Smart Closing & Reporting

How to stay on top of your financial close process

Part II

Introduction of innovative tools and techniques (client presentation)

EY

Building a better working world

Contents

Smart Closing & Reporting

How to stay on top of your financial close process

“

The future depends on what you do today.

Mahatma Gandhi

How to stay on top of your financial close process?

The increasing speed of change in our globally connected world leads to new expectations from shareholders, regulators and analysts. Forward-thinking companies understand that digital development and reporting obligations are a competitive advantage, however, ...

< 10%

less than

... is the usage of "modern" techniques like process mining and robotic process automation (RPA).

= 35%

equal to

... use a consolidation tool to a very high or high extent, whereas in 22% of all cases, a sole manual (e.g. MS Excel) solution is still in place.

> 40%

more than

... strive for a higher degree of automation in the accounts payable, accounts receivable and general accounting processes.

= 45%

equal to

... still regard the process "preparation of the reporting package" as manual or more manual than automated.

< 50%

less than

... is the degree of automation determined to be "high" or "very high" in the "purchase-to-pay" and "order-to-cash" process.

> 50%

more than

... of the respondents assess the automation in the accounting department as "medium", while for 31% the degree is still "very low" or "low".

= 51%

equal to

... claim their annual report creation to be manual or mostly manual.

> 75%

more than

... do not use automated workflow, reports and KPIs, i.e., manual proceeding still prevails.

The better the processes and data flows are linked together and the more accurate figures are available at any time in accounting and controlling, the greater the value is generated for the company …

Potential for improvement according to the survey participants

Part I provides a summary of the survey.

Part II introduces innovative tools and techniques for automation and standardization of the closing and reporting process and efficiency gains in accounting and reporting as part of the "Smart Closing & Reporting" solution.

> Dream big. Start small.
> But most of all, start.
>
> Simon Sinek

I.
Smart Closing & Reporting

> Let's go invent tomorrow rather than worrying about what happened yesterday.
>
> Steve Jobs

A. Introduction

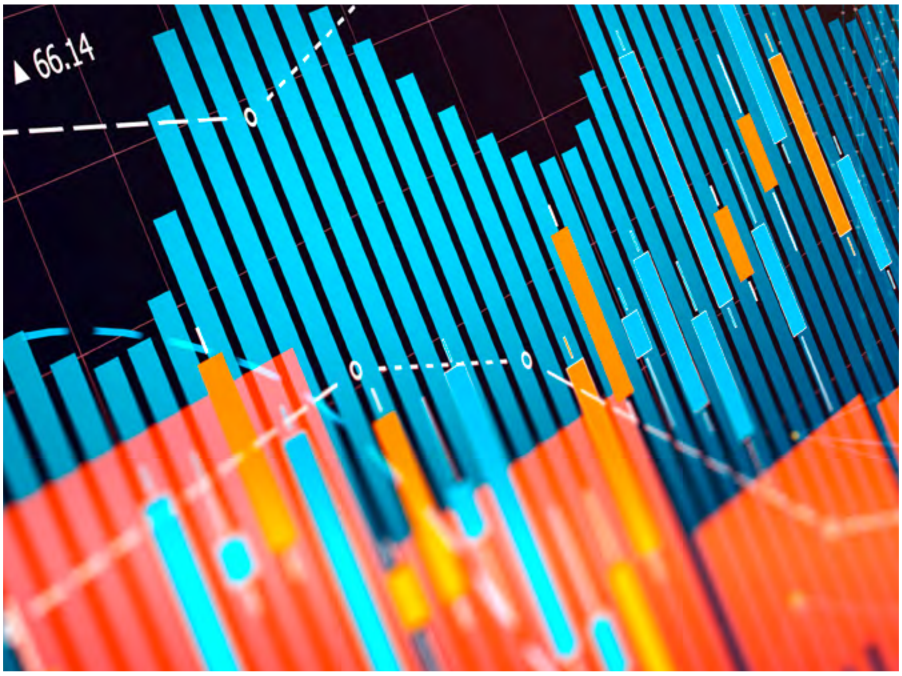
With the solution "Smart Closing & Reporting", EY considers the entire financial process chain and separates it into five main phases. Our approach starts with **transactional processing** in phase one that includes all processes before the actual closing such as PtP, OtC, payroll, fixed asset accounting and much more. This is followed by the monthly, quarterly or annual **closing** in phase two considering the reporting package process and the preparation of single financial statements as well as the preparation of consolidated financial statements in the **consolidation** phase three. In phase four, we consider the external **reporting** (to the capital market) followed by **controlling** including the internal management reporting and forecast procedures in phase five. The focus in this chapter will be placed on the phases transactional processing, closing and reporting. In each of these areas, the legal and regulatory requirements are considered together with the processes, possible technological solutions and organizational aspects in order to achieve the best possible results.

On the following pages we will deep-dive into the standardization of processes, innovative technology around the closing process and efficiency gains in the finance function.

B. Transactional processing: process standardization

In the survey it was determined that overall for no sub-process of the core processes PtP and OtC the degree of automation determined as “high” and “very high” is above 50%. Furthermore, the usage of “modern” techniques like process mining and RPA is below 10% for these processes. Overall, through all industries more than 50% see the degree of automation in the accounting department at a “medium” level, while still 31% assess the level as “very low” or “low”. As a result, more than 40% strive for a higher degree of automation in the accounts payable, accounts receivable and general accounting processes.

In the following we give an overview of methods to determine and assess the current status. In addition, we will focus on the tools for process standardization and automation.



1. Determine the current status

Know yourself
Based on observations made in the course of working as auditors and management consultants, the system landscape in today's businesses can be seen as a mix of all stages of standardization – following a few statements.

- Highly automated processes
- "Standardized" processes with full/partially/none workflow documentation
- Outsourced processes
- Other processes in the deepest depth of the finance function, just known to the people who have implemented the ERP system 20 years ago

But why tackle this challenge? The buzzwords "Talking Digital", "Get Digital" as well as "Finance 4.0" are all over the industry and news. Ignoring these keywords as such, the digitalization in the entities is a major topic. But a high degree of automation requires standardization.

Process analysis will tackle these challenges at their source. It helps to discover the "standardized" processes and simultaneously assess the process maturity. Gaining a common understanding of the status "as is" is the cornerstone to identify areas for improvement regarding further implementation of technological support.

Finance function: Four questions and answers

1
Where I am today?
Assessment of the differences and business consequences of the evaluated processes against other peer groups
... create awareness.

2
Where I want to be tomorrow?
Valuable information enables to kick off the best fitting business strategy and concepts facing the change
... evolve goals.

3
What I need to do?
Knowledge about the possible effort and costs permits the right mix between strategy and goals
... set priorities.

4
How can I have long lasting results?
Sustainable improvements enable to face the required changes coming from the markets
... show potentials.

B. Transactional processing: process standardization

Together we can start the process "Know yourself".
EY has gained valuable insights from our clients and our daily work to create a valuable industry-wide process framework. In this framework, we have access to reference processes for the major industries. This standardized process (blueprint) supports the evaluation of the current and future state.

EY's knowledge is pooled in the EY Process Depot:

The EY-wide process framework will have the following benefits:

- Leveraging pre-built process models accelerating the design effort
- Measuring performance and mitigating risks by using metrics, risks and controls
- Identifying areas for improvement by assessing the current state of processes with the help of maturity models

This leverage is applied for various sector frameworks and process depths. The tool can support multiple levels of the process design.

EY Process Depot supports on all process levels – in depth and breadth

Depth + → Breadth +

Level 1	Operating model/value chain	Organization structure	Application systems view		
Level 2	Business processes	Process objectives	Risks & controls	Key performance indicators	Maturity assessment
Level 3	Sub-processes	Process objectives	Risks & controls	Key performance indicators	
Level 4	Logical sequence of activities as flowcharts				

A sector model consists of:

- Process framework
- Risks and controls
- KPIs
- Maturity models
- IT systems environments

B. Transactional processing: process standardization

2. Maturity assessment, benchmarking and impact assessment

"As-Is" vs. "To-Be"
To help assessing and determining the degree of process maturity in the finance function, a "maturity assessment" is required as a first step. This assessment evaluates the 'As-Is' state.

Different factors and process steps of the finance function are evaluated by assigning one of five descriptions to them (from basic to leading). A final assessment is then derived. As part of the maturity assessment certain KPIs are determined for the later benchmarking.

The knowledge gained is the basis for a targeted benchmark and the correct peer groups (factors to consider are countries, company size, industry, etc.) can be selected. In general, benchmarking is comparing one entity's business processes and performance metrics to another. This can include comparisons of cost, efficiency, cycle time and employees needed to perform a process. The comparisons are made by calculating specific performance metrics such as 'cost per process', 'time to perform process', or 'people needed to perform a process'.

This is step two and is accompanied by the tool "EY Benchmark". The client gains valuable insight into comparing its current situation with the situation of best in class, for example. This comparison enables the discussion about the future state, or "To-Be" status.

Step three and end of evaluation is a comprehensive impact assessment. EY supports the client by interpreting the results under consideration of their needs and goals. Considering all of this – next steps were defined to reach the desired "To-Be" status.

"Learning from the leading with EY Benchmarking" – what is the process in detail?
It is proven that process efficiency and time expenditures are major challenges within the closing and reporting processes. Yet, like this survey intends to, the awareness for these topics must be raised. Dissatisfaction is clearly observed, but only if the current issues are measured, can they be addressed effectively. Ranking individual business processes and performance measures among industry leading practices help the client to better understand which areas to work on. Especially in the financial closing process, are metrics important to indicate risk at an early stage. With this benchmarking approach, EY helps to identify ways to work smarter, faster, leaner and with greater confidence.

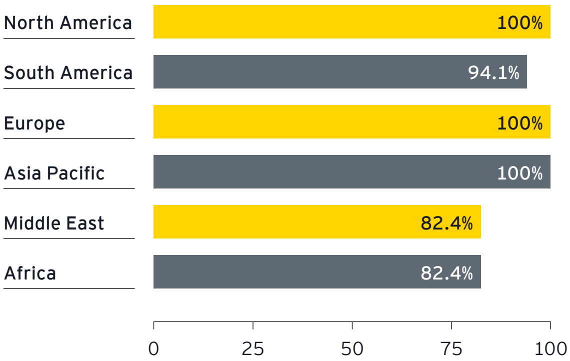
Therefore, EY uses a database of metrics by the American Productivity and Quality Center (APQC), the leading provider of independent, high-quality benchmarking data, to compare the client's data based on similar industry, revenue and geography thoroughly presenting a relevant peer group. For this, EY's global network of companies of all sizes and industries is beneficial and enables fact-based decision making supported by a massive database.

Peer group comparison

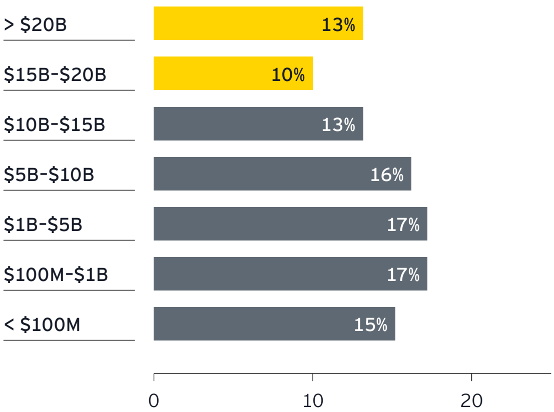
Robust peer comparison

- Selecting a relevant peer group for comparison is critical
- EY's robust data repository allows our clients to compare data from one or more peer groups
- We can compare our clients to peer organizations within similar revenue ranges, FTE ranges or geographical areas
- In addition, we can also compare our clients to peers within similar industries or cross industry
- Comparing finance organizations to multiple peer groups can yield improved results

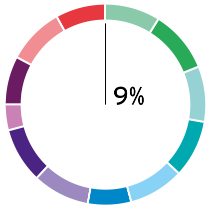
By geography



By revenue

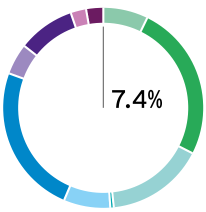


By industries



- 9% Automotive
- 10% CPG
- 9% Electronics
- 9% Financial Services
- 9% Industrial Products
- 7% Media & Entertainment
- 9% Oil & Gas
- 9% Pharmaceutical
- 4% Retail
- 8% Telecom
- 9% Utility
- 8% Others

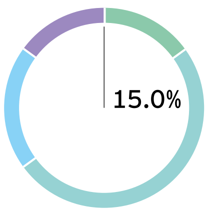
By FTE allocation



Finance

n=53 FTEs

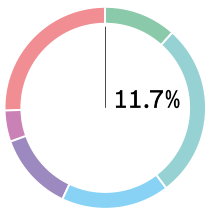
- 7.4% Perform planning and management accounting
- 24.5% Perform revenue accounting
- 15.9% Perform general accounting and reporting
- 0.7% Manage fixed assets
- 7.6% Process payroll
- 24.5% Process accounts payable and expense reimbursements
- 4.9% Manage treasury operation
- 9.2% Manage internal control
- 2.7% Manage taxes
- 2.6% Manage international funds



Procurement

n=8 FTEs

- 15.0% Develop sourcing strategies
- 50.0% Select suppliers and develop/maintain contracts
- 20.0% Order materials and services
- 15.0% Appraise and develop suppliers



HR

n=30.8 FTEs

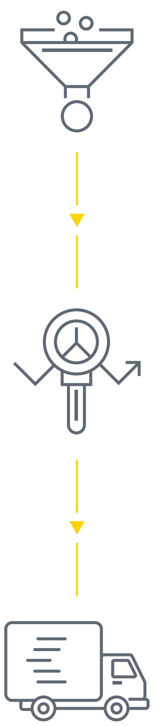
- 11.7% Develop & manage HR planning, policies and strategies
- 28.1% Recruit, source and select employees
- 17.3% Develop and counsel employees
- 12.5% Reward and retain employees
- 4.9% Redeploy and retire employees
- 25.5% Manage employees information

B. Transactional processing: process standardization

Applying an individual approach, EY is able to deliver actionable insights. The initiation is essential for all further steps through determining the benchmarking scope, selecting relevant KPIs and developing a plan of action.

During an iterative process, data is collected and primarily considered in terms of its quality and clarity. To enable gap and opportunity analyses, the collected data undergoes a statistical validation. The data is refined further by the client and EY. The selection of the peer group is a central step, since it contributes to the validity of the final presentation and the gaps and opportunities that are identified and shared with the client as part of the final report. The final report is the overall client deliverable in which the benchmarking insights as well as any maturity assessment or other analysis are provided. In a detailed review process, EY supports its clients in interpreting the findings and discusses opportunities and next steps.

EY Benchmarking Approach



Phase 1: Initiate & Collect

1. Determining benchmarking scope
2. Select relevant KPIs
3. Developing working plan
4. Completing survey by EY and the client
5. Collecting of relevant data

Phase 2: Analyze

1. EY Benchmarking team performs validation of client client data
2. Review submitted data and validation of results with client and update if necessary
3. Review client results and select peer group(s)

Phase 3: Deliver

1. Develop key messages for benchmarking analysis report
2. Write report
3. Review report with client and discuss next steps
4. Initiate discussion with client about resulting opportunities

3. Easy process assessment

As our results show, companies strive for standardization and integration in the closing process. Easy process assessment (EPA) is a fast analysis of business processes for quick insights and evaluation of critical processes and closes the gap between traditional business process management and process mining.

It is a technology designed to show system usage in multiple dimensions and views, to analyze process conformance and to enable easy understanding of the business process. Of fundamental importance for the analysis are the SAP S/4 HANA standard processes.

EPA closing the gap between BPM and PMS

Business process management (BPM)
(Re)design and management of business processes:
- Interview-based feedback on process execution
- Use of BPM tools to design, manage and support execution of business processes
- Only sample walkthroughs in the system

Easy process assessment (EPA)
Fast analysis of business processes for quick insights and evaluation of critical processes:
- Analysis of all SAP HANA standard processes
- Requires only one report, which can be extracted from the SAP systems easily and does not need any further installations
- Identifies potentials for improvement, benchmark against industry peers and visualize results in a dynamic business intelligence report

EY Process Mining Solutions (EYPMS) (see next chapter)
In-depth analysis of system-based business processes:
- Achieves full transparency of business processes by analyzing log data of ERP-Systems
- Visualization of results in Power BI, including the process flow, KPIs, etc.
- Evaluate areas for optimization within the identified process and for example analyze procedural bottlenecks, fraud and compliance violations or the degree of automation

B. Transactional processing: process standardization

Easy process assessment addresses the pain points of multiple stakeholders internally and externally.

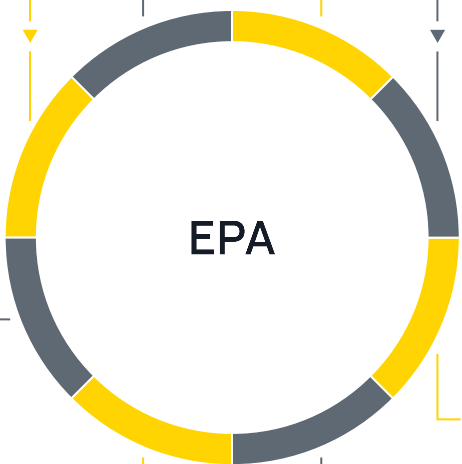
Pain points addressed by EPA

CFO and finance departments
- High-level process evaluation for checking customization, user involvement, efficiency and process conformance
- Assess organizational bottlenecks
- Evaluate performance against industry peers and best in class companies

Process owner
- Achieve an end-to-end understanding of business processes based on real system data
- Benchmarking – internally and externally
- Evaluate procedural weaknesses and user intensive processes

External audit incl. IT audit
- Evaluate processes where weaknesses have been indicated and adjust audit strategy accordingly
- Check of compliance violations (e.g. missing approvals)
- Assess usage of critical transaction codes

CIO and CTO
- Evaluate where additional systems and new technologies (such as Machine Learning) might optimize your business
- Full-transparency of all SAP systems (incl. embedded partner systems)
- Conformance check against SAP standard



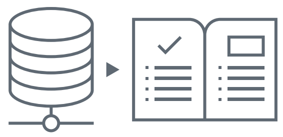
Global business services
- Benchmark processes across multiple systems and against industry peers
- Evaluation of procedural bottlenecks leading to inefficient processes
- Improve quality of provided services by following standardized processes

Internal audit and compliance
- Check of violations against internal controls by for example checking deviations between created and approved documents
- Monitoring of controls over time

(IT or ERP) Consultants
- Obtain transparency over system-landscape and usage intensity
- Analysis of SAP module usage over time
- Continuous monitoring and prioritization of projects for improving processes
- Identification of customized transactions

CDO and operations experts
- Obtain understanding of processes and identify opportunities for overall digital transformation in the company
- Evaluation of automation potentials through artificial intelligence/robotic process automation

Implementation approach: three easy steps (EPA)



Step 1: Data extraction

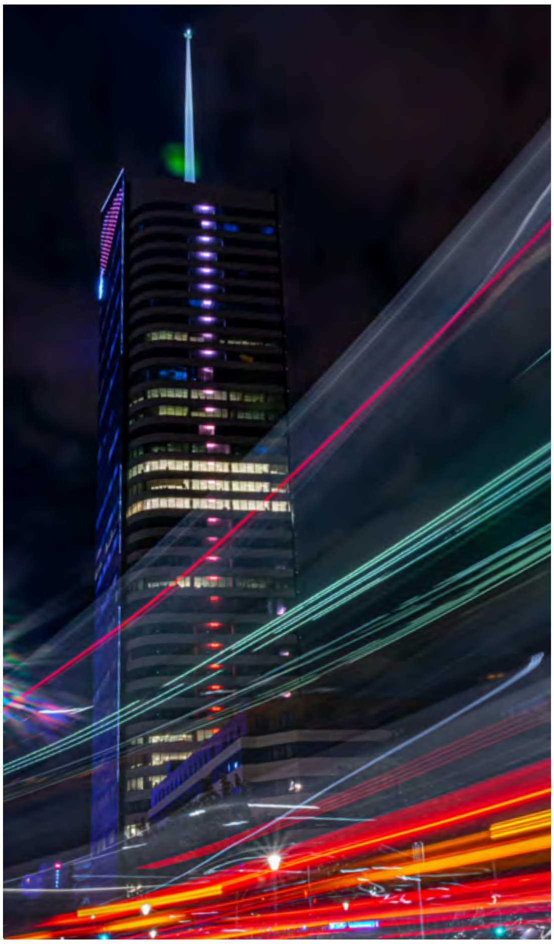
A standard SAP report is extracted by the client and handed over to our EY teams

Step 2: Data transfer

This report is either uploaded to a webpage with a connected database for calculation or sent directly to EY.

Step 3: Visualization

The output will be provided to EY teams as a Power BI dashboard via data transfer.



In addition to the ease of implementation, the application of EPA is beneficial in one other respect:

EPA provides business insights within a few short minutes and easy usage with individual filtering and drilldowns in Power BI. By showing the coverage of and deviations from the 'SAP-standard', critical process flows which are relevant for further in-depth analyses are identified effectively. With this high-level process discovery and the pre-selection of processes, EPA serves as a scoping function for process mining (see next chapter).

Further, process standardization and transparency are crucial prerequisites for automation purposes, which in turn are key to increasing efficiency and reduce costs.

B. Transactional processing: process standardization

Knowing where a client is positioned among its competitors is often valuable information. With the aid of an integrated benchmarking capability, clients can easily compare their process conformance to industry peers, as well as to company entities.

Key features of EPA

4. Process mining

Shine light on the processes
Process mining enables in-depth analyses and easily evaluating the 'As-Is' status of a previously selected process. It is a state-of-the-art technique designed to reconstruct and evaluate IT-integrated processes based on generated data.

By fulfilling their daily tasks, employees generate information on how core activities are performed. By leaving digital footprints, a business core activities are recorded within the IT systems. The 'As-Is' business process is reconstructed by using raw data and visualized in a business intelligence solution. Process mining allows users to analyze processes from an end-to-end perspective, including individual process KPIs.

The process mining workflow is divided into four steps:

- Identification of the source systems and the event data location
- Extraction and transformation of log data to create suitable data sets
- Data transformation is processed in the process mining tool
- The process mining tool creates visualizations and supports further analysis (see below).

What can be achieved by the use of process mining?

- Process transparency – transparency of all process variants within a specified time frame to identify the number of variants not following the planned process steps
- Productivity – measurement of activity-based cycle times to identify possible bottlenecks
- Cost reductions – indication of cost saving potentials, e.g. by comparing process costs (e.g., cycle times, total costs of invoice) with external data
- Process compliance – process mining can provide measures and KPIs related to internal controls as essential logs are analyzed
- Efficiency and speed – identification of the fastest process paths and reworking each per process step
- Continuous improvement – process mining enables the monitoring and comparison of process models and controls in aggregate over time – e.g., to reduce risks related to internal controls or to detect fraud within the underlying process.

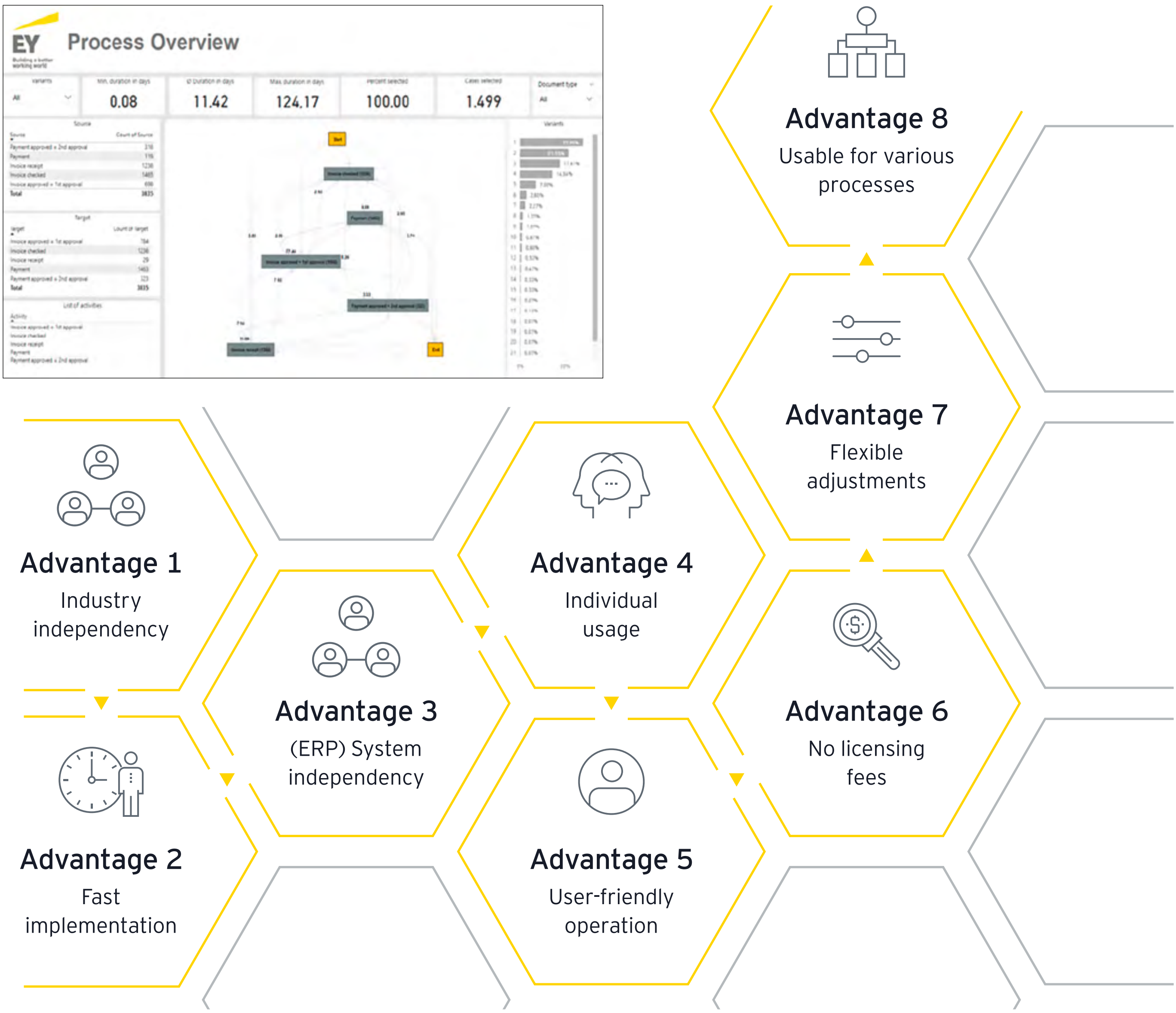
Using the EY Process Mining Solution to achieve the aforementioned objectives is particularly rewarding. Despite the tremendous benefits, companies still fear high costs and thus hesitate to implement process mining. However, the EY Process Mining Solution does not include any licensing fees. Easily implemented, the tool enables industry and ERP-independent analyses and supports the user through an intuitive operation.

B. Transactional processing: process standardization

KPIs and fraud indicators are clearly visualized and allow for a fast and fact-based analysis. This leads to the acquisition of profound knowledge on various selected processes, which is ground-breaking for future improvements in the context of process automation.

After the tool implementation, EY supports its clients to achieve continuous improvement and create sustainable processes. Client trainings or automation applications can serve as enhancements to the actual implementation.

Advantages of the EY Process Mining Solution



C. Innovative finance technology surrounding the closing & consolidation process

45% of the participants of the survey still regarded the process of “preparation of the reporting package” as manual or more manual than automated. In terms of automated workflow, reports and KPIs, manual proceeding still prevails (with more than 75%). A consolidation tool is only used by 35% of the companies to a very high or high extent, whereas in 22% of all cases a pure manual (e.g. MS Excel) solution is still in place.

The following provides an overview of innovative finance technology, e.g. usage of a closing calendar and automated financial closing solutions.

1. Closing calendar

Getting a real-time perspective on the status of the closing process

In order to fully benefit from the advantages of digitization and to optimize expenses and utilization, it is not only necessary to integrate platforms and solutions into the closing process, but also to maintain a holistic view of it. It is of particular importance to effectively orchestrate the workflow of upstream and downstream processes.

During the closing process, various financial tasks are performed and reports are generated which are generally required for the presentation of the current business situation. These financial reports are prepared monthly, quarterly, and/or annually, and allow financial accountants a specified number of days to perform their assigned closing activities. The specification of time frames is important since dependencies exist within the department and work assignments – e.g. fixed assets cannot be closed without a depreciation run and assets under construction will need to be capitalized prior to the depreciation run upfront.

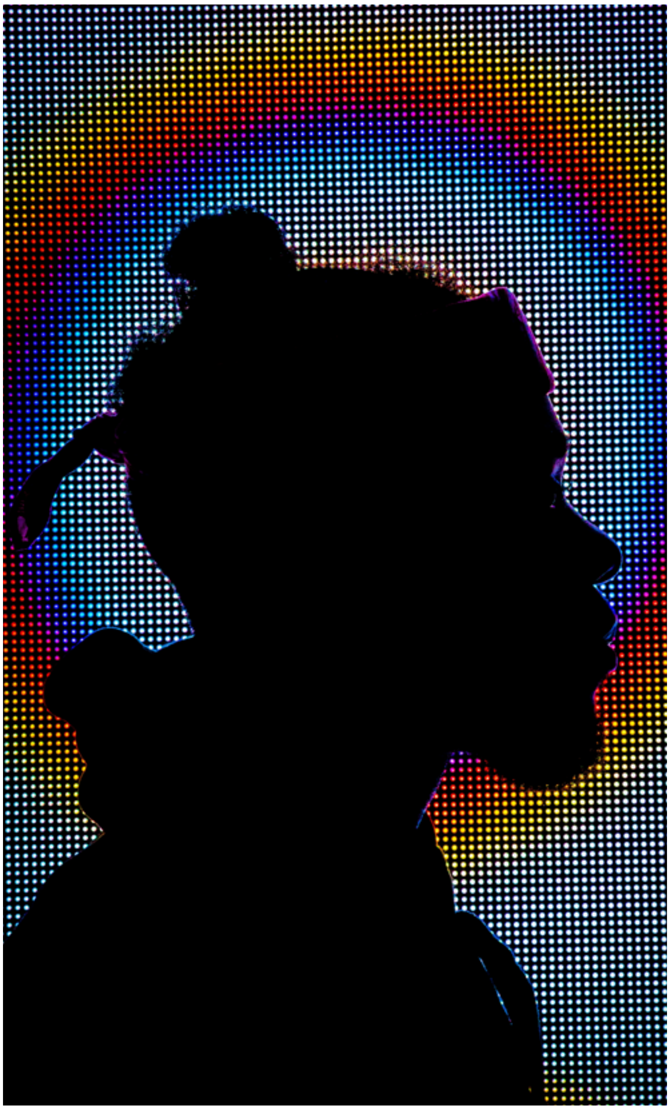
To structure these activities, defining dependencies and responsibilities and tracking progress during the closing process, closing calendars or similar ways to track the status of the financial statement process need to be in place. It is essential that the documentation is in place to enable the company to prepare the financial statements as quickly as possible. This survey showed that progress status is tracked and transmitted mainly manually, which causes major delays in the process and precious time for value-adding tasks is lost.

Many companies use Microsoft Excel spreadsheets to track their activities and then verify their performance manually. Since people often work simultaneously in different locations in one file or exchange it via email, there are often conflicts or duplications. In principle, this approach is prone to errors and the lack of real-time capability and therefore a lack of transparency at the corporate level is a major disadvantage. Management and accounting cannot identify the current status of closing activities across platforms, which means that further work can only be started with a time delay (or needs to be redone) and valuable time is lost in the closing process.

C. Innovative finance technology surrounding the closing & consolidation process

There are various solutions to solve the described problems and support the companies in orchestrating the closing process. Several providers have identified these challenges and developed effective solutions. A distinction is made between ERP-independent and ERP-based solutions.

ERP-independent solutions are comprehensive platforms that are operated (globally) by the responsible employees. In this case, a closing calendar can be used while working in a tool such as a financial closing solution. With these cloud-based platforms, tasks can be created, responsibilities assigned, and progress recorded in real time. This enables central storage and recording and transparency across different ERPs and systems, which is a significant improvement as most companies have multiple ERPs and additional tools such as MS Excel or other (semi)integrated solutions in place.



ERP-based solutions are operated directly in the interface of the ERP system, which results in other functionalities. The connection to the system ensures a smooth and correct flow of activities. Direct links to the corresponding screen in the system can be established and direct automations can be stored. Dynamic workflows are created based on the information from the closing calendar, which is used to run the process with a minimum of human support. In addition, intelligent controls are stored to ensure the accuracy of the content based on stored business rules before automatically processing to the next step. The goal is to develop comprehensive business rules and orchestrate task flows so that the management and accounting have a clear and real-time perspective on the status of the closing process. However, ERP-based solutions are limited to the ERP system they are applied to and cannot be used in a cross-system manner. As a result, a combination of ERP based solutions and non-ERP based solutions often provides the highest benefit for organizations.

Our cross-industry experience helps EY to build sector specific closing calendars that consider leading practices and also helps to identify suitable solutions which enable clients to continuously monitor — and automate when possible/desired — relevant calendars.

Our focus is typically placed on the "orchestration" of the various required tasks and the creation of transparency, which also helps to identify and overcome existing bottlenecks in the closing process.

2. Financial closing solutions

Automating the closing process
Integrated financial closing solutions (FCS) offer reliable software for automating financial closing processes. FCS are comprehensive finance controls and automation platforms on which different data from various systems can be processed. More precisely, these are ERP data, subledgers (as part of the ERP or independent), finance and accounting databases, transactional data or bank statements. The data are pooled in a consistent user interface, as a result of which the user is not required to switch among multiple systems. There are different opportunities for correlating data such as using subledgers and bank information to perform automated reconciliations. Using the ERP general ledger information e.g., enables automated variance analyses.

This subsequently leads to agile accounting in which soft close and hard close concerns, a maximum level of automation, consistent processes and global visibility constitute critical factors for stakeholders.

Based on the weaknesses in reconciliation processes observed in this survey, the advantages of an FCS implementation guarantees tremendous optimization potential. The cloud-based solutions (e.g. BlackLine) offer the possibility to process key accounting processes such as reconciliations, task assignments, journal entries and analyses on a centralized platform, even in very heterogeneous system environments. This processing replaces the complex and error-prone work in different spreadsheets or systems on different servers and enables the finance departments to build up extensive transparency of the closing process and trust in real-time data. Supporting the entire closing process across the company also enables the audit trail to be tracked without interruption.

With the introduction of these centralized platforms, companies benefit from five factors in particular: automated workflow, data integrity, increased governance, a centralized and single source of truth and a value-added business partner.

Five simple wins of the financial closing solution

1

Automated workflow

- Enhanced efficiency of matching processes using user-defined roles
- Significantly quicker and more streamlined uploads of supporting documentation
- Automization of journal entries
- Reallocation of man hours to analysis

Auto certification of accounts by **20%–70%**

2

Data integrity

- Significant reduction in account reconciliation and journal entry errors
- Prevention of large unidentified differences
- Data is consistently more reliable

Reduction in manual effort by **20%–55%**

3

Increased governance

- Consistent compliance with corporate policies
- Increased monitoring of activities and timeline through email reminders, etc.
- Documented ownership

High risk reduction

4

Centralized and single source of truth

- JEs are calculated and posted in a central location
- Standard and automated process that is consistent across all JE's and account recs
- Supporting documentation and tasks are all maintained centrally

Close time improvement **2–7 days**

5

Value-added business partner

- Enables accountants to proactively partner with the business
  - Apply their analytical abilities
  - Increase their value to consistently deliver trusted financial results

C. Innovative finance technology surrounding the closing & consolidation process

FCS offers an integrated solution as a comprehensive platform and thus the optimal starting point for exploiting digitization potentials. For topics which are implemented individually, or which are to be supplemented to a minor extent, the use of RPA as an individual and special solution is a potential supporting solution.

RPA provides a fast and effective way to automate processes – that were probably selected for outsourcing a few years ago – through software that benefits the closing process. Especially monotonous, error-prone, rule-based processes are suitable for RPA. Objectives that can be achieved range from a reduction of the average processing time to reduced downtimes and a reduction of processing costs. Employees also benefit from such a change in operational procedures as they are relieved of monotonous, repetitive tasks and manage to save time for value-adding and analytical activities. Especially in the closing process there are suitable work steps for an application of RPA such as bank, intercompany or account reconciliations, accounts payable payment processing or accounts receivable cash application. With respect to the degree of automation, quality aspects and time expenditure, major dissatisfaction was observed especially in these processes.

Once RPA has been configured/implemented for the first time, it is able to work like a human employee, albeit with the advantage of avoiding human errors. However, digitization with RPA does not offer a holistic, fully integrated solution but rather a partial automation of process steps. This is where closing platforms provide a significantly higher impact on the automation.

To extend the functionalities of existing solutions, more and more vendors are offering the integration of Artificial Intelligence (AI). This integration results in the systems learning independently and reacting to changes. This, in particular, leads to advantages in journal entry booking and thus in transactional processing. The survey showed that both PtP and OtC processes are still rarely automated. Often companies hesitate to integrate RPA because of their unique workflows. AI gains an understanding and develops booking proposals – it acts independently and provides the possibility for further areas of application.

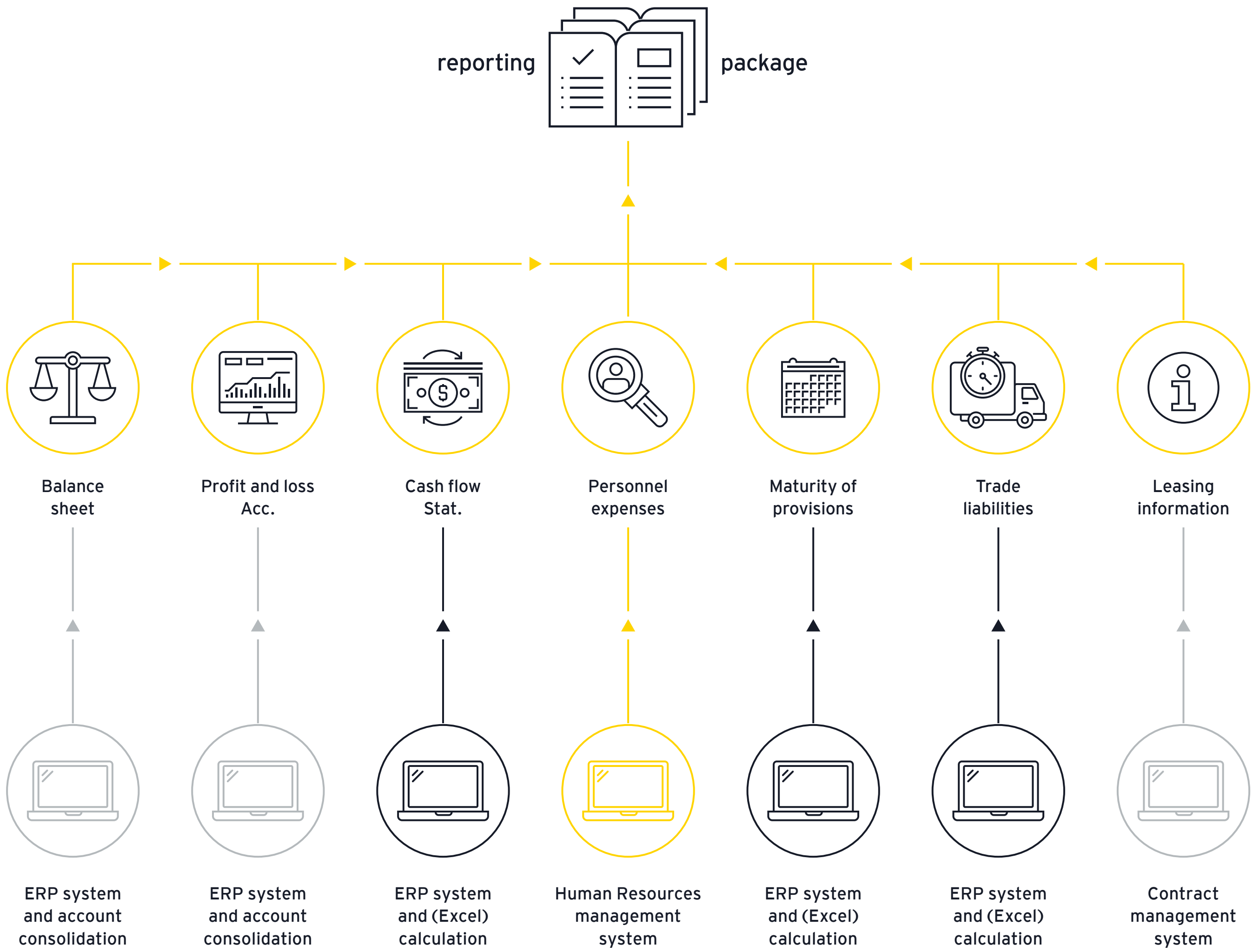
EY can help clients to specify the required functions and also to identify suitable solutions and support throughout the project – from the business blueprint up to implementation and sustainability in all relevant aspects, such as accounting topics, organizational considerations and possible IT questions concerning integration into the existing environment and the configuration of these solutions.

3. Automation of reporting package

Reduction of accounting complexity through automated reporting package creation
Financial reporting packages are prepared by all subsidiaries and reported to the holding company. They contain the separate balance sheets and income statements as well as other supporting documentation that provides an overview of the economic performance of the subsidiaries. The scope of documentation can be different for each group.

Organizations rely on standardized forms of the reporting packages to ensure consistency whereas, the design and the way in which they are transmitted vary from group to group. The applied accounting standard defines the level of detail as well as the structure of the group reporting. Furthermore, the required information is from different sources and systems, e.g. the ERP systems or Excel calculations.

The different information sources of the reporting package (Example)



C. Innovative finance technology surrounding the closing & consolidation process

Aside from the prescription of the standardized form for all parts of the organization, it is also crucial to observe how the form is completed. Differences can occur from trivial valuation topics, e.g. Generally Accepted Accounting Principles (GAAP) conversions. These circumstances lead to considerable complexity in the individual groups of the organization. A different method of account mapping and the frequent manual execution enhances the complexity and effort.

The relevance of this topic is obvious, as this survey revealed significant expenditures of time during the preparation of the companies' separate and consolidated financial statements. To reduce complexity and help organizations to increase accuracy and to save time and costs, the reporting package creation process can be automated in a four-step approach. Beginning with an intensive phase of understanding, the current reporting package, the needed data, and the used systems, EY lays the foundation to ensure the usage of the appropriate procedure. After ascertaining the pain points of the client, a project plan is defined, and the data needed is extracted from the different systems. Therefore, different possibilities are offered like manual extraction, automated extraction via RPA or automated extraction with a software to export data automatically from the ERP system. In accordance with the received data, a master file is developed by EY which the employees or a robot can execute and in which an automated completion of the reporting package is started. Afterward, a training and workshop series is offered to train the employees in handling the master file and additional implemented automated solutions. This individual EY solution distinguishes itself by quick implementation, fast improvements and in that it does not require programmed interfaces and leads to a fast payback as well as higher accuracy.

4. KPI dashboard

Intuitive real-time measures to support decision-making
In many areas of an organization, it is a standard procedure to measure or determine the progress or degree of fulfilment of important objectives or critical success factors using KPIs. These KPIs are commonly used to support decision-making processes by the usage of relevant data sources. To implement a reliable decision-making process some requirements are needed:

- Real-time insights to make end-to-end decisions with more speed, ease and accuracy.
- One single platform capable of processing all data sources for improved data quality.
- Full transparency between KPIs at every organizational layer to improve collaboration between line of business by eliminating separate analytics tools, planning products and spreadsheets.
- Visualizations that allow to analyze, plan and simulate in only a few clicks.

The advantage of implementing KPIs in accounting is the ability to react quickly to deviations and undesirable developments. The target parameters of time, quality and costs, which are relevant for the preparation of financial statements, can be measured easily and simply with concrete key figures. A prerequisite for this is that the defined KPIs are determined quickly and from actual measured values, so that errors can be eliminated as quickly as possible.

To address this, EY develops the individual EY KPI dashboard with integrated interfaces or automated data imports to ensure real-time data analytics and KPI calculation. The KPI dashboard differs from conventional KPI methods especially in its real-time data representation and visualization as well as in its usage of actual data from different sources. EY develops a centralized location where all data from different data sources are stored – called an integration layer. This component combines the static data like product types and the real-time data like new employment figures in a cross-source platform.

By an interface the data is imported on the platform or, if there is no interface provided for the relevant data source, RPA solutions can pave the way to an automated data import. With the knowledge of the in-depth client profiles, behavioral traits and actions, EY is able to develop the dashboard based on business rules and application codes according to the client's needs. The dashboard provides visualizations of the relevant measures whereby the client is able to indicate risks at an early stage and react to them. To provide the client with the best of class, EY places a focus on the user experience of the client by designing the dashboard in a manner that meets the needs of the client. This is a crucial part of driving adoption and maintaining a high utilization for dashboards. An intuitive handling of the dashboard is critical to success as well as quick access to timely insights and prioritized and rationalized data instead of an information overload. The dashboard enables the client to analyze the data and gain analytical insights which are transformed into customized reports and intuitive visuals for management consumption.

Technologies utilized are e.g. Microsoft Power BI to visualize the data in an intuitive dashboard. This ensures a high data quality for the real-time reporting as well as the opportunity to report to different audiences for supporting decision making.

D. Efficiency gains in accounting & reporting

51% of the respondents claim their annual report creation to be manual or mostly manual. Although most participants are satisfied with the extent of the annual report, for 19% there is still an information overload and 29% are not sure.

New European requirements like ESEF have shown that there has been an increase in the information and time required to prepare external financial reporting.

In the following we will introduce different methods to achieve efficiency gains in the accounting and reporting, e.g. the application of hard-close procedures, methods to streamline the external reporting and the usage of disclosure management tools to automize the disclosures and to enable the companies to fulfill the ESEF requirements.

1. Hard-close procedures

What does "hard-close" mean?
Besides the optimization of processes and the use of closing tools, applying closing tasks earlier and/or including the hard-close methodology in the closing process are further opportunities to optimize the year-end closing. The application of the hard-close methodology is based on two core elements:

- Systematic performance of tasks earlier (preparation of the financial statements)
- Usage of stable and valid estimation procedures

Overall, a hard-close can be understood as the closing of the balance sheet and the income statement at an earlier date (e.g. 30 November) showing the figures as of year-end (e.g. 31 December). The figures arising or changing between the actual closing date and year-end date are determined by forward projection or are based on a qualified estimate.

Even if stable and valid estimation procedures are not in place, the systematic performance of tasks earlier is a possibility to streamline the year-end close procedures. This step can also be performed on a standalone basis.

Performing tasks earlier and types of hard-close procedures
Performing tasks for year-end closing purposes at an earlier date can be done for all accounts and/or only for selected accounts. Besides saving time at year-end, it is also advantageous to consider positions with prior issues at an earlier time to be well prepared for year-end purposes.

Hard-close procedures allow for a "full hard-close" (i.e. closure of all balance sheet and income statement positions at an earlier date (e.g. 30 November) or a "partial hard-close" (i.e. closure of certain balance sheet and income statement positions that are suitable for hard-close at an earlier date (e.g. 30 November).

The determination of tasks to be performed earlier and the type of hard-close to be conducted depends on the company's individual processes and procedures – especially for the required estimates – and the availability of resources.

Timing for performing tasks earlier and/or hard-close procedures
Temporarily bringing forward year-end closing tasks to an earlier date can be done throughout the year – depending on the flexibility of internal resources.

However, to fully benefit from a streamlined year-end closing, the capability to audit the early closed positions at interim date should be considered. Benefits of performing substantive audit procedures at an interim date include:

- Earlier identification of significant accounting and auditing issues and therefore more time to resolve them
- Reduced work during year-end closing
- Management of tight reporting deadlines

D. Efficiency gains in accounting & reporting

When designing substantive audit procedures performed at an interim date, the auditor generally considers the control environment and the risk included in the balance sheet or income statement. As a result, the timing of interim procedures depends on the overall risk assessment:

Control environment	Rely on controls		Does not rely on controls	
Risk exposure	lower	higher	lower	higher
Example timing	**Earlier in the reporting period** (up to six months before the balance sheet date)	**During the later portion of the reporting period** (up to three months before the balance sheet date)	**At or near the period end** (up to one month before the balance sheet date)	

When interim substantive audit procedures are designed by the auditor, "roll-forward procedures" also have to be designed, including the preparation and availability of supporting information. They provide a reasonable basis for extending the audit conclusions at the date of interim procedures to the balance sheet date. Nevertheless, the longer the roll-forward period the higher the risk that these procedures may fail to identify a material misstatement. Therefore, more extensive roll-forward procedures are performed to ensure the identification of occurred material misstatements.

For some accounts, transactions during the audit period accumulate and remain in the account balance at the balance sheet date. These accounts are typically income statement accounts, such as revenue or expenses. However, some balance sheet accounts, such as property, plant and equipment have similar characteristics.

For these accounts, substantive audit procedures can be designed before the balance sheet date regardless of the risk assessment since it is possible to obtain evidence throughout the audit period. This reduces the substantive procedures to be performed at the balance sheet date to cover the remaining portion of the audit period. As a result, many closing tasks can be performed at an earlier date.

For hard-close procedures it should be considered that stable and valid estimation procedures have to be in place to determine the values for year-end. Generally speaking, the earlier in the period the hard-close procedures are performed the more difficult it is to determine the values as of year-end.

How can EY support introducing a hard-close concept?
In close collaboration with the organization, EY supports the process of introducing a hard-close. To fully meet the client's requirements, the existing close concept has to be investigated first. This can be done by a cluster analysis considering among others:

- closing operations/instructions
- reporting requirements/documentation
- underlying processes and internal controls
- timing of the annual report and publication dates
- management reporting
- accounting guideline and special accounting areas

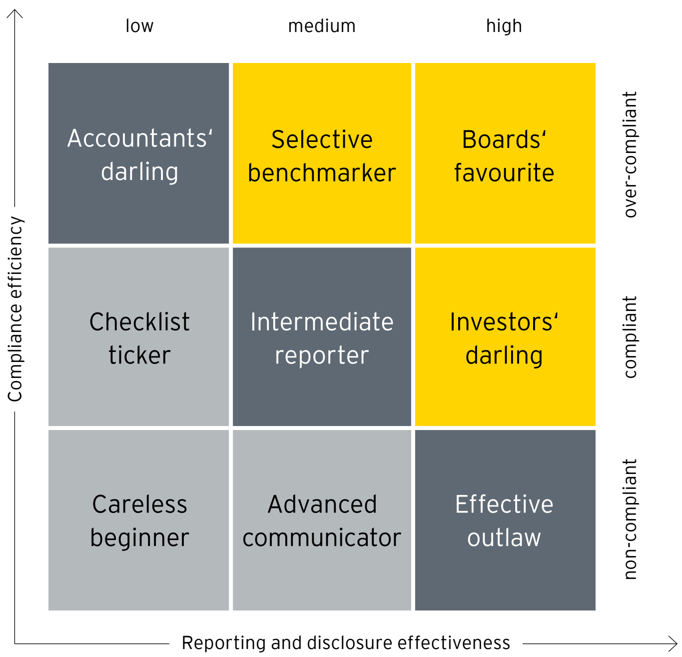
Based on the cluster analysis, potential improvement areas will be identified in a second step. This is followed by a standardization of the core closing processes considering different supporting processes as well as different roles and responsibilities, which is generally documented within the hard-close guideline. Finally, the new approach has to be shared with the employees via workshops or trainings. This way, EY will support driving optimization by cutting non-value adding activities and move important closing steps to an earlier time.

2. Streamlined reporting

Short, concise, compliant
There is no other topic on which preparers of financial reporting agree almost unanimously: The extent, level of detail and complexity of the management report and/or the notes to the IFRS financial statements have reached a dimension that is often regarded as "information overload". In addition, companies are required to continuously reflect their reporting on the basis of new requirements from standard setters all over the world.

Different client reporting types
In order to determine which reporting type the client intends to be, the balance between "compliance efficiency" and "reporting and disclosure effectiveness" is the key point and is illustrated in the chart below:

Compliance efficiency vs. external reporting and disclosure effectiveness



Speed, improved reporting, cost reduction: benefits of a streamlined reporting
Short, concise and compliant internal and external reporting brings the client in the position to

- Reduce a significant portion of the financial reporting costs in the current year and in the future
- Save time in the quarterly, half-year reviews and the annual audit
- Reduce discussions with internal stakeholder (e.g. Supervisory Board or Audit Committees)
- Focus reporting on the important information and company-specific facts and circumstances
- Ensure an evidence-based reporting (incl. supporting documentation) for the regulator
- Automate or outsource regular financial reporting compliance activities

EY has a standardized approach "from materiality to efficient reporting" and thus helps to streamline reporting with it. With the application of a materiality and a concentration on the exact shareholders' needs, only material and relevant information should be disclosed. By avoiding "over-compliant" information, a clear and consistent communication to the financial markets will be generated. Furthermore, EY supports designing lean and quick reporting processes and helps implement reporting tools to automate the process.

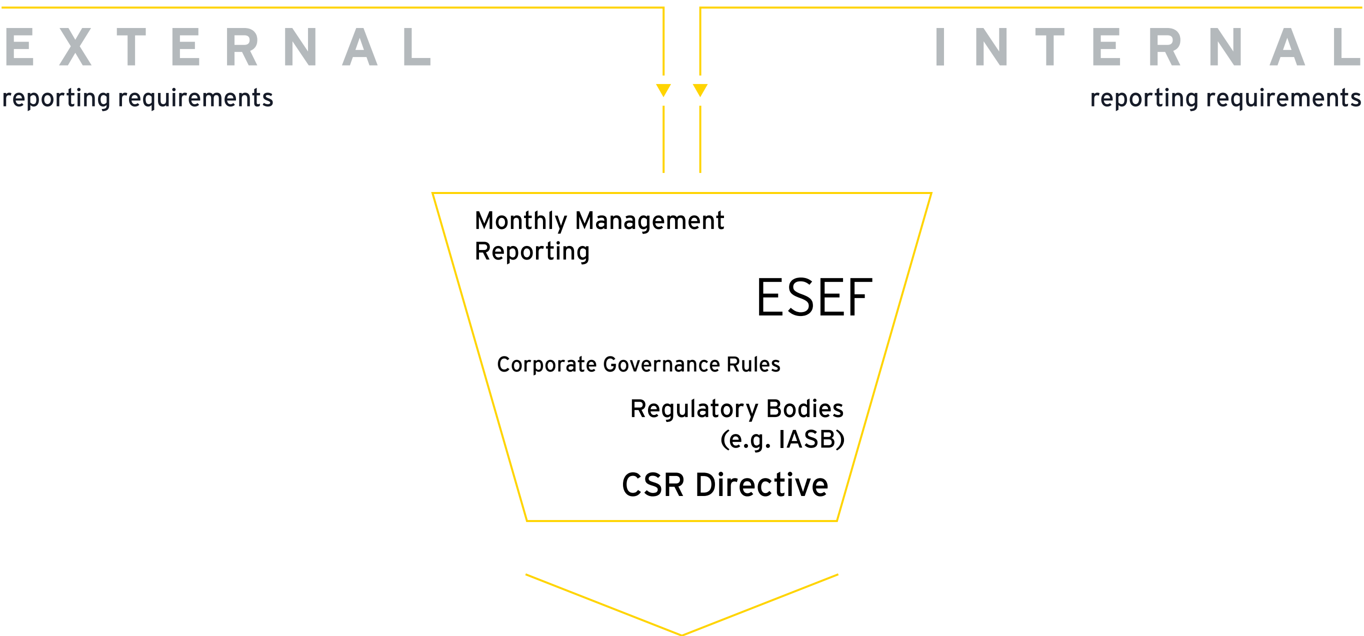
D. Efficiency gains in accounting & reporting

3. Effective disclosure management

Why is there a need to "manage" my disclosures?
Increased disclosure requirements, e.g. due to changes in accounting rules, technical innovations or increased external and internal requirements, lead to higher workload and (IT) costs. The current challenges of external and internal reporting requirements are illustrated below:

Streamlined reporting, reduction of the disclosures itself is and can only be the first step to counteract these growing demands. During the year-end procedures, intensive work is required to prepare the different sets of data for the internal alignment to enable the creation of the external disclosures. Hence, a step to consequently reduce the effort of preparing financials is needed.

Challenges of external and internal reporting



External & Internal reporting requirements are increasing

Efficient disclosure management tool is the key for consistent reporting, controlled and consistent data with the possibility of the immediate update of data and individual workflows.

What are the key drivers and selected reasons to manage disclosures?

Key drivers to manage disclosures

Individual workflow
Easy preparation and maintenance of workflows including order and responsibilities for single steps.

Brief disclosures
Significant reduction of costs for report preparation in the current year and in the future.

Immediate update of data
"Last minute changes" can be adopted and validated easily. Variety of options to automatically compare already prepared information.

Concise disclosures
Concentration of the reporting on company-specific facts and circumstances, e.g., new strategy or business model.

Consistent reporting
Combining various interfaces, Word, Excel, PowerPoint and further data sources with tables, charts and numbers in running text in the notes or management report.

Compliant disclosures
Ensure accounting standards (e.g. IFRS, US-GAAP, German GAAP) compliant reporting including supporting documentation.

Controlled & consistent data
Automated integration and centralized data resources, control about timing, content and extent of imported data.

ESMA/ESEF
European Single Electronic Format "(ESEF)" will become mandatory for listed companies for fiscal years starting 1 January 2020.

D. Efficiency gains in accounting & reporting

How does ESEF, the "European single electronic format" impact the disclosures?
The obligatory preparation and publication of the consolidated IFRS financial statements in accordance with ESEF is a challenge for various listed companies in the EU. The taxonomy, which is given by the European Securities and Markets Authority (ESMA) has to be applied to financial reports content-related (mapping of accounts according to the taxonomy concepts) as well as technically (tagging of the concepts with XBRL keywords) in a predefined file format (Inline (E)Xtensible Business Reporting Language (iXBRL)).

The application of new regulatory requirements is challenging and often requires comprehensive analyses of the existing data structure and processes. To reduce complexity and workload and thus save time, EY assists its clients during the realization of the ESMA requirements. Experts in accounting, processes and systems work together to professionally support with mapping and tagging activities. To adequately meet the requirements and upload data from different sources, EY utilizes a XBRL reporting tool with integrated taxonomies and the ability to flexibly manage changes in taxonomies. The comprehensive functionalities of such as a tool include multi-user modes and the enablement of a full audit trail.

Summary of timing (subject to changes as a result of COVID-19) and financial reports that have to be transferred to the ESEF-format

	IFRS consolidated financial statements	Single financial statements
Primary financial statements ‣ Monetary notes of the primary components of the financial statements, i.e. balance sheet, income statement, comprehensive income statement, statement of changes in equity, cash flow statement ‣ Selected textual notes (e.g., name, head office location, business reason or legal form)	Mandatory from 2020	Voluntary (if Member State provides taxonomy)
Block tagging of notes ‣ Textual disclosure in the Notes to the consolidated F/S according to the ESMA listing (see Appendix II No. 3 in conjunction with Table 2 of the current delegated regulation) ‣ Example: disclosure of accounting judgements and estimates	Mandatory from 2022	
Detailed tagging of notes	Voluntary	

What are the next steps?

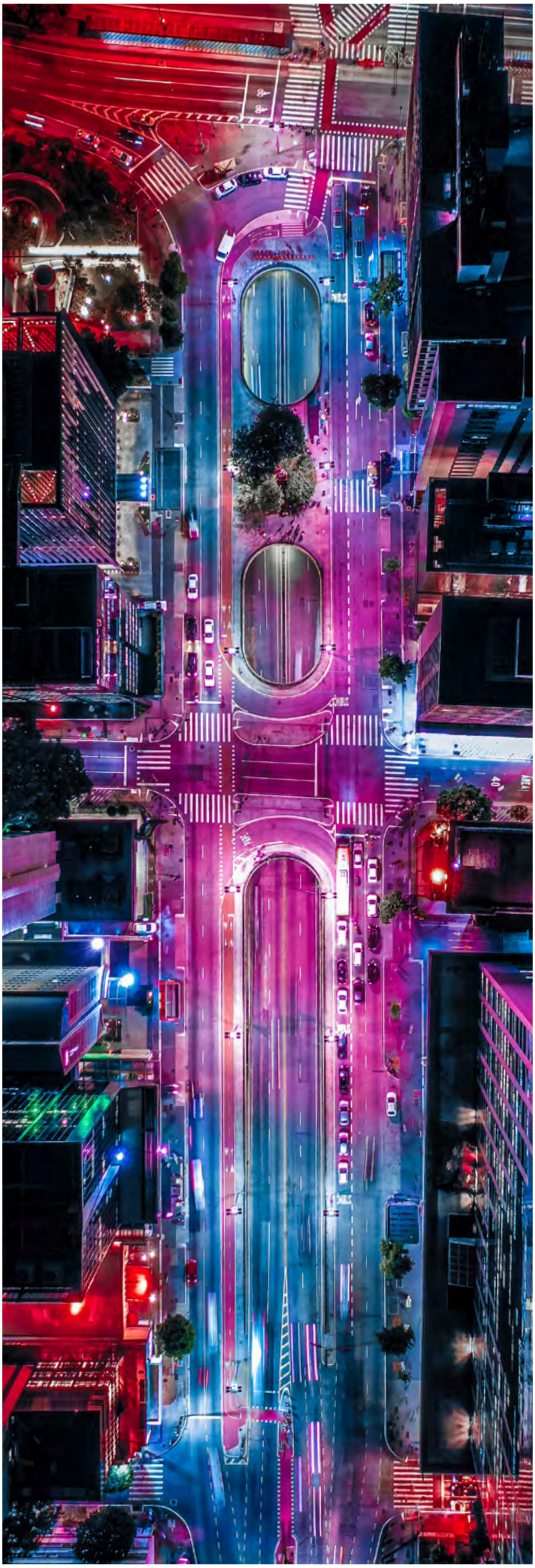
EY supports the identification and customization process of the relevant tool through a combination of technical expertise and accounting competence in order to make the tool follow the client's needs.

Technical support through EY will mainly be provided during the following three operations:

- Initial set up of the tool
- Customizing of the tool
- Support in daily operations

To support with its accounting expertise, EY will focus on these key objectives:

- Initial set up of contents
- Preparation of Word and Excel files for the annual report
- Preparation of PowerPoint slides for internal reports (e.g. board meetings)
- Coaching of employees
- Support for/creation of annual report
- Managing of roles and responsibilities
- Ongoing review if legal requirements are met
- Process discovery and implementation

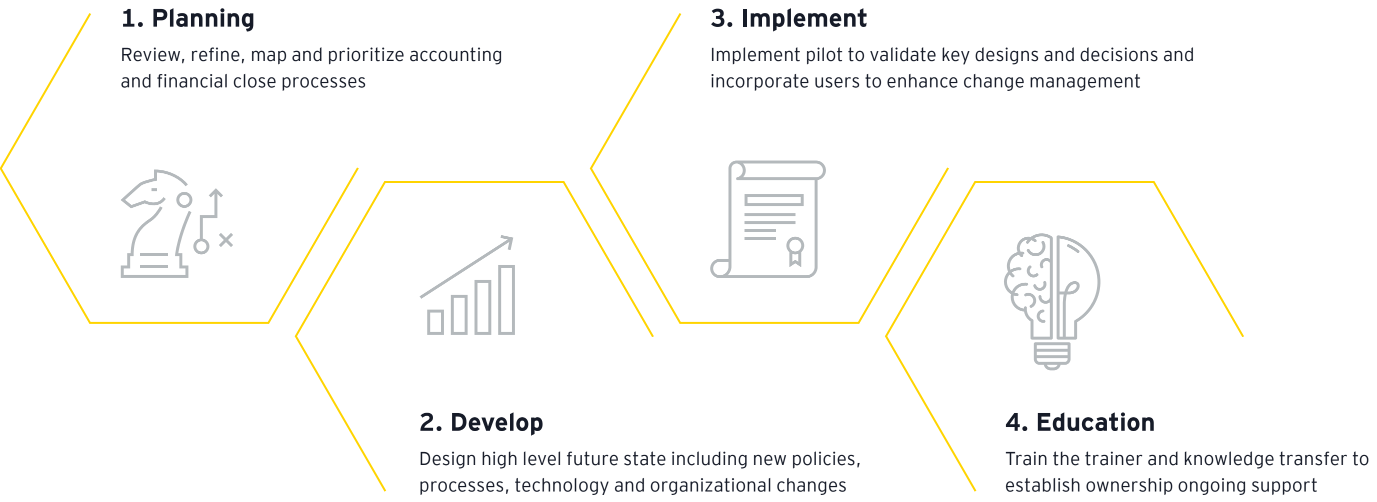


E. Our project approach

EY supporting the transformation
With the aim of optimizing processes and considering suitable systems/tools as well as regulatory and business requirements, EY supports its clients in successfully mastering the upcoming challenges of the future and the digital transformation within the accounting and controlling departments.

Therefore, EY will apply a four-step approach to ensure a holistic view of the client's situation and continuous improvement after project completion. Generally, the client will be supported during the *planning* by reviewing and prioritizing the actual financial close processes, during the *development* by designing a high-level future state, during the *implementation* of a pilot (if applicable) to validate key designs and decisions and in *education* by training and knowledge transfer.

How EY helps



Whether regional middle market or global group – EY is a strong and competent partner for its clients. To professionally take on the client's current and future challenges, experts who are highly experienced in accounting, processes and systems work together. In addition, EY's industry know-how is particularly beneficial to best understand the client's situation. Through various co-operations and alliances with providers and business partners, EY is globally networked and assists the company as a strong partner.

II.
What comes "next" and "beyond"?

This is a time of great volatility and disruption, with the COVID-19 pandemic creating real uncertainty and impacting many people and businesses. The current situation requires adaptation in many areas of life – personal and business. Our daily working routine, our work environment and also the way we work together have changed very quickly and unexpectedly. As a result, many companies have been introduced working from home as the new "normal" and were faced with the remote financial closing in the past weeks and months and ongoing. In the course of many calls and video conferences with clients and colleagues, the challenges that companies are facing during these special times became obvious, in particular regarding the closing and reporting process. Examples of this include:

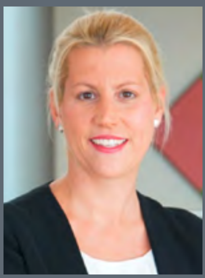
- Closing will likely take longer with a remote and distracted workforce
- Certain systems and tools are not available via remote access or have highly limited access controls
- Collaboration tools are not available or inconvenient for people to use
- Approach to capturing and communicating key decisions and changes to the closing and consolidation process might require adjustments

With the crisis management of most companies focusing mainly on the "now" phase, it is extremely important to consider what comes "next" and "beyond" in order to stay competitive and to make the right decisions for the future. This includes an efficient and effective closing and reporting process. The primary drivers for the "next" and "beyond" phase include:

- Implement a workflow tool and closing calendar with defined tasks, roles, inputs and outputs
- Automate account and intercompany reconciliations
- Simplify chart of accounts
- Standardize templates and enforce procedures to ensure consistency and streamlined reporting cycles
- Set up central repository for supporting documentation

So, are you ready for what comes "next" and "beyond"? We are here to assist you. Contact your EY team!

III. Authors and contacts



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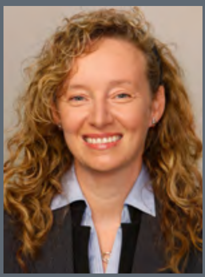

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EY | Building a better working world

EY exists to build a better working world, helping to create long-term value for clients, people and society and build trust in the capital markets.

Enabled by data and technology, diverse EY teams in over 150 countries provide trust through assurance and help clients grow, transform and operate.

Working across assurance, consulting, law, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.

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ED None

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