decision management.”

J2EE (Java 2 Platform, Enterprise Edition)

J2EE is a software programming platform from Sun for developing and running distributed enterprise applications, based largely on modular components running on an application server. J2EE comprises a specification, reference implementation, and a set of testing platforms. J2EE is also considered informally to be a language or standard because providers must agree to certain conformance requirements in order to declare their products J2EE compliant.

junction, junction bar

On a process diagram, a junction or junction bar is a way of showing that one flow (output) is divided and sent into multiple activities, or to show that multiple flows must all be complete before the activity immediately after the bar can occur.

KANO analysis

A KANO analysis is an approach to defining customer satisfaction that divides outputs, service, or product features of outputs into (1) basic requirements (the minimum a customer expects), (2) satisfiers (additional outputs or features that please customers) and (3) delighters (outputs or features that the customer didn't expect that really please customers.) KANO is associated with Noriaki Kano, a Japanese quality control expert.

key performance indicators (KPIs)

KPIs are personalized performance metrics and benchmarks that drive the financial and operational success of a company.

knowledge management (KM)

KM is a BPM component that allows users to share tasks, content, documents, and notifications through knowledge communities.

Business process management (BPM) terms.

lean manufacturing

Lean manufacturing is an approach to designing and managing production processes that emphasizes minimal inventory and just-in-time delivery, among other things, to improve the efficiency of a manufacturing process.

measures hierarchy

A measures hierarchy is a hierarchical tree that shows how organizational measures, are subdivided into more specific measures for value chains, processes, sub-processes and ultimately for activity goals. For every goal there are measures, specific tests of whether the goal is achieved or not. Thus, there is also a goal hierarchy that mirrors the goal hierarchy.

middleware

Middleware is software that allows two modules or applications to exchange data. Also see enterprise application integration (EAI).

model

A model is a formal set of relationships that can be manipulated to test assumptions. A simulation that tests the number of units that can be processed each hour under a set of conditions is an example of a model. Models do not need to be graphical.

model-driven architecture (MDA)

MDA is a new approach to application development being promoted by the Object Management Group. In essence, the idea is that organizations should create abstract class models of their applications

and then use those models to generate specific models and software code. MDA holds that the same abstract model could be used to generate different types of code. Thus, rather than creating new applications when new technologies come along, a company could have a high-level architecture and reusable components that it could use over and over again for many years. This approach is in the early stages of development, but it has attracted quite a bit of attention. Compare it with computer aided software engineering (CASE).

modeling

Broadly, modeling refers to creating a simplified representation of something else. A model can be a picture, a diagram, or a mathematical formula. In terms of business process modeling, it refers to a diagrammatic representation of how work is done—a model must specify formal relationships and assumptions that can be tested.

nodes

Within a process modeler, nodes are tasks or packages of functionality that, when connected, encompass an entire process. Nodes can be either attended (the task is assigned to a person) or unattended (the task is assigned to a computer system).

Business process management (BPM) terms.

object-oriented

Object-oriented is an approach to structuring software applications. Instead of thinking of an application as a process with steps, we think of it as a set of objects that exchange messages. It is now the dominant approach to software development. Java and Visual Basic are object-oriented software development languages.

packaged applications

Generically, packaged applications are any pre-packaged software application. Normally this is used as a way of referring to vendors who sell ERP or customer relationship management (CRM) application platforms that are organized to be used to integrate all of a company's main software applications. By installing a number of packaged applications, a company can assure that major business process applications in finance, accounting, human resources, and manufacturing all communicate smoothly and store data in a common database.

parallel process

A parallel process is a process in which two or more sequences of activities are going on simultaneously. If a physical document is being passed from one person to another, the process is necessarily a single sequence. An electronic document in a workflow system, on the other hand, can be sent to several people simultaneously.

process

A process is a set of activities and transactions that an organization conducts on a regular basis in order to achieve its objectives. It can be simple (e.g., order fulfillment) or complex (e.g., new product development), short-running (e.g., employee onboarding) or long-running (e.g., regulatory compliance), function-specific (e.g., proposal management) or industry-specific (e.g., energy procurement). It can exist within a single department (e.g., billing), run throughout the entire enterprise (e.g., strategic sourcing), or extend across the whole value chain (e.g., supply chain management).

process analytics

Process analytics is data about each particular task or event in a business process. This information can be used to fix bottlenecks, deal with exceptions, and optimize business processes.

Business process management (BPM) terms.

process architecture

Process architecture, also business process architecture, is a written or diagrammatic summary of the value chains and business processes supported by a given organization. A good process architecture shows how value chains and business processes are related to each other and to the strategic goals of the organization. Some companies use the term process architecture to refer to the process diagram for a single process, but here that is referred to as a process model or process diagram. We often add “business” or “enterprise” to process architecture to suggest that it’s a high-level architecture of all of the processes in the organization.

process designer

Process designer is a BPM component that allows a trained user to analyze and model a process, step by step, as well as assign logic to it.

process diagram

A process diagram shows the flow of information, control, or materials from one activity to another. The diagram shows departments, functions, or individuals on the vertical axis and uses swimlanes to show which sub-processes or activities are managed by which departments, functions, or individuals. The customer of the process always appears on the top swimlane. External processes are listed below the main process. The horizontal axis usually depicts the flow of time from left to right, although informal process

diagrams sometimes allow loops that violate a strict time flow. Rectangles with rounded corners represent sub-processes or activities. Arrows represent various types of flow between rectangles. Some developers divide process diagrams into IS process diagrams that show a process as it is currently performed, COULD process diagrams that show how a process might be changed, and SHOULD process diagrams that show how a process redesign team ultimately proposes to change a process.

process engine

A process engine is a BPM component that executes the actual flow of a modeled process, assigning manual activities to people and automated activities to applications as the process unfolds.

process instance

A process instance is a diagram that describes a generic sequence of events. An instance describes an actual process that includes data, real actions, and specific decisions. Workflow systems and simulation systems both keep track of the data from the execution of specific process instances in order to determine things like how long the process actually takes, who handled a specific instance, or how much it cost. In the case of simulation systems, someone has to supply information about a set of actual instances.

Business process management (BPM) terms.

process management

Process management is overseen by managers or supervisors responsible for specific processes or activities and involves organizing the process or activity, securing the resources needed to execute it, and measuring the results of the activity and providing rewards or corrective feedback when necessary. Process managers are also responsible for changing and improving the process whenever possible.

process measures or process output measures

Process measures determine whether a process or activity is achieving its goals. At every level, processes have outputs and those outputs should be measures to make sure the process is functioning as it should. In an ideal organization, company goals and measures are associated with value chains and then subdivided so that, at every level, managers are measuring process outcomes that are related to the ultimate goals of the organization. If vertical alignment is ignored, it's possible that activities or processes will be measured in ways that don't contribute to the overall success of the larger process or the success of the company.

process modeling

Process modeling is creating a diagrammatic representation of how a specific process is completed.

rules engine

A rules engine is a BPM component that manages the flow of information and activities within a process according to the formulas and rules assigned to it.

Rummler-Brache Methodology

The Rummler-Brache Methodology was created by Geary Rummler and Alan Brache and defines a comprehensive approach to organizing companies around processes, managing and measuring processes, and redefining processes. It is described in their 1990 book, *Improving Performance*, and is probably the best known, systematic approach to business process change. Ideas first introduced in this book have been very influential for other, less comprehensive approaches.

scorecards

Scorecards are cross-functional analytic applications that define, measure, and analyze a business strategy according to KPIs. Scorecards aggregate KPIs into higher-level initiatives and objectives. Each KPI in a scorecard is weighted in a way that articulates its relative impact on the higher objective. The most famous scorecard is the Kaplan-Norton "balanced scorecard," which measures a company's activities in terms of its vision and strategies and gives managers a comprehensive view of the performance of a business.

Business process management (BPM) terms.

SHOULD process

A SHOULD process, also known as a TO-BE process, is a description or diagram of the process that the redesign team proposes to create.

silo thinking

Silo thinking is a metaphor drawn from the large structures used in agriculture to store grain and suggests that each department in an organization chart is a silo that stands alone, not interacting with any of the other departmental silos. It is used as a term of derision.

simple object access protocol (SOAP)

SOAP is a protocol that is used to move XML files around the internet.

simulation

Simulation is a technique that uses a model to make predictions about a system or process. There are different types of simulation, some more informal and some more formal. Process simulation tools normally assign values to activities and then a number of cases to see how the business process will respond. The simulation of complex processes can often reveal outcomes that the developers don't anticipate.

SIPOC (supplier, input, process, output, customer)

SIPOC is an acronym used by Six Sigma practitioners to remind them of how to set up a high-level overview of a process.

Six Sigma

Six Sigma is a movement, method, and set of techniques focused on improving business processes. It relies heavily on statistical techniques to measure success. There are multiple Six Sigma methods, some designed for process improvement and some for designing or redesigning business processes. Most Six Sigma books, however, emphasize incremental process improvement. Six Sigma is often associated with Mikel Harry and Motorola.

software engineering

Software engineering is a movement, methods, and techniques aimed at making software development more systematic. Software methodologies, like the OMG's UML, and software tools that help developers model application designs and then generate code are all closely associated with software engineering.

Business process management (BPM) terms.

software requirements

Software requirements are a statement of what a software application should do. Sometimes business analysts create requirements and hand them to software developers. Other times software analysts interview business people in order to determine the requirements for a software application. Business people often define requirements less formally than developers need them to—they tend to define requirements with written statements or with process diagrams. Software developers are more likely to define software requirements by means of use case diagrams or class diagrams, which often aren't easily understood by business analysts. Software requirements constitute an important interface between business managers and IT organizations. If communication between business analysts and developers isn't clear and precise, then the resulting software system is likely to disappoint the people who requested it.

Software-as-a-Service (SaaS)

SaaS is when a provider licenses an application to customers as a service on demand through a subscription or "pay-as-you-go" model. SaaS is also called "software on demand."

standard deviation

Standard deviation is a measure for the amount of variation in a set of values. One standard deviation to the left or the right of the mean on a standard bell-shaped curve accounts for 34.13% of the variation. Two standard deviations, one to the left and one to the right, account for 68.26% of the variation. The Greek letter, Sigma, is used to represent a deviation. Six Sigma people rely on tables to translate numbers into deviations or sigmas.

standard or normal bell-shaped curve

A standard bell-shaped curve is a statistical tool for describing variation of data from a mean. Developed by Carl Frederick Gauss, it shows that most variation is slight and that extreme variations are few and far between. Six Sigma relies on concepts derived from the standard bell-shaped curve but uses a different curve in their tables defined by what they call long-run process drift.

Business process management (BPM) terms.

sub-processes

A sub-process is a part of a whole process. Process analysis necessarily occurs on various levels. A high-level process diagram shows major processes. Each major process is typically divided into sub-processes, which are represented on separate process diagrams. Those processes, in turn, may be subdivided into more sub-processes. There is no logical limit to the number of times it's possible to subdivide processes into sub-processes. Processes are divided until the process is understood in sufficient detail to successfully redesign or improve it. The smallest sub-processes identified in any given analysis effort are called activities.

subsidiary business processes

Subsidiary business processes support core business processes or provide products or services that are not among the most important to a company. In most companies, IT and HR processes are classified as subsidiary processes because they provide support services for core business processes.

super-system diagram

A super-system diagram is an organization diagram that represents the company as a blank box and focuses on the elements like suppliers and customers that make inputs and outputs to the company. Normally we group outside elements into four groups: suppliers on the left, customers and shareholders on the right, governmental and environmental factors above, and competitors below.

supplier-oriented e-business applications

Supplier-oriented e-business applications is a generic way of talking about business processes and internet applications that use the internet to allow companies to link with business partners or suppliers to coordinate their efforts.

Supply Chain Council (SCC)

SCC is an international consortium of companies that are interested in improving organizational supply chains. SCC has conferences, publications, and training programs. They promote SCOR, a systematic process methodology for creating supply chain systems.

supply chain management (SCM)

Supply chain management is a broad term describing any of a number of packaged or tailored applications or tools designed to help with the development or execution of supply chain systems or with managing information gained from supply chain interactions.

swimlane

A swimlane is a row on a business process diagram. It is a way of indicating who is responsible for a given process or activity. Swimlanes are named on the left side of the process diagram. In most cases, swimlanes are assigned to departments, groups within departments, or individuals or to applications, systems of applications, or databases. In exceptional cases, swimlanes may represent geographical regions. Processes, sub-processes, or

Business process management (BPM) terms.

activities that fall within a given swimlane are the responsibility of the entity named on the left axis of the process diagram. (Some workflow tools represent swimlanes as vertical columns, effectively rotating the process diagrams 90 degrees. The distinction between horizontal or vertical swimlanes is arbitrary.)

synchronous process

In a synchronous process, one activity sends a message to another and then waits for a response before proceeding. A phone call to another person is a synchronous process—it can't go forward if the person on the other end doesn't answer the phone. Leaving a message on an answering machine turns it into an asynchronous process. The caller leaves a message and goes on with their business, and the person on the other end will respond when they get the message.

three levels of organization (performance framework)

Three levels of organization is a Rummler-Brache concept that holds that there are three primary levels of business process analysis: the organizational level, the process level, and the activity or performance level (which was called the "job level" in Improving Performance). Sometimes presented as a matrix, the performance framework shows the three levels on the vertical axis and the perspectives or viewpoints on the horizontal axis: goals and measures, design and

implementation, and management. This is a way of classifying the concerns that a comprehensive business process approach should encompass.

total quality management (TQM)

TQM is a movement, an industrial discipline, and a set of techniques for improving the quality of processes. TQM emphasizes constant measures and statistical techniques to help improve and then maintain the output quality of processes. It is often associated with Edwards Deming.

transaction or production workflow systems

Transaction or production workflow systems are types of workflow systems that move documents or information from one terminal to another following a workflow model. Compare these with ad hoc and administrative workflow systems.

transitioning to a new process

The transition to a new process occurs between after managers and employees have been trained in the new process and when they actually start using it. A successful transition depends on having senior management support and measurement and incentive systems in place to assure that local managers ensure the new process is implemented correctly.

Business process management (BPM) terms.

unified modeling language (UML)

UML is an international, standard notation for modeling software systems. The UML specification supports several different types of diagrams, including the activity diagram, which is used to model business processes and workflow diagrams. UML was created and is maintained by the OMG.

universal description, discovery and integration (UDDI)

UDDI is a web protocol based on the WSDL language that allows one web system to locate others and determine what format messages to that system must take.

use case diagram

Use case diagram is one type of UML diagram. Often used by software developers to define the software requirements for a system, use case diagrams focus on scenarios that describe how users use an application.

value chain

A value chain is a very large-scale business process that is initiated by a customer request, or by the decision of the company to enter a new line of business, and results in the delivery of a process or service to a customer. A value chain includes everything that contributes to the output. By adding up all of the costs of each activity in a value chain and subtracting the total from the sale price, an organization can determine the profit margin on the value chain. Most organizations support from three to 15 value chains. Many

managers associate value chains with the description provided in Michael Porter's 1985 book, Competitive Advantage.

web services

Web services is a broad term that refers to distributed or virtual applications or processes that use the internet to link activities or software components. An example is a travel website that takes a reservation from a customer, sends a message to a hotel application that is accessed via the web to determine if a room is available, books it, and tells the customer he or she has a reservation.

web services low language (WSFL)

WSFL is an early IBM XML business process language. See BPEL4WS.

workflow

Workflow is the orchestration of people, systems, and data and connects capabilities like process mining and automation. Workflow sits at the center of automation and creates synergies across organizations.

workflow model

Workflow model is another name for a process diagram. It often includes both a diagram and rules that define the flow of information from one activity to the next. If used in conjunction with a workflow system or engine, a software-based process diagram that becomes the program for a workflow system that will move information from a database to one computer terminal after another.

Business process management (BPM) terms.

workflow reference model

A workflow reference model is a model created by the Workflow Management Coalition (WfMC) to define a workflow management system and to identify the most important system interfaces. Other WfMC standards make reference to this model.

workflow system or engine

A workflow system or engine is a software tool or program that helps analysts define a process and the rules governing process decisions, and then manages the actual distribution of information related to specific instances or cases to terminals and databases.

XML (eXtended markup language)

XML is an internet protocol defined by the W3C. It is a file format that includes within a file both data and rules for how the data is to be interpreted. Using XML, one can create XML languages, which are sets of terms that companies agree to use in a specific way in order to facilitate the exchange of data. It is emerging as the most popular way to transmit data between applications and companies over the internet.

XML business process language

XML business process language is a computing language that describes business processes and their relationships. These languages use XML to pass messages.

XML-based process definition language (XPDL)

The Workflow Management Coalition created XPDL as a standard language to describe how workflow tools can communicate information about business processes with each other over the internet.

Process mining terms.

Process mining

Process mining is a data-driven approach that comes from the fields of process management and data science. It is designed to help organizations discover, monitor, and improve business processes. It uses event logs, which are lists of activities with start and end time stamps from IT systems. Event logs can include information about when an order is received, product delivered, customer contacted, payment made, and more. This data-driven approach provides insight into what people, systems, and organizations are actually doing, as opposed to what they think they're doing. The insights help identify bottlenecks and compliance issues that can be improved. AI is increasingly being applied to process mining to extract greater insights.

activity

In business process management, activities describe tasks that are part of a process. Activities can be performed by persons or automated by machines. An activity is implemented within a certain processing time and can have other characteristics, such as a responsible person or a certain cost rate.

bottleneck

A bottleneck describes a scarcity of resources like manpower, machinery, (partial) products, or manufacturing materials. A bottleneck worsens or delays the process or its performance, increasing the cycle time or even bringing the process to a complete standstill. Thus, a bottleneck

usually holds potential for optimization. Bottleneck sources can be found and eliminated by process discovery and root cause analyses.

case

A case describes a business case that runs through a particular process variant. It is therefore the image of exactly one process cycle. Each case can be identified by its individual case ID. Case attributes can vary for different cases.

case attribute

Case attributes are characteristics of a business case that describe it in more detail. Each case has one or more attributes, and these attribute values can vary from case to case. Examples of case attributes are specific IT systems or persons responsible for activities.

Case ID

The case ID is an identifier, usually a string of letters and numbers, that represent a case. Each case ID is unique and therefore serves to uniquely identify the case. The case ID often consists of a combination of letters and numbers.

Process mining terms.

compliance

Compliance describes the adherence to company internal and/or legal regulations or standards. In business process management, it describes the compliant or prescribed process implementation. This is often based on defined or modelled processes. Process compliance can be checked in process mining with the help of conformance checking.

conformance checking

Conformance checking is a technique used to compare event logs or the resulting process with the existing reference model (target model) of the same process. This technique is used to determine whether the target process corresponds to the actual process. Conformance checking is a process mining method used to check compliance.

continuous improvement process (CIP)

In a continuous improvement process (CIP), the benefits provided, such as products or services, as well as the value-adding processes of a company are continually improved. The results of the CIP are implemented directly, otherwise they are obsolete and no longer achieve the desired results.

cycle time

The cycle time is the time required to complete a process, process variant, business case, or activity. The cycle time is made up of the processing time, the idle time, the transport time, and the wait time. You can use the cycle time to analyze the process to determine process performance.

data extraction

Data extraction describes the extraction of data from a system. In the context of process mining, this means that event data is extracted from an IT system to perform a data transformation and analysis.

data preprocessing

Data preprocessing describes the preparation of data for analysis. This preparation consists of four core activities:

- Data cleaning: Complete the data (e.g., add missing values).
- Data transformation: Modify and adapt the data (e.g., normalize or aggregate data).
- Data integration: Integrate different data sets.
- Data reduction: Reduce data volume, for example, by reducing the dimensions or compressing data.

Process mining terms.

data transformation

Data transformation is the transformation and alignment of data sets to each other or to a certain schema. Data transformation takes place after data extraction. This ensures further processing of the data, for example, to integrate data sets or load them into another IT system. In process mining, data transformation is a component of data preprocessing.

discovered model

The discovered model is a graphical representation of a process and is used in process mining. This graph is automatically generated from the event logs of one or more IT systems. In contrast to the conventional BPMN model, the cycle time and number are visualized directly on the graph. In addition, individual objects, such as activities or events, also have other representations. It is possible to convert a discovered model into a BPMN-compliant model.

DMAIC cycle

The DMAIC cycle is often referred to in connection with Six Sigma and stands for define, measure, analyze, improve, and control. These words represent the individual steps of the cycle. It provides a structured way of working to identify, analyze, improve, and control processes.

ETL

ETL stands for extract, transform, load and describes a process in which data is extracted from one system and transformed and loaded into another system. In the context of process mining, this involves data being first extracted, then transformed, and then loaded into a process mining tool.

event

An event represents an activity in a system. All events that are to be assigned to a (business) transaction form a case similar to a business process that consists of several activities. Each event has an associated case ID, a time stamp, and other context factors. The time stamps correspond to the logged start and end time of the event. An event log collects and stores all these events.

event log

Event logs list events together with their attributes. Attributes that are typically listed in an event log are case ID, timestamps of the start and end times, and other attributes of the event recorded by the IT system. An event log thus represents one or more cases of a business process. An event log can also be used to document several related business processes.

Process mining terms.

human interaction workflow

A human interaction workflow is a process that is dependent on or related to human activities. This means that a part of the process is executed by an agent and another part by a system or machine. Some process steps are therefore dependent on human action. An example of this is the processing of a support request. In this example, a request is received by a system but the process cannot be completed without the request being manually processed by a person. Human interaction workflows can be partially automated using a process engine, but not completely automated.

idle time

The idle time refers to the time between the end of one process activity and the start of the next. During the idle time, a work item such as a document is not processed, inspected, transported, or stored due to a sequence or malfunction. Idle time is the time between two production steps. Idle time extends a process and has a negative effect on the cycle time.

key metric

A key metric represents a measured value or status that is compared with other key metrics or used for analyses, for example, to monitor performance or identify optimization opportunities. In the field of process mining, frequently used key metrics include cycle time and number as well as process costs.

lean management

The term lean management describes the achievement of lean structures and processes across an entire value chain. Accordingly, one of the main goals of lean management is the optimization of processes—to uncover and remedy optimization opportunities such as bottlenecks or process loops.

Model training

Model training is the process of training a model based on prepared historical process data. A system makes automated decisions with the help of this model. Through this training, the model should automatically link process and data correlations with system configurations and key figures. Taking current live data into account, the system can independently make changes to the system configuration and adjust the process control autonomously. Such procedures are possible through machine learning.

optimization opportunity

The optimization opportunity in a process are sections or activities that can be changed to improve the process performance. Optimization opportunities are therefore possibilities for improvement within a process. For example, these can be bottlenecks, process loops, or inefficient process flows. Optimization opportunity is realized by eliminating identified weak points in a process. Optimized processes achieve greater effectiveness, efficiency, and/or conformity. Optimization opportunities are often discovered during process analysis.

Process mining terms.

performance

The efficiency, effectiveness, or success of an activity or an entire process is referred to as performance. Performance can be measured with various key metrics. Such key metrics can affect the cycle time or costs of a process.

performance analysis

Performance analysis is using key metrics to evaluate performance efficiency, effectiveness, or success.

process analysis

In process mining, process analysis describes the examination of a data-driven process model for optimization opportunities. The data-driven process model is based on a log file of the process. Based on this information, improvements or changes are made. For example, bottlenecks or unplanned process sequences identified in this way can be eliminated. The objective of process analysis is the optimization of the process model and thus of the underlying process. A process analyst conducts process analysis.

process analyst

A process analyst is a person whose task is to examine the processes of a company. Models, key metrics, and other indicators are used for this task. A process analyst may identify process weaknesses and further optimization opportunities. In process mining, it is also possible to perform a data-based and, if necessary, automated root cause analysis to identify the sources of process issues.

process controlling

The processes and data collected during process execution are analyzed in process controlling. The data can describe performance and include other defined key metrics. With the help of analyses, performance data, and key metrics, processes can be compared with each other. It is also possible to check whether set targets or regulations concerning compliance are being adhered to. New and more far-reaching findings from the analyses can and should be taken into account in renewed process optimization and process documentation. Process controlling is part of the process management life cycle and takes place after process execution.

process cycle

A process cycle follows a certain process path. Individual process cycles within the same process can differ from each other. This can occur, for example, if the process contains an OR decision. Each process cycle, but also each activity, has a cycle time. Different process variants arise due to different cycle options.

Process mining terms.

process discovery

Process discovery describes the data-based visualization of a process and is a basic method used in process mining. In process discovery, a visual model of a process is usually generated automatically from the available data (e.g. from event logs). The primary goal of process discovery is to increase transparency and process knowledge. Process discovery outcomes are visualized in the discovered model.

process documentation

In process documentation, the existing actual processes and target processes are recorded. In order to save this information, process models are usually created. Internal company guidelines or general standards, such as BPMN, ensure that the process models are uniform and comparable. The process documentation is part of the process management life cycle.

process engine

With a process engine, processes are executed in the form of a predefined sequence or workflow. A process or workflow must therefore exist for the process engine to work. The engine executes each process activity and each connector within the process one after the other and performs the corresponding work step. The activities that are performed during a process execution can be performed by humans or machines. In order for the machines to work, there must be an exchange between the process engine and the software of the machine.

Processes that are executed by both humans and machines are also called human interaction workflows.

process execution

Process execution is when target processes are realized and become actual processes. When processes are executed, process mining helps generate important data for process controlling. Process execution is part of the process management life cycle and takes place after process implementation.

process implementation

Process implementation describes the complete implementation of a company's target processes. In most cases, the target processes are the result of a previous process optimization, but in theory they can also be developed without reference to a previous optimization. As soon as the target process implementation is complete, processes are now executed and considered actual processes. Process implementation is part of the process management life cycle and takes place after process optimization.

process loop

A loop describes the return to a previous activity or step in a process, repeating part of the process path. A process loop often results from a decision. For example, a process may require checking a password and username during login—if one of these two criteria is not correct, the check fails and must be corrected, starting a process loop.

Process mining terms.

process management life cycle

The process management life cycle is a model for the continuous implementation and improvement of processes and business process management in a company. The life cycle consists of the following six phases: process strategy, process documentation, process optimization, process implementation, process execution, and process controlling.

process manager

Process managers are individuals responsible for the concrete processes of a company. Their tasks range from creating a process strategy to process documentation, process optimization, process implementation, and process controlling. Process controlling or process analysis is often carried out by process analysts or in cooperation with them. A process manager thus works on the process during the entire process management life cycle.

process optimization

Process optimization describes the steps taken to improve a process as well as the resulting improvement of a process. During process optimization, the actual processes of a company are analyzed on the basis of their process models and their performance. These analyses help to identify optimization opportunities, which are incorporated into a target process. Process optimization is part of the process management life cycle and takes place after process documentation.

process path

A process path is a specific sequence of events and activities within a process. For example, a process can have several paths that change the process cycle due to decisions and parallelism. If the decision from which the path starts is linked to certain conditions, the outbound paths can have different path probabilities. Each path forms a process variant.

process strategy

The process strategy defines and describes current and future goals of business process management and operational processes. It is closely related to corporate strategy. If the process strategy is changed or if the future process strategy differs from the current one, the processes must be adapted accordingly. Only by adapting the processes to the strategy will ensure the processes correspond to the internal conformance of the company. The development of a process strategy is part of the process management life cycle.

Process mining terms.

process variant

A process variant is a sequence of process activities with a start event and a final event. The total number of converted process variants represents a full process. Each variant differs from the others by at least one activity. Multiple process variants can be mapped in one process model or in separate process models where a single model represents the variants using several process paths. Process mining automatically derives process variants from available data. Any number of cases can run through one variant.

processing time

The processing time is the time required to process a work item. It is the time spent on manufacturing a product or providing a service. Processing time can be assigned either to specific activities or to an entire process.

risk management

Risk management is about identifying, documenting and prioritizing risks or potential problems and developing measures to prevent or counter these risks. The main task in risk management is to prevent risks from becoming problems and to minimize the damage caused by any risk that occurs.

root cause analysis

Root cause analysis aims to find process errors and their causes. A root cause structure is also often identified and analyzed, making it possible to determine the proportion of process errors that have the same cause. . In process mining, root cause analysis can be automated, which saves time.

target process

A target process or target model represents an optimized process that has not yet been implemented or realized. It can also represent a desired ideal state or ideal process. The target process can deviate from the actual process, so in process mining, the comparison of the two is called conformance checking.

time stamp

A time stamp is a basic requirement for a data record that is to be used for a process mining analysis. The time stamp can have different formats, for example “YYYY/MM/DD hh:mm:ss,ms,” which represents the year as four digits, the month and day as two digits, and uses two digits each to represent hours, minutes, seconds, and milliseconds. Time-related process analyses can be carried out on the basis of time stamps (e.g., analyses of throughput times).

Process mining terms.

transport time

The transport time is the time it takes for a work item (e.g., a workpiece or document) to be transferred to another location (electronically or otherwise). This can be the time between dispatch and arrival of an article to the customer. During the transport time, no further processing can usually take place. The cycle time of the process cycle is made up of the transport time, the processing time, the idle time, and the wait time.

wait time

The wait time is the period of time that a work item (e.g., a workpiece or document) is waiting for further processing. There may still be wait time even when the person or machine required for a process is working at full capacity. Furthermore, wait time can occur if the continuation of the process requires the completion of a parallel work step, as no further processing takes place during that time. The cycle time of the process cycle is made up of the wait time, the processing time, the idle time, and the transport time.

The Appian logo is displayed in a bold, white, lowercase sans-serif font. The background is a solid dark blue, featuring a white geometric pattern of lines that intersect to form a large 'X' shape across the page.

appian

For a detailed glossary of Appian software-specific terms, please refer to the [Appian Documentation](#)