2021 REPORTING & ANALYTICS REFERENCE GUIDE
FOR SAP & SAP SUCCESSFACTORS HCM/HXM

- By Danielle Larocca, Senior Vice-President of HCM Solutions, EPI-USE Labs

A GUIDE FOR EVERY DEPLOYMENT MODEL: ON-PREMISE, HYBRID, CLOUD ETC.

CONTENTS:
Reporting and analytics for SAP HCM and SuccessFactors customers

A: SAP HCM On-Premise Reporting and Analytics Options

Section A1:
Reporting & Analytics

"Reporting" and "analytics" are two distinct capabilities designed to solve two different business challenges, each with their own ROI. You may have seen the two descriptions used interchangeably, but they are very different in terms of their purpose, tasks, outputs, delivery, and value.

Reporting is best defined as: The process of organizing data into informational summaries to monitor how different areas of a business are performing.

Analytics is defined as: The process of exploring data and reports in order to extract meaningful insights that can be used to better understand and improve business performance.

|	Reporting VS.	Analytics
Example question	Who terminated employment so far this week?	How is engagement correlated to revenue?
Refresh frequency	Real time, near real time	Daily, weekly, monthly, annually
Data type	Transactional, individual	Aggregated, ratios, trends
Typical audience	Centers of Excellence (CoE), Managers	C-suite, Line of Business leaders
Purpose	Compliance, information	Investigation, insight
Benchmarks	Maybe	Yes
Visuals	List reports, tables	Charts, graphs, analysis

© SAP

Now that the distinction between reporting and analytics is clear, you can understand why different solutions may be required for each. A reporting solution is operational in nature and provides access to all transactional data in real time to drive the business on a daily basis. This type of solution gives the user access to pick the fields they want, from the time periods they are interested in, in real-time, down to the lowest level of detail to review.

These types of reports include:

- Hires, Terminations and Turnover
- Payroll Registers and Reconciliation
- Time, CATS and Leave Accounting
- Benefits Enrollment
- Overtime Reports
- Vacant positions and Organizational Management
- Compliance and Auditing reports to identify missing data or null values
- Action or Incident reporting

> Analytics are not designed to be transactional, and include summarized information that is aggregated often from various data sources. Analytics are often pulled from a data repository or warehouse on a scheduled basis, such as monthly or quarterly. The data included in analytics is not necessarily designed to drive the business on a daily basis, and is generally used to plan for the future.

Sample Analytics includes asking questions such as:
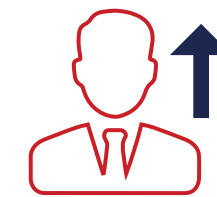
What is your revenue per employee? Is it higher than your competitors? How does it vary across lines of business or geographies?

How many dollars of operating profit are generated for every dollar invested in compensation and benefits?
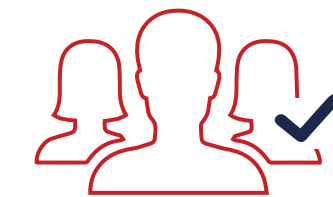
How does your headcount per unit of production compare to that of your direct competitors?
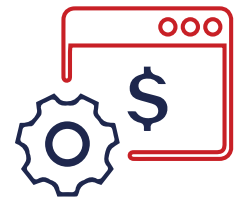
What percentage of your operating expenses is invested in compensation and benefits?

REPORTING	VS.	ANALYTICS

- Real-time transactions used to run the business
- Right this second and today
- Transactional, operational and individual detail
- HRIS, Centers of Excellence (CoE), Managers
- 97% of time spent

"I need a report showing how many Employees terminated employment this past week, and their names and their supervisors' contact information."

- Aggregate historical data from engagement surveys, financial ledgers and talent/learning systems
- Planning for tomorrow
- Aggregated, Ratios, Trends
- C-Suite, Line of Business Leaders
- Less than 1% of time spent

"I need to show my CEO how employee engagement correlates to revenue over the last 3 years, then identify the drivers of engagement."
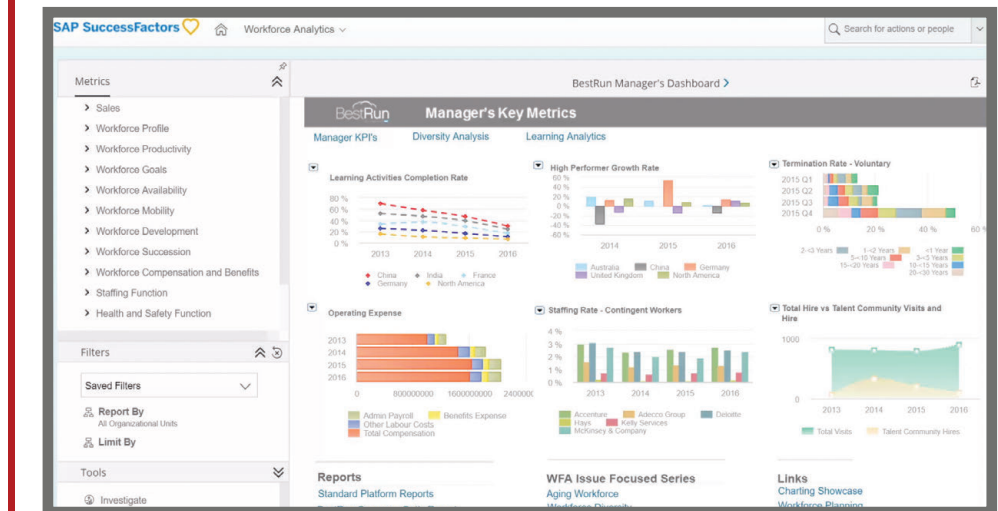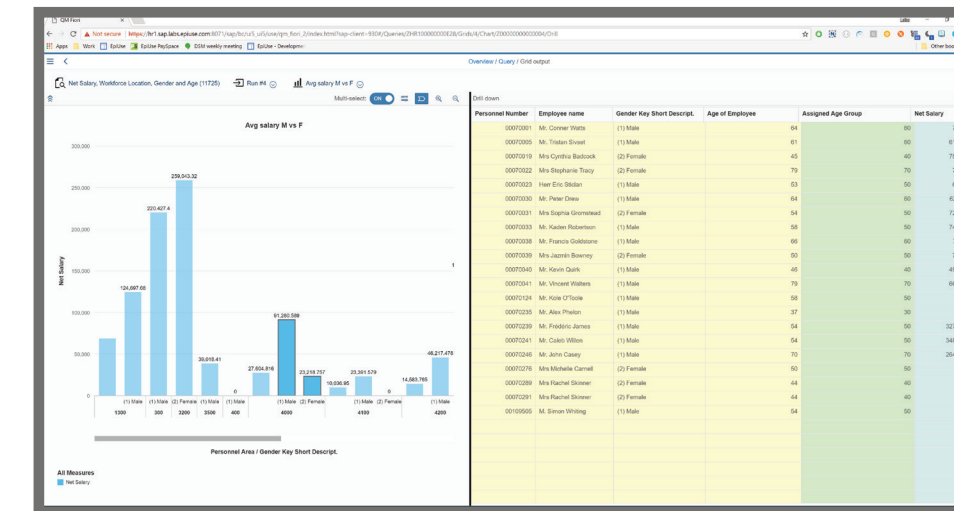
© SAP

Section A2:
SAP HCM On-Premise Reporting Options

SAP®

- SAP Pre-delivered reports
- Human Resources Information System (HIS)
- Custom Coded ABAP reports
- Ad Hoc Query
- SAP Query
- QuickViewer
- Wage Type Reporter
- Transaction Code PCPO Display Posting Runs
- Transaction Code SE16 Data Browser
- Transaction Code SE16NData Browser New
- Third-Party Solutions

Reporting has always been a challenge for SAP HCM and Payroll Customers, as there are various utilities available to them based on each different type of functional data. For example, the Ad Hoc Query could be used to collect basic data from simple infotypes, the Wage Type Reporter transaction code could be used to collect payroll results for employees, and transaction code SE16 could be used to collect configuration data for example. Using these utilities to extract data, along with manual manipulation of the data to marry it to each employee record (using tools like Microsoft Excel and Access) has been common practice. This results in extra time and costs, not to mention the security risks of taking the data outside of SAP for manipulation, plus the opportunity for user error.

TYPES OF DATA

- Master Data Administration
- Benefits Management
- Org Management
- Time & Attendance
- Payroll Data
- Tax Data
- Financial Postings
- Concurrent Employment
- Configuration Data

REPORTING SOLUTION

- Pre-delivered Reports
- Custom ABAP/SAP Script
- Ad Hoc Query
- HIS
- Quick Viewer
- Payroll Recon
- Wage Type or Tax Reporter
- PCPO
- Cumulated Time Evaluation Results: Time Balances/Wage Types
- Display Absence Quota Information
- Display Working Times

MANUAL DATA MANIPULATION → **REPORT**

a) Pros and Cons of SAP HCM On-Premise Reporting Options

The table below outlines each of the On-Premise HCM reporting tools and utilities and the pros and cons. Some of the most commonly used solutions have not been updated in over 15 years and include many OSS Notes for errors. SAP SuccessFactors has advised that there will be no new fixes or development planned for many of these on-premise technologies specific to HCM reporting.

Solution / Utility	Primary function	Accessed via	Pros	Cons
Pre-delivered Reports	SAP delivers hundreds of standard reports for the HCM module for its customers. Each functional area in SAP ERP HCM is listed by module and all of the available standard reports are included.	SAP Easy Access Menu Human Resources >Information System >Reports	A great place to check to see if a report exists before building a new one. Reports include government and regulatory standards by country.	No editing possible, assumes standard system configuration and data loading rules.
Human Resources Information System (HIS)	A visual object-based tool that allows customers to look at hierarchical data in their SAP system.	SAP Easy Access Menu Human Resources >Information System >Reporting Tools >HIS	Graphical representations of data in drill-down format.	Limited data; it does not offer printing or formatting options.
Custom Coded ABAP Reports	Any customized report that requires a trained programmer to insert code into the SAP system to collect information, design output, and produce a report.	Transaction code SE38 or ABAP editor; requires trained programming developer access and transport cycle (Dev->QA>PRD)	Can extract data from any structure within an SAP system.	Requires programmers, hard-coded security, data retrieval, manual updates each time the system is changed, and additional cost and time to produce and maintain. Also has a higher risk of error.

Solution / Utility	Primary function	Accessed via	Pros	Cons
Ad Hoc Query	A basic, quick, one-time look-up utility for fast access to basic data, including counts and simple lists.	SAP Easy Access Menu Human Resources >Information System >Reporting Tools >Ad Hoc Query	Very easy to use.	Offers limited functionality, hundreds of SAP Notes logged, no updates are planned, no major updates since version 4.6C, no standard access to clusters for payroll or time results. It can bypass SAP authorization objects if not configured correctly.
SAP Query	A simple report-creation utility for fast access to basic data, including counts, calculations, and basic statistical and ranked lists.	SAP Easy Access Menu Human Resources >Information System >Reporting Tools >SAP Query	Very easy to use.	Offers limited functionality, hundreds of SAP Notes logged, no updates are planned, no major updates since version 4.6C, no standard access to clusters for payroll or time results. It can bypass SAP authorization objects if not configured correctly.

Solution / Utility	Primary function	Accessed via	Pros	Cons
QuickViewer	A simple, quick, one-time look-up utility for fast access to basic data.	QuickViewer is accessed via transaction code SQVI.	Very easy to use.	Offers limited functionality, hundreds of SAP Notes logged, no updates are planned, no major updates since version 4.6C, no standard access to clusters for payroll or time results. It can bypass SAP authorization objects if not configured correctly.
Wage Type Reporter	A utility that allows access to payroll and time results data from the clusters.	Transaction code PC00_M99_CLGA09.	Evaluates wage types from the payroll results for a selected period. This data is from tables RT (Results Table) and WPBP (Work Place Basic Pay) for the payroll results. Other tables and data from infotypes are not evaluated.	Does not provide access to employee or system data, only the wage type results.

Solution / Utility	Primary function	Accessed via	Pros	Cons
Transaction Code PCP0 Display Posting Runs	Provides an overview of all documents created during the posting run.	Transaction code PCP0.	Provides an overview of all documents created during the posting run.	Does not provide access to employee or system data, only the posting runs whose status is in some way open.
Transaction code SE16 Data Browser	General purpose database table inquiry utility.	Transaction code SE16.	Offers unfiltered access to any table.	No default security is offered, and fields are displayed with technical names. Customers may update/edit/delete tables directly.
Transaction code SE16N Data Browser New	General-purpose database table inquiry utility launched as part of SAP's Enjoy! Release for a friendlier user interface.	Transaction code SE16N.	Offers unfiltered access to any table.	No default security; fields are displayed with functional names. Customers may update/edit/delete tables directly.

b) Best Practice Recommendation for SAP HCM On-Premise Reporting

The SAP SuccessFactors CEO was asked at the 2016 annual SuccessConnect conference, "What should we do for on-premise SAP HCM reporting until we move to SuccessFactors?". His answer was "...continue business as usual", advising that no new solutions were planned for on-premise HCM customers. The best practice recommendation is to stop using multiple solutions like Microsoft Excel or Access that have so much room for error and risk, and leverage an SAP-certified third party solution that provides access to all of the various data sources, live, in real time, inside SAP.
There is only one vendor that offers an SAP-certified solution for live reporting in SAP HCM, and that is EPI-USE Labs' Query Manager.

MASTER DATA ADMINISTRATION

BENEFITS MANAGEMENT

ORG MANAGEMENT

TIME & ATTENDANCE

PAYROLL DATA

TAX DATA

FINANCIAL POSTINGS

CONCURRENT EMPLOYMENT

CONFIGURATION DATA

Query Manager

Personnel Administration & Benefits (includes custom infotypes) · Payroll Cluster · Financial Postings · Time Cluster · Non-HCM Data · SAP SuccessFactors · Org Management · Server Input File · Custom Data sources/tables (Z-Tables) · Config. Data · Non-SAP Data

SAP and SuccessFactors Authorization check

SAP ALV · Adobe PDF · Excel · Interface · Document · Email · Tree · Portal · Chart · SAP Success-Factors · Odata Service · SAP Analytics Cloud

c) Why Query Manager?

Query Manager comes with over 250 pre-delivered reports from each application area that allow users to report on each aspect of their HCM data. Customers can also download reports created by other users and customers from the online customer community. Users can create reports from scratch or via a template using any fields, any measurement criteria, etc., and most importantly, users can include the lowest level of operational data as needed. For example, in Query Manager you can create a report that lists every employee and how much overtime they have earned by department and rate for the past five years.

Samples of data inputs and outputs available within Query Manager are shown in the image on the next page.
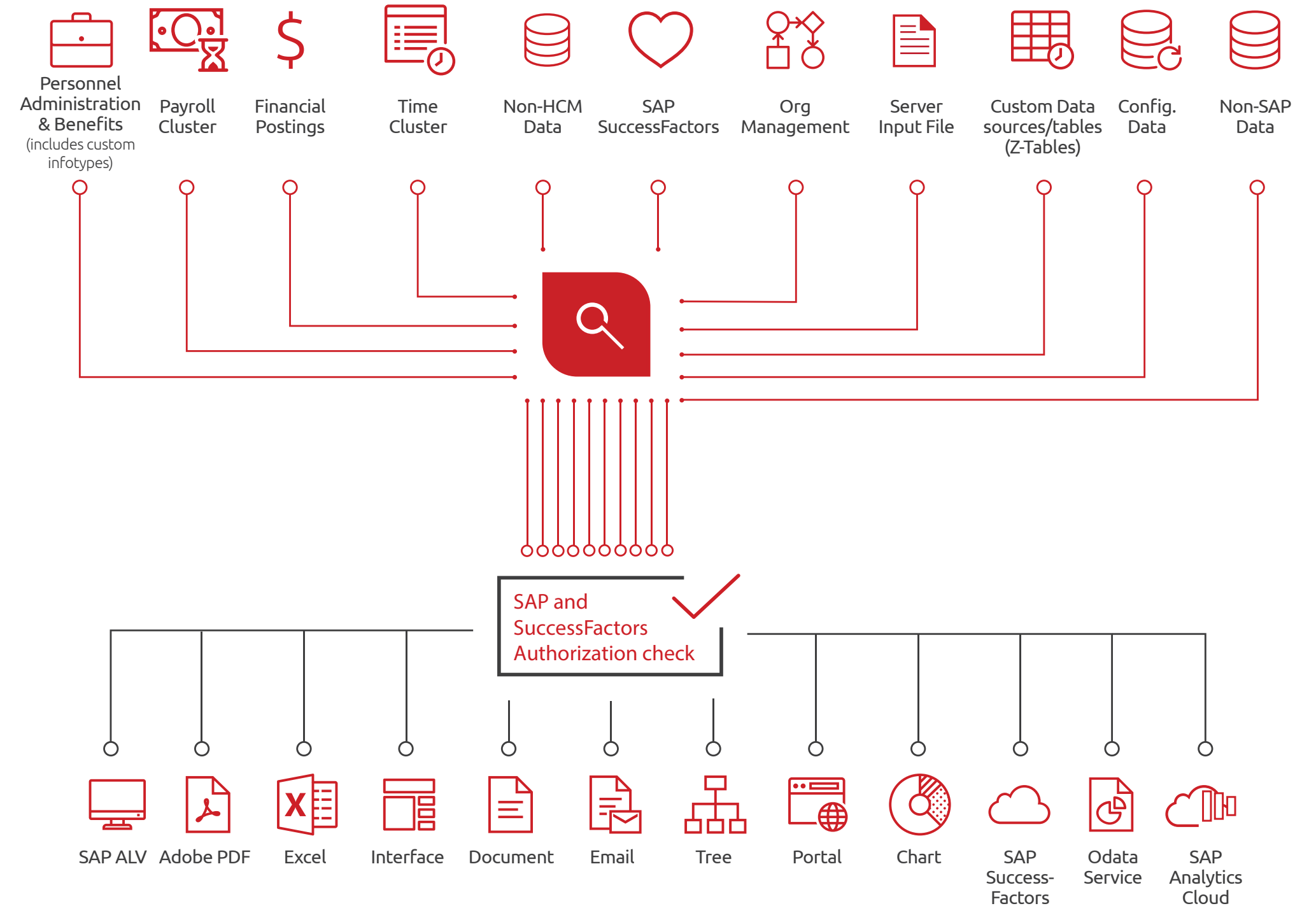
Section A3:
SAP HCM Analytics Options

SAP Analytics

SAP Digital Boardroom	SAP Analytics Hub

Smart BI, agile planning and predictive, machine learning

SAP Analytics Cloud

Run the Business
Steering excellence

SAP Analytics

BI	Planning	Predictive
Governed BI, reporting, and data discovery	Business planning and consolidation	Predictive analytics/ ML

SAP Analytics solutions

SAP BW/HANA	SAP S/4HANA
Modern data warehousing	Embedded analytics and planning

Grow the business
Plan
Predict
Innovate

a) BW Business Intelligence

SAP's first foray into analytics was SAP Business Information Warehouse, often referred to as BI (Business Intelligence) or BW (Businesss Warehouse). BW is an offline data warehouse run on industry-standard RDBMS and SAP's HANA in-memory DBMS. SAP BW is generally used as a strategic management reporting tool across multiple modules, not just HCM and Payroll. BW extracts data out of various SAP systems and imports this into InfoCubes for reporting. BW is routinely (i.e. monthly, quarterly etc.) fed with data for post-hoc analysis. It is ideally suited for non-operational data that can be analyzed in conjunction with other data sources. BW is most popularly used for non-HCM modules, however InfoCubes exist for HCM. A common customer complaint is that there is only one InfoCube that contains Payroll data, which is limited to only those companies that have a monthly payroll frequency. In the future landscape, any HCM data that exists in an off-line data warehouse like BW will likely be fed into the SAP Analytics Cloud for strategic analysis in line with the SAP SuccessFactors movement to the cloud.

© SAP

b) Third-Party Solutions

Because of the challenge of reporting and the use of multiple tools, many customers offload their confidential Human Capital Management data to third-party solutions for offline reporting and analysis. The most popularly used solutions for analysis include Microsoft Excel and Access.

The primary challenge with the extraction of highly confidential HR and Payroll data from your secured SAP system is the potential for this data to be saved in an unsecure local or network file. There are GDPR considerations with this approach, as well as typical security concerns. Using this type of solution would not pass a standard security audit. In addition, the room for error is great as the data is being propagated from one system to another which impacts formatting of the data etc. and the vulnerability of the data from manual error.

c) Pros and Cons of SAP HCM Analytics Options

Solution/ Utility name	Primary function	Accessed via	Pros	Cons
SAP Business Warehouse (BW) Business Intelligence (BI)	SAP's first foray into analytics. Offline data warehouse runs on industry-standard RDBMS and SAP's HANA in-memory DBMS.	Launch via desktop shortcut.	Can be used to analyze data from various functional areas and data sources including Finance and CRM, in addition to key figures from HCM.	• Separate cost investment • Offline, not real time, only limited data is extracted • Cost, performance, relevance and complexity of use are often barriers to use
Third-Party Solutions	An offline data warehouse.	Launch via desktop shortcut.	You choose which data to load into the solution.	• Requires a separate investment • Data is not live inside of SAP • Data is not protected by SAP Security

d) Best Practice Recommendation for SAP HCM Analytics

If you are currently leveraging a data warehouse for analytics, research your options for integrating it with SAP Analytics Cloud.

B: SuccessFactors Reporting, Analytics and Planning Options

Section B1:
Reporting Analytics and Planning

With the introduction of SuccessFactors a new category was added to the mix to supplement Reporting and Analytics. This new category is called Planning. We know that reporting focuses on context-aware insights to preemptively drive actions and guide decisions with suggestions and recommendations including leveraging search functionality to deliver insights to casual users and answer their specific questions. We also know that the focus for analytics often involves studying past historical data to research potential trends, to analyze the effects of certain decisions or events, or to evaluate the performance of a given tool or scenario. The goal of analytics is to improve the business by gaining knowledge which can be used to make improvements or changes.
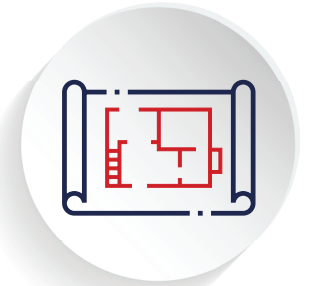
By incorporating Reporting, Analytics and Planning, SAP SuccessFactors has embraced an overall methodology of Intelligence. The end goal is so that customers can access all data and embed analytics directly into their business processes to turn instant insight into quick action.

Reporting — **Analytics** — **Planning**

Section B2:
SuccessFactors Reporting Options

SAP SuccessFactors

- List Views & Spotlight Views
- Classic Reporting Spreadsheet
- Dashboards
- Tiles & Dashboards
- Module specific reports
- Ad Hoc Reporting
- Online Report Designer ORD/BIRT
- Metrics & Benchmarks

The focus of reporting in SuccessFactors was historically similar to SAP; they had several solutions to access various functional bits of data including tools like the Online Report Designer, List Views & Spotlight Views, Classic Reporting, Spreadsheet, Tiles & Dashboards and Headlines.
In 2017 SAP SuccessFactors announced a new solution called the Report Center which is a consolidated frontend for using these various solutions for reporting.

SAP SuccessFactors ♡
Reporting

| List Views & Spotlight Views |
| Classic Reporting Spreadsheet |
| Dashboards |
| Tiles & Dashboards |
| Module specific reports |
| Ad Hoc Reporting |
| Online Report Designer ORD/BIRT |
| Metrics & Benchmarks |

SAP SuccessFactors ♡
Reporting

| The Report Center |

The following section outlines the pros and cons for the SuccessFactors Reporting solutions. It is important to note that even though these are all accessible via the Report Center on the front end, behind the scenes the original tools are still running. SAP SuccessFactors has a project in place, often referred to as the Unified Reporting solution, that will consolidate all of these tools on the back end to a single user experience, leveraging HANA.

a) Pros and Cons of SuccessFactors Reporting Options

Tool Name	Capabilities	Limitations	Skill Level/Users

Ad Hoc	• Standard Content Delivered
	• List Reports
	• Simple data extraction
	• Excel, CSV, PDF & PPT
	• Real-time reporting
	• Available for most SuccessFactors Modules (see limitations)
	• Cross-Module Reporting
	• Can use graphs and joins
		• Excluded Modules:
		  • Employee Central
		  • Recruitment Marketing
		  • Onboarding
		  • Learning
		• No true Date Effective Reporting
		• Not designed for high volume data extractions
			• Simple
			• All to create and consume

Dashboards	• Home Page, interactive chart tiles
	• Online, interactive dashboards
	• Track key processes
	• Drill from chart to detail
	• Deliver on mobile
	• Runtime Filters available
	• Available for most modules in the suite (see limitations)
		• Excluded Modules:
		  • Recruitment Marketing
		  • Onboarding
		  • Learning
		• No cross-domain capability
		• Browser output only
		• No PDF or PPT outputs
			• Simple
			• HR Analysts/HRIT to design and create
			• HR/Manager/Exec to consume

Tool Name	Capabilities	Limitations	Skill Level/Users

Online Report Designer (ORD)	• Pre-defined standard content (> 75 reports and dashboards)
	• Multi-page/presentation ready
	• List reports, charts and graphs
	• Images
	• Excel, CSV, PDF, PPT, DOC, and Email
	• Advanced capabilities: Calculated Columns, Data Aggregation, Pivot Tables, Charts and Graphs, Joins
	• Data Sources
	• Live data from SAP SuccessFactors talent modules
	• Replicated data from Employee Central into SAP HANA
	• Workforce Analytics
	• Date Effective and table join management in reporting for Employee Central
		• Excluded Modules:
		  • Recruitment Marketing
		  • Onboarding/Offboarding
		  • Limited for Learning
		• Not designed for high volume data Extractions
			• Medium
			• HR Analysts/HRIT to design and create
			• HR/Manager/Exec to consume

b) Report Center

Report Center is a one-stop shop that can be used to run and manage reports, and a consolidation of all report-building tools (Tiles, Dashboards, Report - Table, and all Report - Canvas reports) via a new interface, built in UI5 using SAP Fiori. This change can be seen in SuccessFactors navigation as it removes all reporting related content out of the Workforce Analytics tab and into Report Center. It also removes the separate sub-tabs for Reporting and Dashboards and consolidates both Workforce Planning and Headcount Planning tabs into one Workforce Planning tab. All customers can use Report Center; it just needs to be enabled from the Upgrade Center and permissioned.

The next step planned in the Roadmap is to unify the back-end processes that drive the Report Center, which starts with unifying the data layer leveraging SAP HANA. The future model is designed such that regardless of where the data is, it's the same experience for the user, allowing you to include data from virtually all SuccessFactors modules into a single query, including Learning. You may hear this referred to as the Unified Reporting Solution. This Unified Reporting Solution will be powered by SAP Analytics Cloud. Customers will continue to access and manage their reports via the Report Center, however the underlying engine driving it will change to the Unified Reporting Solution.

The plan is for customers to be able to access reports created with previous SuccessFactors tools from the Report Center. As of Fall 2018, 2,000 customers have enabled the SuccessFactors Report Center which will continue to be the front end for SAP Analytics Cloud for HCM.

c) Pros and Cons of Report Center

Solution	Primary function	Accessed via	Pros	Cons
Report Center	SuccessFactors front end for reporting.	SuccessFactors > Reporting *Note: Report Center has to be enabled.*	An easy wizard style front-end process for report building that leverages the existing solutions behind the scenes. Available now, no additional license required for basic functionality.	Currently only the front-end design is unified. The back end is still the multiple tools powering the data.

## d) When do the older SuccessFactors Reporting Tools get turned off?

The preliminary timeline for the sundown of the older SuccessFactors solutions has been communicated accordingly:

• In the second half of 2019, along with general availability of new capabilities, customers can edit reports made with old solutions but cannot create new ones

• After 12 months, customers can execute reports made with old solutions but cannot edit or create new ones

• After 24 months, the plan is to shut down the old tools entirely

e) Best Practice Recommendation for SuccessFactors Reporting

Although still in development, customers should enable and begin using the Report Center today. Available now with no additional license required for basic functionality, the Report Center includes a unified front end for report building that leverages the existing solutions behind the scenes.

The current priority is focused on the back end (unification of the Data Model) as part of the larger adoption of SAP Analytics Cloud solution. This continual evolution is in line with both the latest technology solutions leveraging S/4HANA and the best practice of building an intelligent enterprise.

For those customers with inquiries on reporting in SuccessFactors Employee Central Payroll, please proceed to the section titled 'What About Payroll reporting' on page 66.

© SAP
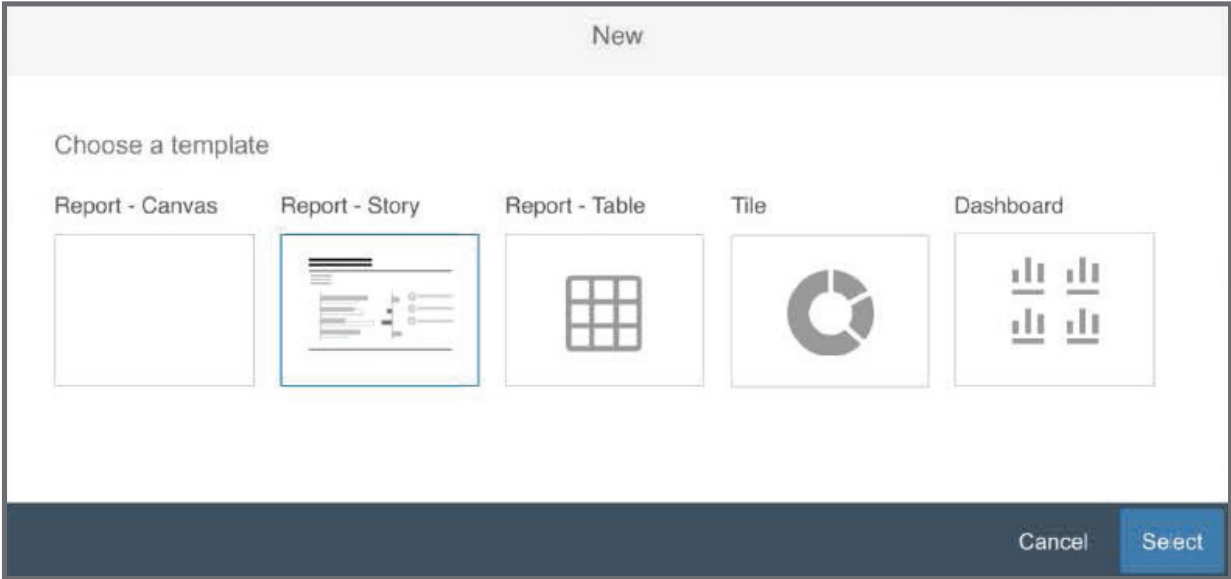
Section B3:
SuccessFactors Analytics Options

SAP SuccessFactors ♡
Analytics

> Workforce Analytice (WFA)

a) Workforce Analytics

Workforce Analytics (WFA) is a purpose-built analytics application for line of business HR. Workforce Analytics combines business intelligence capabilities and predefined content. Workforce Analytics, originally called Infohrm, was created by an Australian-based workforce analytics and software vendor known as Inform Business Impact, which was founded in 1982 and acquired by SuccessFactors in 2010.

The largest distinction is that Workforce Analytics is not a reporting tool; it is a module just like Learning or Employee Central, and it requires an implementation to configure and load it with the appropriate data. At its core WFA is comprised of metrics packs, which are groupings of metrics for various HR and talent management functional areas, including Employee Central, Recruitment, Learning and Compensation.

These metrics are used across the SAP SuccessFactors Workforce Analytics customer base, to allow for benchmarking an organization against a similar area, location or industry.
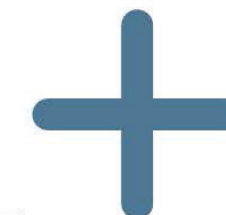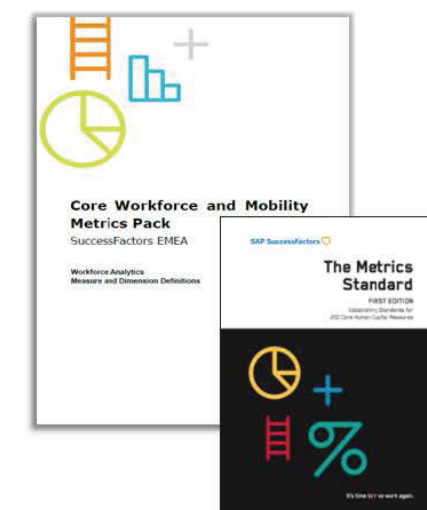
SAP SuccessFactors Workforce Analytics provides a single source for all workforce data from many disparate sources, regardles of whether those sources are from SAP, SuccessFactors or third-party systems. The SAP SuccessFactors Workforce Analytics process includes specialized Extract-Transform-Load (ETL) tasks to ensure all data is linked, and can be analyzed in a relevant way.

Foundational Metric Packs

- Core Workforce and Mobility

Core Workforce and Mobility Metrics Pack
SuccessFactors EMEA

Workforce Analytics
Measure and Dimension Definitions

SAP SuccessFactors
The Metrics Standard
FIRST EDITION

Additional Metric Packs:
Absence Management
Career & Development Planning
Compensation Planning
Financial Management
Goals Management
Learning Management
Leave Accrual
Health and Safety (OH&S)
Performance Management
Recruitment / Staffing / RM
Payroll and Benefits
Succession Management
Survey
Fieldglass
ADP

Absence Management Metrics Pack
SuccessFactors EMEA

Workforce Analytics
Measure and Dimension Definitions

SAP SuccessFactors

© SAP
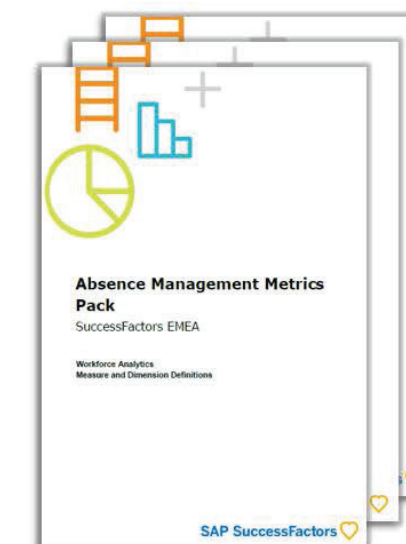
In SAP SuccessFactors Workforce Analytics, users have the ability to select fields or data to analyze from a pre-determined model (sample shown below), however most of the work is not done at table/field level. The process becomes less technical and more in HR language where users access metrics by their name, and filtering and slicing and dicing according to characteristics (or dimensions).

© SAP
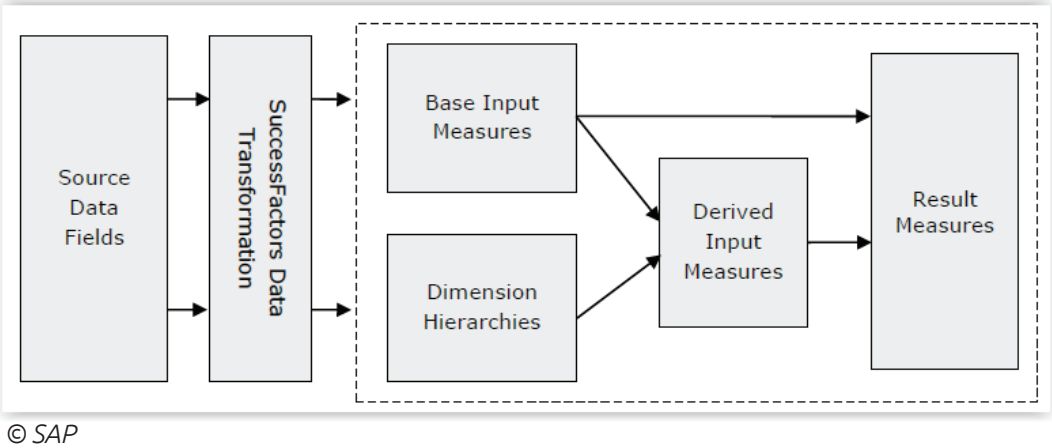
For each functional area in SAP SuccessFactors (or any third-party HR or talent management system of record), this sophisticated model takes pre-determined source data fields from a system and transforms them in conjunction with base input measures, dimension hierarchies and derived input values to produce meaningful result measures (output). This is often not transactional data. As shown in the SAP graphic above, this is aggregated or summarized data often shown in conjunction with other key variables. This could be looked at by department for a particular age group, and if the user chooses so, they can drill down to see individual level detail.

SAP SuccessFactors Workforce Analytics could be used to produce a trend correlation analysis between a segment of employees who worked overtime and employee retention. In Workforce Analytics the focus is always on the segmentation as opposed to individual, with the ability to drill to see the individual's details. A main objective is to identify systemic issues in an organization, and then drill to the individual level.

It was announced in June 2018 that SAP SuccessFactors Workforce Analytics will fold into the new unified reporting solution powered by SAP Analytics Cloud in the future. As of release 2017 Q3, Workforce Analytics includes something called Investigate. Investigate is a data exploration tool that provides the capability to analyze data quickly and easily. Investigate achieves this through robust search functionality partnered with recommended metrics and visualizations using the comprehensive SAP SuccessFactors Workforce Analytics metric library. In line with the movement to SAP Analytics Cloud, data from Workforce Analytics is planned to be leveraged in the future SAP Analytics Cloud landscape.

b) Pros and Cons of SuccessFactors Analytics Solutions

	Workforce Analytics
Prerequisites	▪ For SAP SuccessFactors Workforce Analytics on HANA platform: EC + SAP SuccessFactors ▪ Talent Management
Implementation	▪ Technical/Functional Consultant (Tech service in SAP SuccessFactors or Partner-enabled)
Connector	▪ SAP Analytics Cloud
Metrics	▪ Depends on Metrics Pack ▪ Customizable in Instance
Available Dimensions	▪ Guided by Metrics Packs ▪ Sourcing customizable per Instance ▪ Admin User Ability to Manage Dimension Structure via Dimension Editor (Depending on SAP SuccessFactors Workforce Analytics Platform)
Available Functionality	▪ Dashboard and Tiles ▪ Insights Panel ▪ Investigate ▪ Measure Page ▪ Online Report Designer ▪ Workforce Planner

c) Best Practice Recommendation for SuccessFactors Analytics Solutions

Leverage any reports that you have already successfully deployed via Workforce Analytics and work toward your goal to integrate them into SAP Analytics Cloud as part of your overall intelligent enterprise strategy.

Section B4:
SuccessFactors Planning Options

SAP SuccessFactors ♡ Workforce Planning

If the focus of reporting is on keeping the lights on today and the focus of analytics is be prepared for tomorrow, then the focus of planning is to be ready beyond tomorrow. As introduced earlier, Planning is the next step wherein customers take the data an analysis they have curated from Workforce Analytics to predict and model future scenarios.

a) Workforce Planning
Planning or Workforce planning as it is called in SuccessFactors is a systematic process that aligns business and HR needs to ensure organizations have the right people, with the right skills, at the right time and cost to execute efficiently and successfully. There are two main components of workforce planning: strategic and operational. Strategic workforce planning takes the long view and forecasts critical roles the organization will need in the future. Operational workforce planning looks at the short term demands of the business, compares them to current talent supply, and determines whether additional resources are needed.
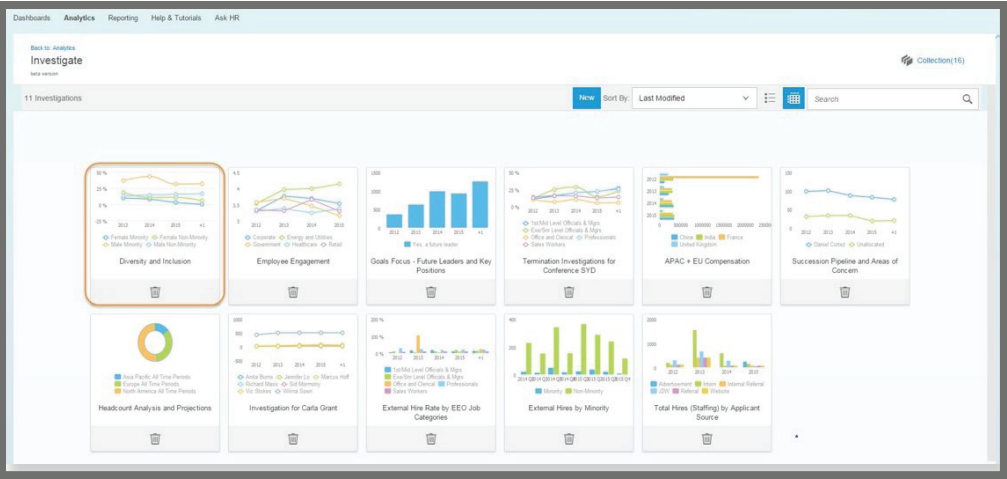

© SAP

Strategic Workforce Planning and Operational Headcount Planning

With strategic planning, customers can develop strategies that help ensure that they hire and retain the right talent for years to come. However, with operational headcount planning, customers can plan for changing organizational needs and transform this traditionally once-a-year process into an ongoing planning practice. If you have already deployed Workforce Planning the plan is that you should be able to leverage that data in the future via SAP Analytics Cloud. Because there are fewer customers using the Planning tools, I have not included a pros and cons or a formal best practice recommendation beyond the obvious which is: You need to manage the business today, plan for tomorrow and most importantly, be ready for beyond tomorrow. Planning solutions are critical to this end.

© SAP
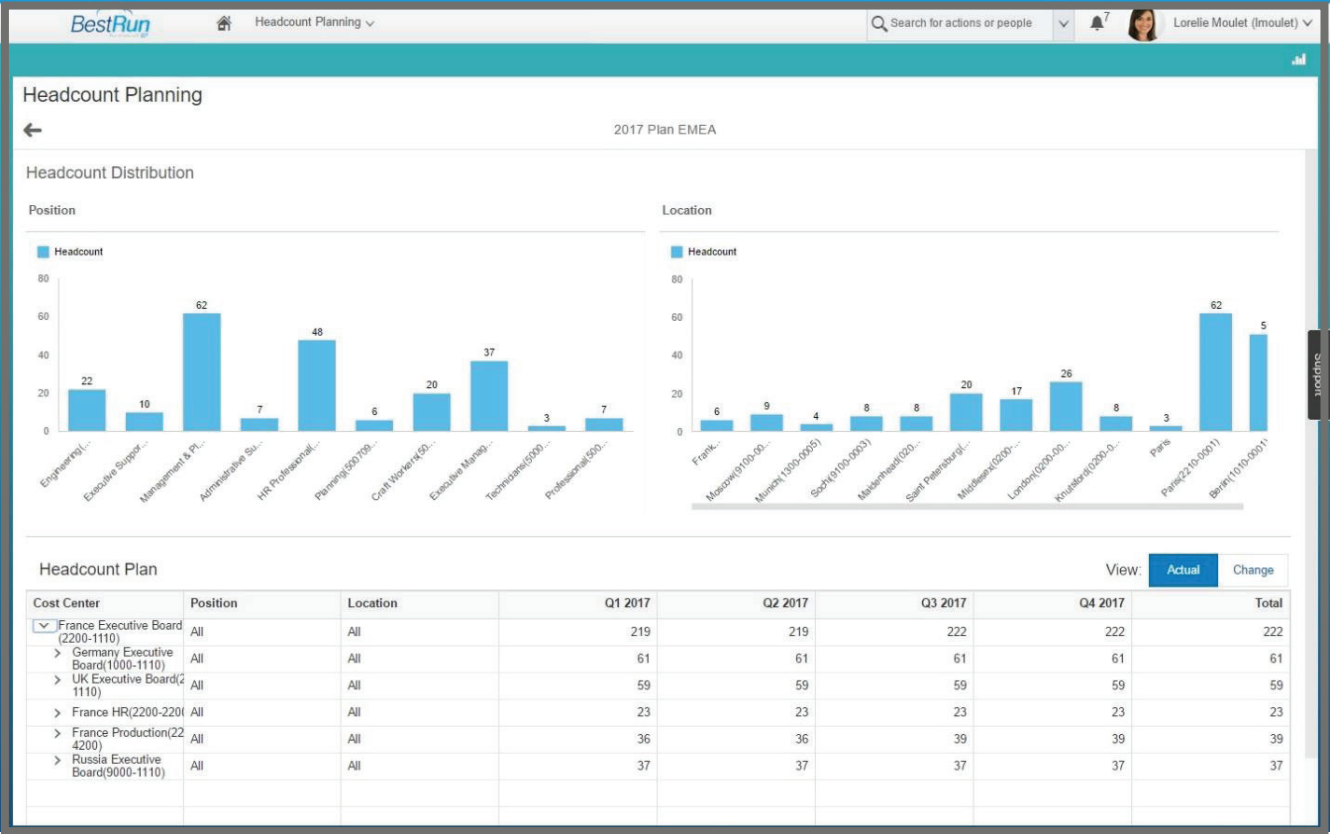
C: SAP SuccessFactors Intelligence

In the summer of 2018 SAP SuccessFactors announced that they are working to ensure that reporting and analytics is not going be a challenge in their future landscape. The newest SAP theme is INTELLIGENCE (Intelligent Enterprise, Intelligent HCM, Intelligent Suite etc.)

This Intelligent Suite, which is based on HANA, supports three key things:

| Real-time data | Unified user experiences | Integrated processes |

The goal is to eliminate disparate disconnected modules or handshakes between systems, transferring data between various mechanisms. Everything in the new model is within a single system with a reporting and analytics layer over the top of it all, leveraging a unified reporting solution powered by SAP Analytics Cloud as detailed in the picture on page 60.

According to SAP, the SAP Analytics Cloud is a single experience for decision making that allows users to discover, visualize, plan and predict, all in one place. This gives everyone, whether in front of the customer or in the boardroom, the power to find new insights and take action.

The end game is:
1) One unified reporting solution
2) Workforce Analytics metrics combined with Enterprise data
3) Embedded Enterprise Insights and Predictions

The primary shift from traditional reporting and analytics to intelligence is that you are not just running reports and showing them on a dashboard leaving the user to do the analysis and draw their own conclusions.

In this Intelligence model, reports are no longer an output type resulting from data retrieval. Their purpose is to provide insight and intelligence which is much richer than data and output. This continual evolution is in line with both the latest technology solutions leveraging S/4HANA and the best practice of building an intelligent enterprise.

Before Intelligence:
The Dashboard would show a chart labeled Headcount and the user could drill into it to review it and try to ascertain patterns, look for outliers etc.
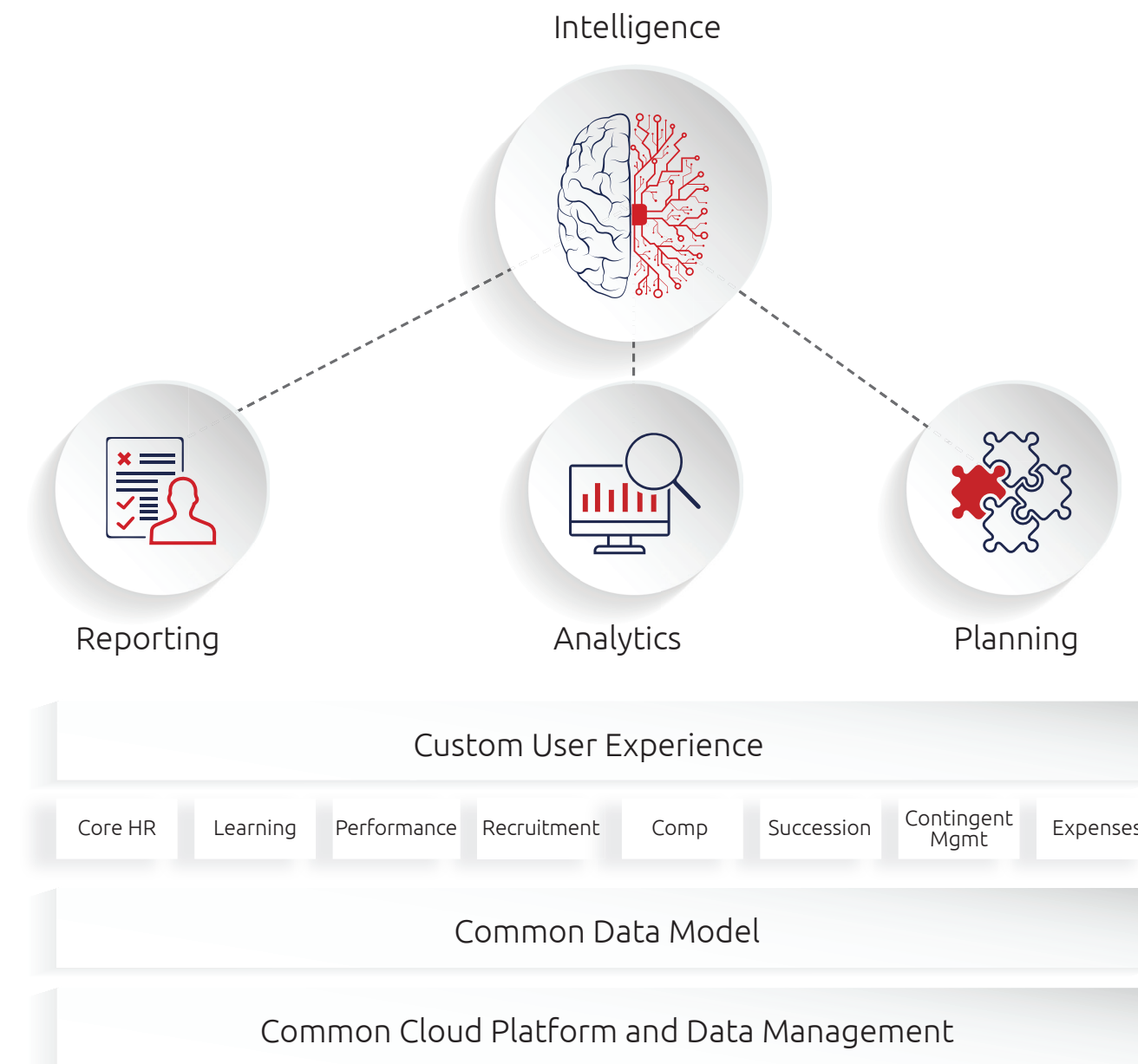
After Intelligence:
The Dashboard would highlight a business consideration insight such as "How are we hiring by Ethnicity?" or "Who is at risk loss due to compensation?" from which the viewer can take immediate action.

Intelligence now sits on top of all things in an organization, whether it be disparate systems, or technologies. Information is collected from all the different functional areas, to provide intelligence to the organization. All of this data – whether it be reporting, analytics or planning focused – will be leveraged in the greater Intelligence model. People Analytics will become the single solution for business intelligence and organizational planning, enhanced with the power of predictive analytics and machine-learning technology via SAP Analytics Cloud.

Intelligence

Reporting

Analytics

Planning

Custom User Experience

| Core HR | Learning | Performance | Recruitment | Comp | Succession | Contingent Mgmt | Expenses |

Common Data Model

Common Cloud Platform and Data Management

Section C1:
SAP SuccessFactors People Analytics, enabled by SAP Analytics Cloud

As announced by SAP in their News Center on October 31, 2018: "Since the dawn of automated HR reporting, analytics, and planning, HR has had no other option than to procure and implement multiple systems to deliver individual capabilities – a reporting tool for transactional data, a standalone analytics application for descriptive metrics, and a business intelligence package for advanced analytics with machine learning. However, this can create a mish-mash of complex tools with no clear visibility or confidence in the data or analysis provided. Our vision at SAP SuccessFactors is different.

SAP SuccessFactors People Analytics delivers business intelligence, planning, and predictive capabilities within one product. It includes things like "smart discovery" that uncovers hidden patterns through machine learning, data blending from multiple sources, opportunities for collaboration and team discussions within planning, beautiful visualizations, and the ability to ask the data questions via voice interactivity.

Our goal at SAP SuccessFactors is to help you improve people and organizational decisions and to help managers and business leaders do the same. We will do this by simplifying how you consume and share analytics with powerful new capabilities, enabled by SAP Analytics Cloud, embedded within our human capital management (HCM) suite and by providing expanded options for analytics and planning capabilities that disrupt the perceived limitations of traditional offerings."

© SAP

© SAP

SAP Analytics Cloud has a dashboard view for People Analytics that leverages intelligence by not simply listing and displaying a bunch of reports, rather it is curated and analyzed data presented to the user. Users will notice a settings option on the right-hand side of the screen, providing an analyst with the ability to customize what they see, including varying which charts to see, changing from a pivot table to pie-chart, changing the scales, interacting with a specific chart for example to see only the top five values, and so on, through a simple selection filter on the main screen. This may look a bit like traditional dashboards or even some reports created within the Report Center; the difference however is the focus on Intelligence.

a) When will SAP SuccessFactors People Analytics, enabled by SAP Analytics Cloud, be available?

As of Fall 2018, SAP Analytics Cloud is in beta with a small number of customers, with a limited set of test data and a limited set of capabilities. SAP has announced that a new launch to a larger Beta audience (manual sign-up) will become available in the first half of 2019. SAP SuccessFactors Roadmaps are available to download that include more specific timelines. The current goal is to make SAP Analytics Cloud generally available by the second half of 2019 to include all data including SuccessFactors Learning, enablement of Pixel Perfect and mobile capabilities. All Users, all analytics, one product. A solution designed to answer any question from anyone at any time.

D: What about Payroll Reporting?

With the adoption of SAP Analytics Cloud, Human Capital Management customers are finally going to have a single place to go for reporting. With all of the solutions for reporting analytics, planning and intelligence mentioned so far, there is still an area that is often a challenge for customers and that is related to accessing payroll data whether it be from SAP Payroll, SAP SuccessFactors Employee Central Payroll or SAP SuccessFactors Managed Payroll.

The challenge of detailed operational reporting on Payroll and Time data is a long-standing sore point for SAP HCM customers. The payroll and time data, unlike other HCM system data, is stored in complex structures called clusters, which are not as easy to evaluate as basic table data. Special skills and utilities are required to access it.

If there is one thing we all know, it's that reporting on SAP Payroll is not easy to do and accessing transactional data can be cumbersome in SAP using utilities like the Wage Type Reporter. Workforce Analytics on the other hand offers limited summarized curated data post implementation, related to payroll analytics by leveraging data from payroll results. It is the area of **Payroll and Time reporting** where your best option is a third-party solution that has access to all of the SAP HCM data, like Query Manager. Sample Payroll data sources available for Query Manager include:

▪ Garnishments	▪ Arrears	▪ Variable assignments
▪ Off-cycle Workbench	▪ Frozen averages	▪ Retroactive results
▪ Payroll Results	▪ Tax data	▪ Configuration Tables
▪ Payroll Results de-clustered	▪ Cost Distribution	▪ Cross Application Time Sheets (CATS)
▪ Payroll Postings	▪ Deductions not taken	▪ Leave Requests and Quota data
▪ Absences	▪ Cost distributed liabilities	▪ Financial posting data
▪ Month end accruals	▪ Modifiers	▪ External system time entry data

Section D1:
Best Practice for Payroll Reporting

As mentioned earlier, there is only one SAP-certified solution that runs in real time inside SAP for this business challenge, and that is EPI-USE Labs Query Manager. Query Manager can provide access to all of your data whether it be in SAP, SuccessFactors or some other external system via an easy to use tool. It is even web-enabled via fiori for mobile and tablet use. Query Manager is also integrated for use live in Microsoft Excel and can also be used as an engine to extract your data from SAP to populate other external systems including SAP Analytics Cloud.
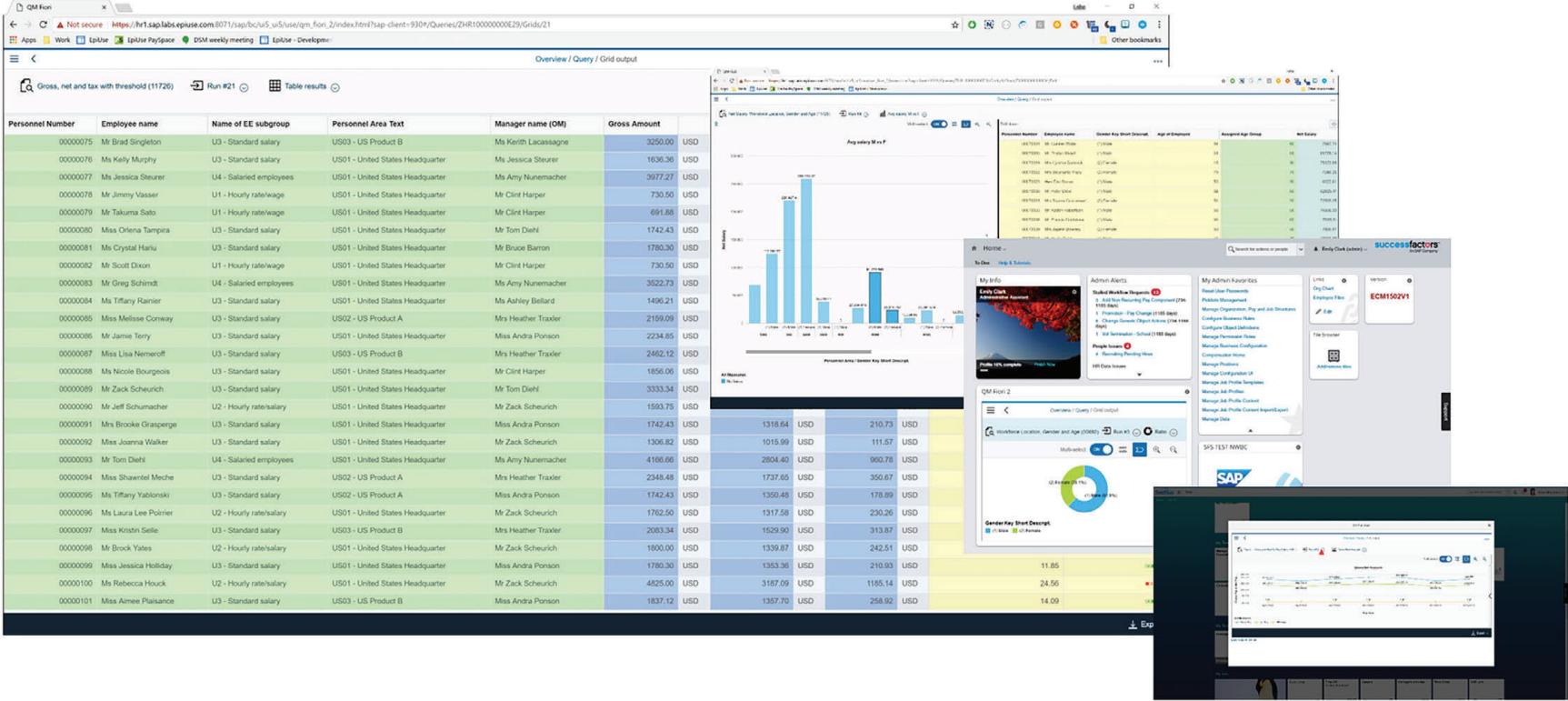
To see sample reports available with Query Manager see the next page. Whether customers' data is in on-premise, SuccessFactors Employee Central, S/4 HANA sidecar or SAP SuccessFactors Managed Payroll, they will need a reporting solution to access it. Query Manager is the SAP-certified solution (Powered by SAP NetWeaver) used by thousands of users around the world for their SAP on-premise HCM and Payroll reporting.

Query Manager Delivered Queries

The list of delivered Queries provided below is a snapshot of the Queries available in the Query Manager solution.

HCM Category	Name of Query
Personnel Administration	Headcount Development
	Headcount (active employees) per Organizational Unit
	Employee Movement Report
	Time Spent in each Pay Scale Area/Type Group/Level
	Headcount Changes
	Employee List
	Nationalities
	Work Permit Details
	Active Employees (basic)(DE)
	Help Desk's Employee Verification Report
	Specific Date Type List
	Employee by Age Category
	Employee Entry and Leaving Dates
	Compa-ratio in Salary Band
	Birthday Query
	Current Secondments
	Pre-Payroll Identify Actions in Date Range (AUS)
	Basic Pay Information
	Statistics: Gender Sorted by Seniority
	Active Employees (with org. info)
	Termination Report
	Employee Action Report
	Certification and Licenses
	Telephone Directory for External Connections
	Telephone Directory for Internal Communications
	Compensation Adjustment

HCM Category	Name of Query
Personnel Administration	Name Change
	Position Assigned Roles by Employee
	Letter of Employment
	Power of Attorney
	Bank Details
	Gender-based Salary
	Quote Weibliche Mitarbeiter (DE)
	Services Anniversaries
	Salary Adjustment Letter
	Telephone Directory for Extensions
	Leavers Last Active Position
	Staffing Actions
	Employee Anniversary Letter
	Family Members
	Objects on Loan
	DOL Overtime Validation (US)
	Seniority-based Salary
	Expiring Work Documentation
	Equity and Diversity (I0619) (AUS)
	Home Cost Center vs. Cost Distribution
	Report on Hiring's
	Leave Liability Report
	Length of Service Reporting
	Employee Count per Nationality
	Age-based Salary
	Planned and Actual Working Time

HCM Category	Name of Query
Personnel Administration	Reference Personnel Numbers
	OSHA-200 Report - without Illness and Injuries
	Employee Pay Information
	Vehicle List
	Ethnicity Report
	OSHA-200 Report - Illness and Injuries Only
	Payroll Status Information
	Basic Pay Information
	CATS vs Infotypes Reconciliation
SuccessFactors	Recruiting Eligible Candidates
On-Premise Talent Management	Education and Training
System	SAP Transports (High-Level)
	SAP Transports (Object Detail View)
	Diverse Formate – Prozent, Datum und Euro (DE)
	PA Compare Infotype 0007 and 0008

HCM Category	Name of Query
Benefits	Terminated Employees with Health Plans
	Insurance Plan Enrollment
	COBRA Medical and Prescription Plans
	Overview of Maternity Data
	Health Plan Dependent Age Out
	Health Plan Enrollment
	Savings Plan Enrollment
	Terminated Employees with Savings Plans
	Health Plans
	Savings Plans

HCM Category	Name of Query
Organizational Management	OM Exceptions: Positions with User and No Holder
	Vacant and Filled Positions by Org Unit
	OM Exceptions: Vacant Manager Positions (including User)
	PA/OM Position Mismatches
	OM Exceptions: Positions not Connected to an Org Unit
	Organizational Unit Managers
	Headcount Report: Flexible Display
	OM Exceptions: Vacancies
	Position Information with Attached EE Info
	Evaluate Careers
	Is a Line Manager
	Org Assignment

HCM Category	Name of Query
Payroll	Missing Permanent Address
	Missing Tax and Social Insurance Data (SA)
	Missing Specific Date Type
	Missing Tax and Social Insurance Data (DE)
	Missing Withholding Info W4/W5 (US)
	Payroll Results - by Check
	Pre-Payroll Missing Infotype Records (AUS)
	Incomplete Voids
	Missing Tax Data (Singapore)
	Missing Social Insurance Data (FR)
	Payroll Results - by Effective Date
	Payment Postings
	Missing Tax Data (AUS)
	3PR Postings Utility Report
	Missing Tax Data (UK)
	3PR Postings Completeness Checks
	Statistics: Gender Sorted by Age
	Payroll to Payment Postings

HCM Category	Name of Query
Payroll	Pre-Payroll Locked Employees and Infotypes (AUS)
	Pre-Payroll Employees Flagged for Retro Calculations
	Missing Tax and Social Insurance Data (ES)
	Missing Tax and Social Insurance Data (NL)
	Missing Tax and Social Insurance Data (CH)
	FI Postings Completeness Checks
	Missing Bank Details
	Payroll Status Information
	Missing Residence Tax Area (US)
	Basic Pay Information
	AU Payment Summary - WT Configuration
	Basic Payroll Query - Report of Gross Pay
	Payroll Results Multiple Periods
	Payment Summary - PAYG Amounts (AUS)
	Read BT Table in RM-Cluster
	Tax Infotypes Overview (USA)
	Payment Summary - Company Details (AUS)
	Payment Summary - ETP Amounts (AUS)
	Payroll RT to TCRT Compare
	Payment Summary - Override Amounts (AUS)
	Payment Summary - Employee Details (AUS)
	Read V0 Table in RM-Cluster
	Bank Details
	Year-to-Date Figures
	Pre-Payroll Australian Tax Information (AUS)
	Payroll to FI Postings
	FI Postings Utility Report
	Voided Checks
	Invalidated Pay Checks

HCM Category	Name of Query
Time Management and Evaluation	Time Evaluation Retro Dates
	Leave Provision - Long Service Leave
	Basic Leave Workflow Requests Report
	Quota Hrs Compensated by Time Period or Action
	Absence: Current and Previous
	Leave in Last n Months - Multiple Related Periods
	Time Evaluation Error Report
	Leave Provision - Rec. Leave (AUS)
	Cap Utilization, Work% and Work Schedule Info
	CATS vs Infotypes (Reconciliation)

E: What about Hybrid Reporting (SAP & SuccessFactors at the Same Time)?

While customers make the journey to the cloud, they are going to want to report on data from their on-premise SAP system in addition to their SAP SuccessFactors solution. Query Manager is designed to allow customers to do this. For the next few years, the most popular landscape model SAP's approximately 13,000 HCM customers will fall into is called the Hybrid model.

Customers in a Hybrid model have some of their data in an on-premise SAP system and some in the SAP SuccessFactors system. Examples include using SAP HCM on-premise for HR and Payroll, and SuccessFactors for Recruitment. There will be cases where customers will want to report on data on an employee, their pay or time details and any position that they may have applied for via the Recruitment module.

Other examples include customers who have deployed a side-by-side model wherein customers run both SAP and SAP SuccessFactors at the same time for different populations of employees. In that scenario data will be required from both systems to produce any consolidated company reports, headcounts etc.

F: What about Hybrid Analytics?

SAP SuccessFactors also uses the terminology Hybrid to include combining the SAP Analytics Cloud and SAP BusinessObjects Enterprise into a single solution that leverages the strengths of both platforms while enabling rapid innovation in the cloud. The SAP Analytics product strategy also includes the SAP Analytics Hub, built on SAP Analytics Cloud, which will be designed to provides a searchable catalog for all analytic content allowing customers to bring together all analytic assets whether on-premise or cloud, including SAP or third-party content.

Section F1:
Best Practice for Hybrid Reporting

While we look forward to the launch of SAP Analytics Cloud in the future and the potential ability for it to provide access to both on-premise and SuccessFactors data, in the interim, EPI-USE labs Query Manager can solve this business challenge.

The Query Manager solution by EPI-USE Labs provides access to on-premise SAP data as well as data from SAP SuccessFactors all in a single report. Query Manager includes access to thousands of data sources and enables users to create powerful reports, regardless of their landscape model. Query Manager is integrated with SAP SuccessFactors for on-premise SAP and hybrid SAP SuccessFactors reporting.

In addition, it allows users to add their own data sources inside SAP or their own external non-SAP data sources, perform calculations on the data, create charts via the Fiori app, produce visually stunning outputs via Document Builder, and schedule and distribute reports automatically.

THE QUERY MANAGER SOLUTION:
COMPLETE HCM REPORTING

How do you extract accurate, meaningful and real-time information from all of your SAP® HCM and Payroll data? Query Manager™ is a powerful, flexible, easy-to-use solution that solves your reporting challenges. The brilliance of Query Manager is that it empowers you to:

- Access all your data from a single solution in SAP
- Create your own professional reports and documents without reliance on technical resources
- Streamline your business HCM reporting.

KEY BENEFITS

250+
READY-TO-USE
DELIVERED REPORTS

80%
REDUCTION
IN REPORT
CREATION

ADD
EXTERNAL
NON-SAP DATA SOURCE
VIA FILE OR ODATA

13,000+DATA
SOURCES
DELIVERED

REPORTS BUILT
AND EXECUTED IN REAL-TIME
IN PRODUCTION CLIENT

SAFE
AND
SECURE

EASY ACCESS TO
REPORTS FROM
YOUR
BROWSER
SMARTPHONE
TABLET

DRAG
AND
DROP
INTERFACE

ACCESS TO
ALL HR,
BENEFITS,
PAYROLL,
ORG, TIME
DATA SOURCES

What our clients say

"Our QM reports routinely pull data from the de-clustered results and the Payroll Department relies on the information we provide from this table. This has been very helpful, and we have been able to spot discrepancies before we kick off live payroll."
— Shahin Ahmadpour,
Business Payroll Analyst – Payroll Strategy,
American Airlines

"I am blown away. (Query Manager) takes any and every variable in SAP, and can mash it up to a depth that is needed on my job. What I need it for is to dig into the depths of SAP for anomalies that I know lurk in bad data."
— Jane Coleman, EA, CPP Nonresident
Tax Administrator, Purdue University

"With Query Manager, we can securely access and distribute all SAP HCM reports quickly across the business."
— Warburtons

"What I appreciate very much is the rapid, non-bureaucratic, uncomplicated assistance from the EPI-USE Labs team. Query Manager should be, in my opinion, part of the standard SAP HR solution."
— Anton Mayr, Head of Payroll, Zürich Airport AG

2023 HCM AND PAYROLL REPORTING OPTIONS FOR SAP AND SAP SUCCESSFACTORS

DOWNLOAD NOW

epiuselabs.com

*The content in this book is valid as of the publication date (2021),
although SAP SuccessFactors continues to innovate in this space every day.*

*Be sure to keep an eye on https://www.sap.com/products/intelligent-enterprise.html to
stay up to date with the latest developments.*