



NAGEM

FUTURE

of the companies say that

the current topic of business

process management will continue to gain importance

in the future.

Only those companies that

successfully combine both

disciplines — strong orga-

nizational competence and

controlling process per-

formance — can effectively control and continuously

improve company processes.

Our business world is growing increasingly complex; it's becoming more difficult to stay on top of it all. To ensure sustainable control over this complexity, businesses require well developed processes that are logically structured, easy-tounderstand, and capable of mapping business realities as closely as possible. Modeling these processes and applying them to the real world are critical to reacting to future changes with agility.

TODAY

of the surveyed companies agreed with the statement that business process management currently plays an important or very important role in their own business.

Expertise in the following areas is essential to overcome permanently increasing competitive pressures, arowina complexity, longer value-added chains, and economic volatility: Process integration and information, customer orientation, and quality responsibility.



SUCCESS

of the surveyed companies are of the opinion that the future success of their business will depend on how well they implement process management.

Currently, many companies are focused on a standardized procedure for holistic process documentation and only evaluate key figures sporadically. Even though continuous process improvement based on process indicators still eludes many organizations, almost all companies have already endeavored to take this path.



REVENUE

of those surveyed stated that business process management is a significant factor for their business success, for 13% a very significant factor and the trend is upward.

Numerous surveys reveal not only a clear trend toward the growing importance of business process management, but also the association between targeted BPM implementation and their profit margin of the business.

of those surveyed believe that companies will only be able to keep up with the competition in the coming 10 years if they continually work on their process optimization.

For the majority of companies, business process management has moved away from a one-time project with the goal of process optimization and become significant business task. Because smaller businesses are also interested in sustainable process improvement, this orientation is not a question of company size.

 Your company can use existing information more effectively to meet customer and market requirements and ensure your long-term competitive capacity.

Diverse surveys by renowned market research companies confirm the increasing importance of process management and mirror real-world perceptions about its contribution to company success.



MANAGEMENT

TOP

among those surveyed about the implementation of a professional Business Process Management is support from the highest management levels.

This was followed by the clear definition of responsibilities as well as adjustments to the company structure. All three factors are leadership concerns and emphasize the importance of closely incorporating management to effectively realize BPM.



EMPLOYEE

ONLY when

the majority of the company — across all operative levels — upholds and applies the implemented business process management will it be a success.

Employees will only actively contribute to process management if they see and understand the actual benefits for themselves and the organization as a whole. Companies with uniformly practiced processes are able to quickly and effectively react to customer and market demands thanks to increased efficiency.



place is where the surveyed companies ranked increased transparency as the most prominent, qualitative benefit.

Process run times (42%) and error quotas (40%) were measured the most often. Furthermore, approx. 90% of the measuring companies confirmed an acceleration of their process run times and a reduction in error quotas. Eighty-three percent reported cost savings, 21% were even able to achieve savings of more than 20%.

57%

SOFTWARE

of the organizations who participated in the survey utilize a BPM tool. This underscores that softwarebased applications to implement BPM are met with acceptance.

The BPM tools are used to model business processes (81%); analyze business processes (55%); support governance, risk and compliance aspects (46%); automation (41%); monitoring (38%); and simulation (17%) of business processes.



GOALS

However, the goals pursued with process management extend well beyond cost reductions and transparency improvements. Many companies also want to improve quality [65%] and increase customer satisfaction.

Sources: PricewaterhouseCoopers AG Auditing Firm; The Center for Business Information Technology (ZWI) of the School of Management and Law of the Zürich University of Applied Sciences (ZHAW); BearingPoint GmbH and BPM&O GmbH; A.T. Kearney

STRUCTURING AND AUTOMATING BUSINESS PROCESSES MADE EASY

In times of growing pressure from competitors and progressive digitalization, it's becoming increasingly important that companies in all industries are able to react quickly to change and flexibly structure their processes.

In this context Business Process Management tools are becoming increasingly common to model and manage company processes of various complexity — from approval processes (purchase orders, sales orders, etc.) to integrating new employees and implementing ticket systems.

abas BPM was developed for exactly this purpose. With abas BPM you can graphically map your company-specific business processes in accordance with the established BPMN 2.0 standard, automate these processes, roll them out throughout the entire company, and systematically monitor them. abas BPM consists

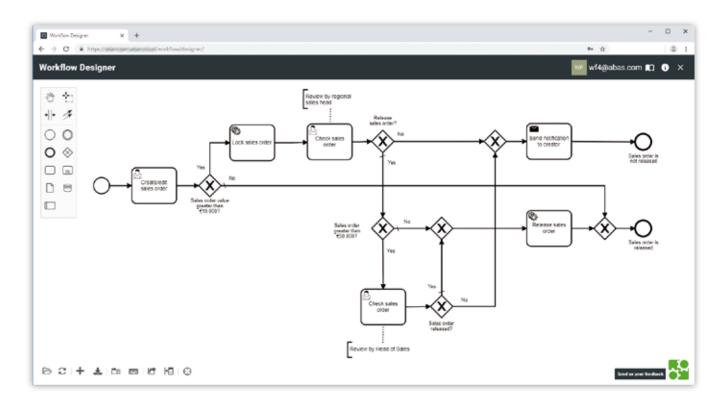
of the following three components: abas BPM Designer, abas BPM User Dashboard and abas BPM Viewer.

WORKFLOW MODELING

The abas BPM Workflow Designer is a graphical editor with which you can model and configure your workflows. This tool is intuitive to operate and provides common process mapping symbols in its toolbar, which can be applied quickly and easily per drag and drop. With procedures, tasks, dependencies, priorities, deadlines, and responsibilities defined and documented you can establish a crossdepartment overview of processes and structures that is both uniform and binding.

The created workflows remain flexible and authorized users, such as the process owner, can adjust them to changing requirements at any time.

After a workflow has been modeled and released and defined trigger conditions for the process start are met, a workflow instance will be started. The Process Engine controls this instance and creates tasks for persons or person groups and automatically triggers system services.

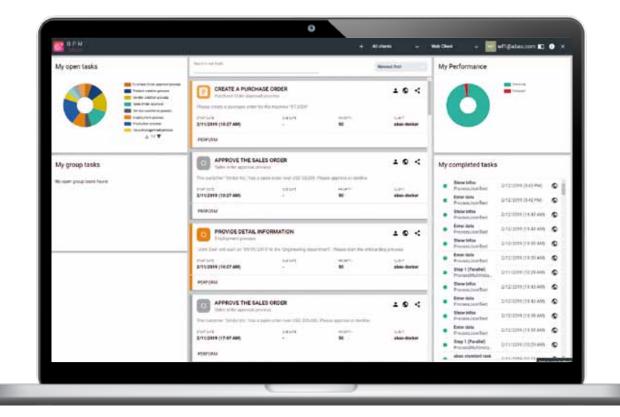


ORGANIZED TASK PROCESSING

The Workflow Task Overview of abas BPM provides each process participant a manageable overview that bundles information relevant for the individual user and prompts them to complete pending work packages.

The dashboard displays outstanding tasks for the specific user and offers them the option to start processing these tasks directly from the overview, after which, for example, the appropriate abas ERP screen will

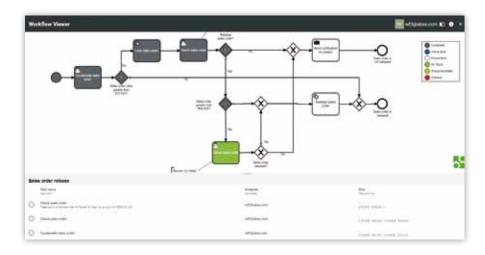
open automatically. In addition, a performance diagram displays the proportional distribution of tasks completed on time or too late by each user.



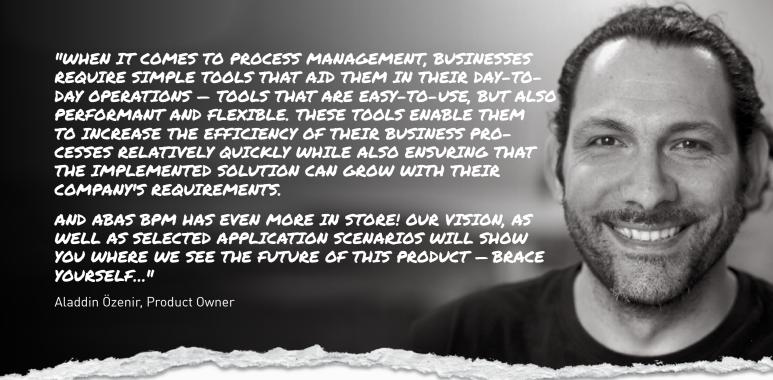
Transparent task overview

IDENTIFY PROCESS PROGRESS

In the abas BPM Workflow Viewer you can identify where a process is currently at with a single look: Based on the procedure defined in the Workflow Designer, completed as well as active process steps are marked and the step that is currently being processed is highlighted. Authorized users (Process Administrators) can manually influence the process flow if necessary.



Transparent workflow progression



THE FUTURE OF ABAS BPM

abas's vision with regard to abas BPM goes well beyond mapping and automating processes. In the future, this product should offer a procedural transverse plane for the entire company, as well as other connected organizations and systems.

Our vision focuses on enabling new concepts for recording, controlling and optimizing business processes with the help of the BPM system in connection with other technologies, services, or ERP components. This includes combining sensor technologies and software in numerous areas to create pragmatic solutions and take companies one step closer to the Industrial Internet of Things. But what does that actually look like?

Events of varying complexity can be generated with the help of sensors, which can then be saved in a database, for example, via web services, for further processing with abas BPM. abas BPM uses these events to create appropriate process instances, provides the relevant information to those responsible (for example, on a smartwatch) through an active ticketing system, and ensures situation-based and economic processing and control of the corresponding workflow.

This approach sees abas as an intelligent enabler for integrated, sensor-based business models in production, logistics, IT administration, etc. — helping businesses achieve lower costs while increasing the output, quality and security of their processes and improving realtime transparency.

POSSIBLE SCENARIOS FOR SENSOR-BASED WORKFLOWS

- Networking machines, plants, or high-precision tools in the area of production with sensors and the ERP and BPM systems, incl. the definition of custom follow-up processes depending on the reported sensor data.
- Monitoring material flows or tracking products in the logistics process can trigger corresponding workflows (for example, initiating correction measures or approval processes) after retrieving location information as well as real-
- time information about transport conditions.
- In the area of maintenance, sensors automatically report repair and maintenance requirements.
 Through the connection to BPM, the people responsible and poss. their representatives can be immediately informed, service orders can be created automatically, and and replacement parts can be ordered, which will significantly accelerate maintenance processes.
- Continuous tracking and event-based order tracking in highly diverse industries in close proximity to production: Item data from objects (for example, assembly dollies, workpieces, or products) serve to record production processes in real time, provide information about current product rates, and analyze and control production processes up to the completion of documentation in the ERP/BPM system.

TECHNICAL REQUIREMENTS

For abas BPM you can choose between an on-premises installation or a hybrid Cloud infrastructure. In the hybrid Cloud, businesses operate and administer part of their IT resources on-premises, while the rest of their IT infrastructure is operated outside of the company, in the Cloud. The Process Engine — which runs the individual workflows and organizes instances in the background — runs on your local server.

With abas BPM's hybrid Cloud approach, data are maintained within your company and simply displayed in real time in the Cloud. This ensures that your sensitive company data remain in house.

Specific requirements must be fulfilled in order to use abas BPM:

ABAS ERP

 abas ERP Versions 2016r4n13, 2017r2n07, 2017r3n03 or 2017r4n00 or higher

SERVER

- Installation of Docker and Docker Compose on the server on which the Process Engine and its dependencies will run
- For the hybrid Cloud approach: Internet connection for communication with the applications in the abas ERP Cloud

ABAS BPM: OPERATING MODELS **HYBRID CLOUD ABAS ERP CLOUD ON-PREMISES** Virtual Private Cloud (VPC) of abas using Amazon Web Services (AWS) QUOTATION SHIPPING CUSTOMER INVOICING PRODUCT WAREHOUSE ACCOUNTING SCHEDULING ERP abas BPM $\stackrel{\triangleright}{\times}$ VENDOR REQUEST PURCHASE ORDER INVOICING **GOODS RECEIPT** abas BPM **ON-PREM** SALES ORDER CUSTOMER QUOTATION SHIPPING INVOICING ERP PRODUCT SCHEDULING WAREHOUSE ACCOUNTING abas BPM 嶌 \bowtie REQUEST GOODS RECEIPT INVOICING VENDOR PURCHASE abas BPM Process Engine

ABAS BPM IN ACTION

ON-BOARDING NEW EMPLOYEES

Structured on-boarding of new employees incl. organization of work materials, integration in the EDV systems (phone number, email account, computer, keys, etc.), training plan, patron assignment, etc.

- Seamless fulfillment of IT-side requirements
- Motivation through systematic procedure
- Eased integration process
- Efficient work methods through process knowledge
- Performance facilitation after a short integration period

BIDDING PROCESS

Creation, editing and evaluation of bidding processes to identify the best vendors: Creation and distribution of the requests, reminder emails, valuation of answers received, provider selection, and conversion of the quotation into a purchase order.

- Systematic identification of the best vendors for the specific requirements of your company
- Reproducible procedure
- Increase in process efficiency through automated reminder emails



–⊙ Management

-O Human Resources

Purchasing

TEMPERATURE MONITORING IN THE SERVER ROOM¹

Continuous monitoring of the temperature and humidity as well as control over fire and water damage in server rooms using measurement systems (for example, temperature sensors).

- Automated determination of variances and disruptions
- Persons responsible alarmed within seconds
- Subsequent processes triggered to protect the IT landscape
- Reduced risk of failure
- Values saved for reviews

¹ Prerequisite for a project of this type is the BPM integra-



PURCHASE REQUISITION

Reporting and management of material/service requirements as part of order processing with subsequent approval procedure if a purchase requisition fulfills certain conditions (for example, total value greater than 10 TUSD).

- High efficiency and transparency in purchasing processes
- Acceleration of the approval process
- Elimination of paper and email linked form processes
- Reduction of "procurement without purchasing knowing"





ORDER PROCESSING MULTISITE

Order process between associated companies (for example, purchase order placed by the subsidiary to its manufacturing parent company): Bilateral approval of the process, purchase order release, and sending of the purchase order via Multisite, which is electronically imported and processed on the corporate side.

- Automated exchange of transaction data for intercompany processes
- Time savings by eliminating manual data entry
- Reduction of error risks
- Increased data consistency
- Communication and processing between clients without system breaks



CREDIT LIMIT REVIEW²

Automatic review of credit standing upon creating a new customer as well as credit limit review when creating sales orders, deliveries, or sales documents with corresponding notifications and follow-up processes for insufficient credit worthiness or exceeded credit limits.

- Reduction of payment and receivables defaults
- Quick overview of the default risk through automatic review
- Reliable risk minimization in business relationships
- Seamless sales processes
- Mapping customer-specific credit rules and adequate control of payment methods and limits



2 Requires connection to a service provider for the credit assessment

Financial accounting
Debtors O
Creditors O

INCOMING INVOICE REVIEW TO PAYMENT APPROVAL

The review of the incoming invoice with regards to the quantities, prices, tax data, accounts, and cost centers can't exceed approx. 5 days so that cash discounts aren't lost.

- More cash discount entries
- Certainty about who has the invoice
- Improved quality of the data for financial accounting
- Transparency, where procurement channels aren't maintained
- Reduced administrative expenditures
- Consideration of all aspects (for example, mandatory specifications) and completeness



CLARIFICATION OF PAYMENT REDUCTIONS

After determining the grounds for reduction, a claim can be processed (poss. including adjusting the payment goals for the remaining amount) or a reminder for the remaining amount can be triggered.

- Transparency for claims and credit notes
- Greater receipts through targeted payment claims for unauthorized payment reductions



CHANGE MANAGEMENT FOR PRODUCT MASTER FILES AND BOMS³

Inter-system workflow (ERP/PDM) for BOM changes (for example, BOM-relevant construction changes) as well as new products or product changes or locks ensure that the persons responsible will be directly informed to trigger the necessary follow-up processes.

- Data consistency through automatic triggering of change management mechanisms
- Product master files and BOMs are synchronized in both systems after changes to keep the data up to date (for example, PDM system of the construction department and ERP)
- Process optimization through the integrated notification management and automated task triggers



³ Prerequisite is the BPM integration to the PDM system

Quality Assurance

Sales





QUALITITY CONTROL IN PURCHASING AND PRODUCTION

Determination of the inspection obligation depending on the process context (product, vendor, machine, operation, date), triggering of the inspection job, forming inspection batches and samples with consideration of the dynamic testing accuracy, recording and automatic valuation of the inspection results, derivation of the usage decision, and triggering necessary measures (post stock receipt, trigger claim).

- Optimization of the inspection expenses through dynamic testing accuracy
- No redundant data retention
- Short communication channels and quick implementation



ADDED VALUE FOR DAILY OPERATIONS

abas BPM helps you optimize your business processes and resources: Possible improvements — such as processes that can be readily parallelized — are made apparent as early as the graphical modeling and can be implemented directly. Furthermore, process designers can transfer steps to the system as services, such as locking a sales order during editing, and therewith automate process steps. Thanks to automa-

tion, unnecessary delays as well as error risks, which often occur due to entries made by hand in manual processing, can be largely avoided. This enables you to ensure smooth and efficient processing.

Another significant benefit of the new tool is increased transparency: The components Workflow Designer, Workflow Viewer and Workflow Task Overview offer a comprehensive overview of the current status of active processes and the disruptive factors affecting these processes. This is a pragmatic aid, particularly for department heads and process owners, to help them identify bottlenecks within a process or team and promptly initiate the necessary control measures.





ABAS ERP. THE BEST ERP SOLUTION FOR MIDMARKET BUSINESSES.

SALES MANAGEMENT + CUSTOMER RELATIONSHIP MANAGEMENT (CRM)



With abas you have control of your sales tasks and can manage your customer relations - always informed and well organized.

FUNCTIONS: sales, purchasing, document management, customer portal, mobile CRM, mobile deliveries

B2B webshop with product catalog, CRM, opportunity and quotation management, sales planning, costing,

SERVICE PROCESSING



Customer service is the key to success: abas service processing helps you separate yourself from the competition by delivering exceptional service quality to your customers.

FUNCTIONS:

Service requests, service planner, on-site service, inhouse repair processing, document management, mobile service

AND DOCUMENT MANAGEMENT HIGH PERFORMANCE LOGISTICS



Do you know that the average employee spends roughly 30% of their time searching for information? Find, don't search, with DMS!

FUNCTIONS: Document archiving, full text search, document search, document flow, management of document workflows

PRODUCTION CONTROL
AND ADVANCED PLANNING



PPC plus a precise, forward-looking advanced planning: The APS system provides analyses, visualizations and simulations for proactive decision making.

FUNCTIONS: Advanced planning (APS), Production, Scheduling (MRP)

PURCHASING



abas actively helps your purchasing department to make decisions that can lead to better conditions, strategic supplier selections, and on-time deliveries.

FUNCTIONS: Bidding processes/Requests management, sales planning, purchasing, vendor portal, document management



PRODUCTION PLANNING

AND CONTROL (PPC)

For modern manufacturers, PPC is the heart of the ERP system: abas ERP helps you optimize your production processes.

FUNCTIONS: Production, work order management, personnel/ work order time record-ing, CAD/PDM integration, mobile PDC

MATERIALS MANAGEMENT



With abas ERP you can efficiently manage your warehouse, know which stocks are on hand, and ensure that all necessary resources are available.

FUNCTIONS: Sales, production, warehouse management, materials management, scheduling, valuation, mobile stocktaking, mobile

FINANCE AND



ACCOUNTING

Regardless of whether you are a midmarket business or an international corporation — the secret to success is how well you have your figures under control.

FUNCTIONS: Preliminary/Final costing, financial Accounting, fixed asset accounting, cost accounting, liquidity planning, controlling

BUSINESS INTELLIGENCE ΔΝΠ ΔΝΔΙ ΥςΙς



Being able to make the right decisions quickly is becoming even more important in increasingly dynamic and global

FUNCTIONS: KPIs, dashboards, reports, pivot table

GROUP ACCOUNTING



Increasing globalization in the midmarket is leading to ever-complexer financial data. With abas group accounting you'll be ready.

FUNCTIONS. Consolidation, group balance sheet, group P&L

warehouse management



Today, not only large corporations but also many midmarket businesses have national and international locations, plants, and subsidiaries.

FUNCTIONS:

Multisite, intercompany planning, master files synchronization

INTELLIGENT DOCUMENTS

EDI AND



Intensely competitive industriés such as the automotive supply industry and distribution are particularly reliant on efficient processes.

FUNCTIONS: Electronic Data Interchange (EDI), shipping planning, container management, Automotive & Supply package, mobile deliveries **BUSINESS PROCESS** MANAGEMENT



abas BPM enables the intuitive creation, automation and monitoring of workflows and therewith contributes to the optimization of your processes.

FUNCTIONS: Workflow modeling and optimization, Task management and PROJECT MANAGEMENT



abas Project Management utilizes full integration with abas ERP to provide a control center for projectoriented businesses.

FUNCTIONS: Project planning, project costing, project cost accounting, project closing, project controlling MOBILE PROCESSES



Mobile applications help you increase efficiency in core business departments by providing users access to essential data anywhere, anytime.

FUNCTIONS: CRM, purchasing, deliveries, warehouse management, stocktaking, PDC. service

