Efficiently working with SAP ERP

There are a number of benefits and limitations of using SAP. Companies spend a great deal of time and money weighing these pros and cons, when they're deciding whether to implement SAP. Let's take a look at some of the most common benefits and limitations. First, we'll look at the benefits. Why would a company spend so much time and money getting rid of their old systems and transitioning to SAP? First, SAP eliminates information silos and standardizes data across an entire company or multiple companies. For example, instead of having one system that handles all of your company's suppliers and a different software that handles all your company's inventory, all of this information is kept current in SAP. As a result of all the company's data being standardized in one system, SAP can be set up to automate a business's core processes. Let's talk about an example of this automation. If there's a part that needs to be ordered every time your inventory starts to run low, rules can be set up to automatically order the new parts from your preferred supplier when stocks hit a lower limit. Also SAP ERP enables better decision-making because all of the businesses processes are in one system. You can create powerful real-time reports that provide in-depth data. Having access to this information in real time, allows decision makers to collaborate, solve problems, and recognize opportunities on the fly. Finally, SAP is known for robust security and compliance functions. SAP's role design feature allows for appropriate segregation of duties. Ensures that the right people have access to things like sensitive information or the ability to make business decisions. It's also possible to customize SAP configuration settings with a company's policies, ensuring compliance across the system and with government regulations. Now let's have a look at a few of SAP's limitations. SAP is notorious for a very high total cost of ownership or TCO. The software is expensive to implement and maintain. Not only is it expensive, it can take years to implement SAP across an entire organization. SAP is highly configurable and because every company is unique, customizing SAP to fit a business can result in unexpected multi-year implementations. Finally, the software itself can be really **challenging at first for end-users.** There's a steep learning curve that requires proper training for users to get up to speed. In companies where people have been doing their job a certain way for years, there can be huge resistance to change. These growing pains have to be addressed proactively with a robust training strategy to get users up to speed. There are a number of both benefits and limitations for companies that use SAP ERP.

SAP implementations and customizations

Implementing and customizing SAP to suit a company is a huge undertaking. Let's walk through this steps needed for a successful implementation. There are multiple successful strategies to implement SAP but they all follow a similar flow. Project preparation is first. This is where the cost and scope of the SAP implementation are defined. This is also the time to ensure there's a great team in place that has all the skills necessary for successful implementation. This team studies the current systems being used then they

determine which system interfaces are required. This step also includes business blueprinting. This is where requirements for the new system are mapped. The second step is called, realization. System configuration takes place during realization. Configuration is where SAP is matched with the company's existing business processes. All configuration is done utilizing the existing SAP structure in functionalities. In other words, configuration ties together the way a company works with the out of the box functionality of SAP. Realization is also where customization occurs. Basically customization is making a change that is not supported by SAP's default functionalities. Customizations are expensive and can really extend the length of an implementation. They can also complicate future upgrades. The third step in typical implementations, is testing. There are different types of testing. Unit testing is typically first and this is where we test individual parts of the program. An example here would be to make sure that each SAP transaction is working properly on its own. Next, integration testing test how the systems are working together and how the program affects downstream processes. These first two types of testing are usually executed by project team members. Next is user acceptance testing. This testing is where end users are able to get into the system and ensure that SAP has been configured to accomplish everything needed for the business to run well. And finally performance testing, ensures the system can handle all the data and transactions. This is the testing phase that makes sure the system is fast enough for the end users. The fourth step and an implementation is final preparation. This is where all master data like business partners in materials is uploaded into the new system. Final preparation is also where end user security rules are set up and training is conducted for all end users. The fifth step, is Go-live. This is when the actual switch from old systems to SAP occurs. These are frequently referred to as cutover activities. At this point end users start using the SAP production environment daily for their work. Finally, the last step is, post go-live support. This is where any problems in production that were missed during the other phases are solved. This is also a non-business critical or your nice to have customizations are developed, tested and implemented in a system. The SAP implementation process end to end can take as little as six months up to four or five years for very complex implementations. Companies often choose multi wave implementations. This means they'll implement in one location and ensure the system works well before implementing at other sites.

SAP ERP modules

SAP ERP is broken up into different modules that all interact with each other to form a comprehensive solution. Let's look at a very high level overview. There are two types of modules in SAP, technical modules and functional modules. Technical modules deal with SAP infrastructure. Work done in technical modules make sure the system runs correctly. Developing or maintaining functional applications is completed in technical modules. Because of this, most SAP end users never come in direct contact with any technical modules. We'll spend most of our time focusing on functional modules. Functional modules support transactions that align with business processes. These modules have very strong integration. This means they send

information between each other very efficiently, and this is one of the biggest strengths of SAP. There are many functional modules in SAP. Each organization can choose which modules they need to implement to suit their specific business. Let's talk through some of the most common functional modules. The first group we'll look at are accounting modules. SAP Financial Accounting includes the general ledger, accounts payable, and accounts receivable. Next is SAP Controlling. This is where profit center and cost center accounting are done. A third common accounting module is SAP Project System. This module houses project planning, project monitoring, and project costing functionality. The next group are logistics modules. SAP Sales and Distribution has sales order processing and shipping. The SAP Materials Management module includes purchasing, inventory management, and valuation. Next, SAP Production Planning includes production order processing and materials requirement planning. SAP Quality Management is where incoming, in process, and final inspection are done, and SAP Plant Maintenance includes breakdown, predictive, and preventive maintenance functions. Finally, SAP Human Capital Management in the human resources area can capture the entire cycle of an employee at a company, from new hire all the way to termination. Besides the typical functional modules, there are many industry specific modules available in SAP as well. Modules that are industry solutions start with I and S. For example, the IS-A module is built for the automotive industry while IS-U supports the utilities industry. Modules that are financial services related are built for banks and insurance firms. Two examples of financial services modules are FS-CM, which deals with claims management, and FS-ICM, which does incentive and commission management. Because of its broad capabilities, SAP has built modules for almost every common business process.

Master data vs transactional data

In SAP, we often talk <u>about two types of data</u>, master data and transactional data. Let's take a look at the difference between these two types. **Master data refers to all the information that deals with people**, places, or objects in the system. Master data is the foundation that the SAP databases are built on. Without accurate master data, transactions cannot occur. Master data tends to be **relatively static**. Examples of master data in SAP include the information in business partner records. This is all the static data about our suppliers and our customers. Another example of master data is our employee master data with information like employee name and social security number. On the other hand, **transactional data records the actions of a business**. This type of data represents the bulk of day-to-day transactions. Transactional data is **constantly changing**. Examples of transactional data in SAP include the information found in purchase orders, sales orders, or changing an employee's work schedule. Our transactional data depends on good master data. We need both types of data to be accurate to have an effective system. But if the master data is not precise, the transactional data will never be correct.

SAP clients

The term client in SAP has a unique meaning. Let's look at clients in the SAP world. Clients are essentially self-contained business units within each SAP system. When we log in to SAP, we choose the specific client we want to access. Each client is assigned a three digit number. In our screenshot, we're logging in to Client 150. There are different types of clients in SAP, and we'll look at a few of the most common here. End users typically log in to what is called the production client. The production client is the system of record for a business. Another type of client is quality assurance. This is where system developers can check on customizations and development changes and make sure they'll work with other parts of the system. Next the sandbox client is a place to experiment with new changes or customizations before they're moved into production. Finally, the training client is where all the end user training can take place. During training, end users can experiment freely in the training client without impacting our production client. These last three types of clients are what is often refer to as non-production clients. Let's take a look at how different SAP clients may be set up at a large company. Large companies tend to break their clients up by either business units or by geographic area. This example looks at a company that has different SAP clients for each of its business units. Our imaginary company is called Widgets R Us. Our company has two separate business units: widget manufacturing, and widget consulting services. Because our business units are guite different, it makes sense for us to have different clients for each business unit. On the widget manufacturing side we have Client 100, which is production, Client 101 for training, Client 102 for quality, and Client 104 as a sandbox. The consulting services side has a different production client. It's Client 110 in this case, and a different training client, number 111. This is a simple example, but the larger the organization the more complex the client structure will be.

Understanding SAP security roles

SAP has customizable security roles. Let's take a look at how they work. Not every SAP end user will have the same access in the system. When a user profile is first created, they are mapped to a security role. The role that the user is mapped to will either allow or deny access to different transactions. The assigned security role will also allow or deny access to different organizational levels in the system. Organizational levels are things like company code, plant, or sales organization. Security roles in SAP ensure that there is a segregation of duties across a business. They make sure that the right people are doing the right transactions in the right areas of the system. Let's look at an example. Let's imagine there's a shop floor manager and she's mapped to a role called manufacturing manager California. This manufacturing manager California role allows her to approve time off for her direct reports. It also allows her to create purchase orders in the system to order materials for her plant in California. Because her security role is mapped this way, she's denied access when she tries to approve time off for her coworker in the accounting department. The role she is mapped to does not show her coworker in accounting as one of her reports, so access is denied. Similarly, when she tries to create a purchase order for a plant in Toronto, her request will be denied by the system. Her role, manufacturing manager California, only allows her to create purchase orders for permitted organizational

<u>levels.</u> In this instance, her security role does not allow access to make a purchase for the plant in Toronto. As our example demonstrates security roles in SAP, make sure that users have only the access they need to get their job done effectively.

SAP Financial Accounting (FI)

SAP ERP is broken up into different modules that interact with each other. Let's dive into the SAP financial accounting module, often referred to as SAP FI. The SAP FI module is responsible for tracking and reporting on financial data across an organization. It contains nearly every financial business process a company may have. Because it is so versatile, the SAP FI module is one of the most widely implemented by companies using SAP. In SAP FI, all our transactions start and end with a general ledger or G/L. The G/L includes all of a company's financial transaction data and a chart of accounts where all of the accounts are listed in the system. Transactions are recorded in sub modules that can be reconciled with the general ledger data in real time. There are four primary sub modules of SAP FI in the general ledger. They are accounts payable, accounts receivable, asset accounting and bank management. Accounts payable, or AP is the sub module that houses supplier related data. This is where we can look at a business partner record for a supplier and see information like current payment terms. Capabilities of accounts payable include invoice and credit memo posting, invoice payments, and automatic payments programs. It's also where supplier reporting happens. Let's look at an example. In our test system, we're looking at a document of an outgoing payment for 15,000 U.S. dollars. We can see our vendor is called ABC Insurance. We can also see the general ledger accounts. Next we have accounts receivable or AR. This is where we deal with business partner records to manage our customer data. Transactions and accounts receivable include invoice creation, invoice posting and payments, and it's where we run any customer base reporting we may need. Again, let's jump into our system and this time we'll look at an accounts receivable document. Here we're looking at an invoice that was created from a sales order in the system. We can see that this invoice is for a payer named Midwest Supply Company. The net value of this invoice is 480 U.S. dollars. And in the line item area below, we have the specific line-by-line details for this invoice. We can see it that this invoice was for consulting services executive, and the customer was billed for four hours. The SAP FI sub module that deals with the company's fixed assets is called asset accounting. Examples of fixed assets are things like owned warehouses, land, vehicles, and computer hardware or software. Functions of asset accounting include recording acquisition, depreciation, sales, and the retirement of these fixed assets. Let's look at an asset master record. Back in our test system, we're looking at the asset master data for a 2019 Mercedes Sprinter. We see that the asset class for the Sprinter is vehicles. We could drill down and look at the value of this asset, including things like depreciation by pressing the asset values button in the bottom right. The final major sub module of the general ledger is bank accounting. It deals with all of the company's bank account transactions. It's used to reconcile all transactions recorded on bank statements and compare them with the transactions in the system to ensure that they balance. Let's look at a bank master record. Our test system is now displaying a bank master record for

Chase Manhattan Bank. It includes the bank key and the Swift number. A major benefit of the way the SAP FI system is designed is that all of the sub modules are integrated and transactions are updated in real time. This means that accurate financial statements can be pulled from the system at a moment's notice.

SAP Controlling (CO)

Let's look at the SAP controlling module, called SAP CO. SAP controlling deals with planning and monitoring business operation costs. It has powerful reporting functions and can show exactly where money is being spent at a company. Ideally, this can be used to increase profitability. The five primary sub modules of the SAP CO module are profit center accounting, cost center accounting, internal orders, product costing and profitability analysis. Profit center accounting is used to evaluate profit or loss of independent areas within a company. Instead of looking at a company's profitability as a whole. Let's take a look at a profit center in SAP. In our test system, we're now looking at profit center 1011. This profit center is called widget sales. We can also see this profit centers controlling area, which is controlling area 1000. In the validity date, we can see this profit center became valid on January one, 2017 and there is no end date for this profit center. Next, we'll look at cost centers. They deal with the costs associated with a company's internal departments, like sales or human resources. Cost centers deal only with expenses, not revenues. They show exactly how much departments are spending. Let's take a look at a cost center. Back in our test system, we're looking at a cost center 100105. And this cost center is called accounting. We can see that the cost of their category is marked as W. This means it's an administration cost center. Internal orders are used to manage the costs for small internal projects within a controlling area. Internal orders are used for in-depth analysis of short-term projects or a one-time expense, such as a trade show. Internal orders are different from cost centers. As they're able to collect both costs and revenue. In our SAP test system, we're viewing master data for an internal order for a Las Vegas trade show. We can see the order number at the top. We can also see the order type is Y400. This is the code for internal order marketing. Product costing looks at the costs required to produce goods and services. It gives clarity to manufacturing costs and it helps with decisions on whether it's worth buying a product to resell or better to manufacture it in-house. Let's take a look at an example. In our test system, we're looking at material cost estimate for material called blue widgets size two. We can see the value of \$187.50 for each one piece of blue widget size two manufactured. Finally, profitability analysis measures the profitability of the products or services offered. And it helps us make pricing decisions. A key feature is the ability to determine profitability by geographic region or country, distribution channels or how profitable sales to a single customer R.

SAP Sales and Distribution (SD)

The SAP sales and distribution module or SAP SD is the backbone of the selling and the transportation of products and services. SAP SD is a logistics module that is used to

deal with customer and product related data. Organizations use this data to manage all of the sales, ordering, shipping, billing and invoicing of their goods and services. SD is best visualized when broken into the sales cycle. First, our pre-sales actions where inquiries and quotations are created. Next is sales where sales orders or more robust sales arrangements, like contracts and scheduling agreements are created. Third is distribution. This is where delivery documents are created. And goods are picked from the warehouse, packed and then shipped to the customer. Last is billing and returns, where billing documents and invoices are created. And if necessary, any return orders are also created. Let's look at a typical sales and distribution process in the system. First, we're going to look at a quotation from our pre-sales step in our test system. This quote is for a customer called Seattle Retailers. The total amount of this quote is 2,500 U.S. dollars. When we look below in our item list, we see that this quote is for a potential order of 50 small steel plates. Moving on to an example from our sales phase, we are now looking at a sales order in our test system. Sales orders are very similar to quotations. We can actually create sales orders with reference to the quotations that are already in the system. This will bring over a bunch of information like the sold to and shipped to parties, ao we don't need to reenter that information. In our example sales order, we again see our customer is Seattle Retailers and our net value is 2,500 U.S. dollars. However, when we look below and our item overview, we see that this order is for 50 large steel plates. After sales orders are finalized, our shipping documents are then created. Now, we're looking at an outbound delivery document. Here, we can see the dates for the products for this order were loaded from the warehouse and delivery date in time of 11 o'clock of March 16th, 2018 to our customer. So we've looked at our sales quotes, the sales order and our outbound delivery document. The final step in the process is billing. Now we're looking at an invoice. Here, we can see our net value of 360 U.S. dollars, the payer, which is Georgia Distribution and the billing date of March 13, 2018. We've had a look at the general sales and distribution process in SAP. Each of these steps in the SAP SD module generate transactions in the other modules in SAP. Let's review two common examples of this integration. First, when a sales order is generated, the system does a product availability check in the materials management module to make sure there is actually stock to be sold. At the same time, SAP also runs a credit check for a customer in the finance module to ensure this customer will be reliable about paying their invoices. The sales and distribution process is highly dependent on other modules. This tight integration enables efficient selling and transportation of products and services at a company.

SAP Materials Management (MM)

The next module we'll take a look at <u>is materials management or MM.</u> This is a logistics module that many other modules rely on to keep the supply chain functioning. Materials management ensures that there are always the required materials in stock. The key benefits of materials management are the way it can help increase productivity and reduce costs by handling materials efficiently. The four major components of materials management in SAP are material master data, purchasing, inventory management and physical inventory. First, we'll look at master data in materials management. One

component of MM master data are material master records. They include a huge amount of information about a specific material. Next, our business partner records for suppliers. These records document all the physical and financial information pertaining to the suppliers a company is working with. Finally, we've got purchasing information records. These act as the marriage between material information and supplier information. For example, a supplier's current price of a particular material is stored in the purchasing information record. Let's look at a material master record in the system. This is the basic data one screen of a material master for material TTS five. In our description field, we can see that this material is a small titanium screw. Our record also shows the base unit of measure. In this case, our small titanium screws are sold by piece. When we scroll down, we see the dimensions area that shows that the net weight of each screw is 35 grams. Across the top, where it says basic data one, basic data two, purchasing, et cetera. Each of these are tabs that has many fields that allow for input. These tabs have over 200 available fields. There are a few required fields, but a material master can be as detailed as a company needs. The next MM module component we'll explore is purchasing. This includes procurement activities, like purchase requisitions and purchase orders. Let's take a look at a purchase order in our system. We're now looking at a standard purchase order and we're in our delivery slash invoice tab. We can see the vendor number and name. This purchase order is for Indiana Supply Company. And the date the order was created was March one, 2019. The grid below shows line items of what was ordered. It looks to be a raw material named RM20 and 500 pieces were ordered at a price of \$1.23 per piece. Inventory management and the MM module does exactly what it says. It manages the inventory. Examples here include goods receipts from suppliers and internal transfers, where we move a material from one storage area to another. Let's look at an inventory management report in the system. This is an important inventory management report that showing all the goods receipts at a particular plant. In the first column, we have which material was received. In the second column, we have our plant, which is 17, 10. In the third column, we have our storage location within that plant. The last three columns show us when the material was received, how big the order was and in what unit of measure. Was it in pieces or eaches? Closely tied to inventory management, we've got physical inventory. This is where physical inventory is documented. Various inventory strategies can be implemented. For example, a company may choose periodic inventory where they count all inventory at a specified time. Alternatively, a company may go with a process, like cycle counts. A cycle count is where a small sample of inventory in one storage location is counted at a specific time. Let's look at a physical inventory report in our test system. This is a report showing our physical inventory for a specific material called small widgets. At plant 1710 in storage location 171A, we can see that our current stock 4,998 pieces was last counted on June 11, 2019. The last column shows that our inventory counts still needs to be executed for our current period. When used effectively, the materials management module is a powerful tool to ensure an efficient supply chain.

Let's look at the SAP Production Planning module, often abbreviated as SAP PP. This module is used to help plan the manufacturing for sales and distribution of products. SAP PP has the ability to handle businesses that have both repetitive manufacturing models where the manufactured products stays the same over a long period of time and discreet production models. Businesses using discrete production models tend to use order based production where the product is customized or change frequently. Four of the major aspects of SAP production planning are: the bill of materials, routings, capacity planning, and materials requirement planning. Let's take a look first at the bill of materials. The bill of materials is often referred to as the BOM in SAP. It is a complete list of the materials, assemblies, and other components needed to manufacture a product. Essentially, a bill of materials is the ingredients list part of a recipe. Let's take a look at a BOM in the system. This is a bill of materials for a metal picture frame. We see that there are three line items in our material grid below. This means there are three components to make up our metal picture frame. Each of these components has a different quantity needed to make up the product. Our first line item shows that we need four pieces. The second, eight pieces, and the third row we see we need 32 pieces. Routings are up next. They are description of which operations and in which sequence these operations need to occur for something to be produced. Routings are used for scheduling the production of semi-finished and finished products. They are also used to help calculate the operation cost for a finished product. We talked about the bill of materials acting like the ingredients list of a recipe. In our example the routings act as the step-by-step instructions of the same recipe. In this case to make a product. Let's look at a routing in SAP. We'll look at the same product as in the bill of materials. Our metal picture frame. This is a simple routing where there's only one operation and it's called assembly. This routing tells a lot of information. We have a base quantity of 100 pieces and it's going to take 30 minutes to set up the machine, and 10 minutes of labor to complete the assembly operation. Next up is capacity planning. Capacity planning is done to balance the production load across different work areas which called work centers in SAP. Over in our test system, we're looking at a report that displays that capacity evaluation of the assembly work center at plant 1710 over a specified date range. For each weekday date, we can see that there is a 480 minutes of available capacity. If we look at our last column, which is remaining available capacity, we can see that all of our capacity is remaining. This means we can start booking production to this assembly work center right now. Materials requirement planning called MRP is used to ensure every material we need is available for production. The key feature of MRP is that when it is run, it will create procurement proposals. It ensures production can happen to meet our demand and it minimizes the cost of holding too much unnecessary inventory. Let's look at MRP in the system. Back in our test system we're looking at an MRP list for our metal picture frame. It shows us that we have an available quantity of zero in our stock, but we have a quantity of six of this material in storage location 171D that is sitting there because of a production order from July 12th, 2018. The production planning module enables businesses to efficiently produce the goods needed to meet customer demand.

SAP Quality Management (QM)

Let's explore the SAP Quality Management module, also known as SAP QM. As the name indicates, this module deals with managing quality throughout a company's processes. There are three major areas of the Quality Management module. They are quality inspection, quality control, and quality notifications. Let's take a look at each of these areas. Quality inspection helps determine if the units inspected meet defined quality requirements. This is where inspection lots, results recording, and defect recording all take place. Let's take a look at an inspection lot in our SAP system. This is an inspection lot for a goods receipt. That means we're inspecting goods that were ordered from an external vendor. This inspection lot had a quantity of 10. Of these 10, zero units were defective or destroyed. Quality control is the area where different preventive, monitoring, and corrective activities take place. This is also where suppliers can be evaluated on quality. If a supplier's products are consistently not meeting a company's quality standards, it shows that it would be worthwhile seeking out a better supplier. Let's look at an inspection plan in the system. This is an inspection plan for manufacturing of material SG29 at plant 1010. For this material, this inspection plan applies to all lot sizes from quantity one and up. Finally, quality notifications are used to record internal or external problems that are caused by poor quality. Quality notifications can be created anywhere in the product cycle. This includes incoming inspection when a product has been purchased externally and final inspection before sending finished products out to our customers. SAP Quality Management measures and monitors quality against company defined standards all throughout the procurement and production phases.

SAP Plant Maintenance (PM)

The SAP Plant Maintenance or PM module functions to keep a plant working at the most efficient and effective level possible. Plant Maintenance has three major areas, inspection, preventive maintenance, and repair. First, we'll look at inspection. Inspection measures the actual current condition of a production area. Next, preventive maintenance is used to maintain the ideal condition of a production area. Similar to how an oil change in your car keeps everything in good working order, preventive maintenance in SAP ensures the work areas are kept in the best condition possible. Finally, we have repair. Repair functions are used to restore the ideal condition of a production area. Functionality here allows immediate response to an event that causes a production shutdown. Let's look at plant maintenance orders in SAP. Over in our test system, we're looking at a list of plant maintenance orders. Each of these orders has a description of what needs attention. In our first line, we see a need to repair a leaking valve. The column equipment signals the asset that needs attention. Our last two columns show the plan total cost and the actual total cost of maintenance. In our first line, Our asset that needs attention is a cooling tower fan. The plan total cost is \$262.08, but work has not begun on this order, so the actual total cost is still zero. The plant maintenance module in SAP helps keep businesses functioning at the most optimum levels possible.

SAP Project System (PS)

- [Instructor] SAP Project System abbreviated PS is SAP's integrated project management tool. SAP Project System enables companies to manage all projects, large or small scale throughout their life cycle. This includes project planning, execution and completion. The project system module supports projects that are financed internally and externally. Internally financed projects are projects related to capital investments or overhead cost projects. And these projects are funded by the companies themselves. On the other hand, there are externally financed projects. These are the projects which are sponsored by clients and are executed to meet client requirements. The key component of SAP Project System is the work breakdown structure called WBS. WBS forms the basis for organization and coordination in a project. It shows the amount of work required, how much time each segment of the project will take, and the costs involved. They act as buckets where costs and work can be assigned and then rolled up into a larger project. Once work breakdown is calculated, we're able to accurately begin process planning, cost planning, scheduling, and date and capacity planning. Let's take a look at a small piece of the project system module. Over in our test system we're viewing the assignment tab of the project builder for a work breakdown structure element. In this case, it's number 41. The assignments of this element have designated some organization data including the controlling area A000, company code 1710 and the plant, which is also 1710. SAP Project System is a powerful project management tool that manages a project's entire life cycle.

SAP Human Capital Management (HCM)

- [Instructor] Next we'll cover SAP Human Capital Management, or SAP HCM. This module is a SAP solution to manage all human resources processes. The Human Capital Management module has a huge amount of capabilities. Major HCM functions are broken down into different areas. All these functions in the HCM module rely on organizational management. This is where the organization is populated with different areas, positions, and employee names. Next is employee administration, which handles employee addresses, bank details, and tax information. The HCM module also houses time management to record attendance, shift management, and leave accruals. This ties in to benefits management. Benefits management is where companies can create their own unique benefits packages. Next, the recruiting capabilities of HCM include applicant tracking and reporting. This helps a company figure out how effective their recruiting efforts are. There's also a platform that links with external recruiting websites. Finally, learning management helps enable online and classroom training. It includes a learning management system to track the completion of courses by employees. Let's look at two of these areas in our SAP system. In our test environment, we're viewing the personal data of an employee named Mr. Andrew Ulysses. Important to note on this screen is the start date and the to date. This employee started on March 9, 2017, and because this to date is 12/31/9999, it signifies that this employee is still working at the company. Now let's take a look at a list of vacancies in our test organization. This company has six open

vacancies. We can see the description of these vacancies in our activity column. Four of the positions open on June 12th, and the other two open on June 19th. From this report, we can tell that none of these vacancies have yet been filled. We know this because the status is marked as vacant for all six of these positions. SAP Human Capital Management has a multitude of tools to help support the human resources activities at a company.

Logging on using the SAP GUI

- [Instructor] We're now going to log on to the SAP GUI or GUI. GUI stands for graphical user interface. To log on, we need the SAP software installed correctly and an internet connection. Oftentimes companies will require employees to be connected to the company's network to establish a connection with the system. This could mean we need to log onto our company's VPN when we're working remotely. When installed properly there'll be an icon on our desktop or a windows menu option in the SAP front end folder called SAP log-on. Double-clicking on SAP log-on will open the SAP log on pad. When our SAP system is set up properly with at least one connection created, we'll see it in our connections list. In our test system, the connection we'll use is commercial SAP S/4 HANA 1709. So we'll select it and click log on. This opens up the SAP log on screen. The first field we want to look at is called client. Clients are a way to separate data. For example, many organizations will have a testing client to test different functionality and a production client where all the real world operations are being done. The client field is where we enter the number of the database we're accessing. In this case, client 150 is our test client, so we need to enter 150 in the client field. Next is the user field. This is where we enter the username. And in our test system we'll enter username student001. This field is not case sensitive. Next we need to enter our password. Each organization can customize their own password rules. The first time we log on to a new client, SAP requires us to change our password. We'll enter the password now, and we can either press enter on our keyboard, or we can go to more user log on. We have successfully logged on to SAP, and this brings us to the SAP easy access screen where we can begin running transactions.

Menu tree navigation in SAP

- [Instructor] Now that we've logged on to SAP, we're here on the SAP easy access screen. To do anything in SAP, we need to enter into what is called a transaction. Transactions can be entered using two methods. First, transaction codes can be entered in our command field. The other way to enter a transaction is using the menu tree. In our SAP menu screen, the folders and their associated transactions are organized by business area. Let's imagine that we are looking for accounts receivable transactions so we can post incoming payments. We're going to use the SAP menu tree to drill down to find the appropriate transaction. First, we'll expand the accounting folder. Then we'll expand the financial accounting folder. Here, we see the accounts receivable folder and can expand that. Again, we want to post incoming payments. This transaction is under document entry, so we'll expand that folder. Here, we see F-28 incoming payments. To enter this transaction, we'll double-click on that line. We have now

entered the post incoming payments transaction using the SAP menu tree. The menu tree is one effective way to drill down by business area and navigate to our needed transaction.

Transaction code navigation in SAP

- [Instructor] Again, to do anything in SAP, we need to enter into what is called a transaction. Transactions can be entered using the SAP menu tree or by using transaction codes. In the SAP world, these are often referred to as T-codes. A T-code consists of letters, numbers, and punctuation. Every transaction in SAP has a T-code associated with it. Navigating with T-codes is usually much faster than drilling down using the SAP menu tree. SAP users almost always navigate using T-codes and most users end up memorizing the T-codes that they're using often. A quick search can help us out if we do forget a specific T-code. To navigate using a transaction code, we'll start on the SAP easy access screen. We'll click in the command field. This command field is at the top of every screen in SAP. We want to enter into the post incoming payments for accounts receivable transaction. The T-code for this is f-28, and we enter that directly into our command field. Transaction codes are not case sensitive. We'll then press enter. We have now entered the post incoming payments transaction using the T-code f-28. If we forget what transaction code we're in, there's an easy way to find out. First, we'll go to the SAP menu bar at the top. Clicking the left arrow, we'll expand our system information. When we click HS4(1)150, it brings up a dropdown of all of our system information. Clicking on transaction shows our transaction code which is f-28. A really helpful hint in SAP that works most of the time is understanding that transaction codes ending in 01 are create, Tcodes ending in 02 are change and T-codes ending in 03 are display transactions. For example, mm01 is a transaction code to create a material. Mm02 is the T-code to change a material and mm03 is the T-code to display a material. Finally, whenever we encounter a transaction code that starts with the letters Y or Z, we know that this is a custom transaction. Transaction codes starting with Y or Z are not standard out of the box transactions from SAP.

User menu and settings in SAP

- [Instructor] Let's talk about adjusting <u>some of our user settings in SAP.</u> The SAP GUI has many different settings that can be changed. The setting changes are tied to our SAP login ID and they'll stay in place every time we log in to the system. First, let's talk about changing our theme. To do this, we'll go to more, SAP GUI settings and actions, options. On the left side, under visual design, we'll click theme settings. We can see that our current theme selected is the Belize theme. If we chose another theme and clicked apply, our change of theme would show up the next time we logged into the system. Just be aware that by changing these themes, the menu bars and the buttons sometimes change from words to icons and vice versa. There are many other keyboard and visualization settings that can be adjusted. Let's look at one now called tool tips. to do this, we'll look under interactive design and click notifications. It's recommended the new users turn the tool tip on. This means that whenever we hover over a button or icon in the

system, a hint will pop up to describe what the icon or button actually does. We'll change our tool tip delay from no tool tip to medium, 0.5 seconds. We'll click apply and OK. The third helpful setting we want to turn on is called displaying technical names. Right now, when we look under our favorites folder, on the left side of the screen, it says create material. There's no transaction code showing. Let's turn on our display technical names. To do this, we'll go more, extras, settings. The settings menu has four options that are all preferences about our SAP easy access screen. For this setting, we're interested in the last option. We'll click the check box to activate it to display our technical names. Then we'll press continue. We now see under our favorites folder on the left side of the screen MM01 create material where MM01 is the transaction code for this favorite. This is a helpful way to start memorizing the T codes we need to use frequently. There are many user settings we can customize in SAP. We can continuously fine tune to make the software work best for our needs.

Working with favorites on the SAP easy access screen

- [Instructor] Many end users find themselves using the same transactions over and over. We're going to look at using the favorites folder on the SAP Easy Access screen as a shortcut to all the transactions we regularly use. Let's walk through the steps to add, delete, download, and upload our favorites. First, we'll add a transaction to the favorites folder. To do this, we'll right click on the favorites folder and click insert transaction. We're prompted to enter a transaction code. We'll enter mm03, which is Display Material and click continue. We now see mm03 Display Material under our favorites folder. We'll do this again for the Change Material transaction. We'll right click on favorites, choose insert transaction, and enter the transaction code. For changing material it is mm02, and press continue. We'll do this one more time for create material. We'll right click on favorites, choose insert transaction, and enter mm01 for create material and press continue. To answer any of these transactions we have now favored it. We can simply click on the line of the transaction we want. Next, let's look at deleting favorites. If we want to delete any of these transactions from our favorites, we right click on the favorite we want to delete. We'll right click on mm01 and choose delete favorites. SAP gives us an information message at the bottom telling us that the note was deleted from our favorites list. Perhaps we want to share our favorites with a colleague because we have a similar role and use similar transactions in SAP. We can do this by clicking More, Favorites, Download to PC. We need to enter the file name, we'll enter SAP favorites and click save. This object with all of our favorites is now saved on the local PC. To demonstrate that our download and upload works, we'll quickly delete our remaining favorites. We'll right click mm02 and choose delete favorites. And we'll do the same with mm03. We'll right click and choose delete favorites. Now to upload our favorites, we'll go to More, Favorites, Upload from PC. We'll choose SAP favorites and click open. Now we see our favorites folder includes mm02 and mm03, Change Material and Display Material. We have now added, deleted and downloaded and uploaded our favorites on the SAP Easy Access screen.

- [Instructor] There are some common icons, buttons and system messages that we encounter often when we're working in SAP. Let's take a look at a few. To demonstrate, we'll enter into a transaction to change a material. The T code for this is MM02. We have two fields available in this transaction, material and change number. The red asterisk next to the material field means that it's a required field. If we try to continue without entering a valid material, we will hit a hard stop. To demonstrate, we'll leave the material field empty and click continue. This brings up a red error message in the footer bar. We can go no further until we fill out all required entry fields. We'll enter material FG dash MAT dash zero one and press continue. This brings up a list of views to select. Each view has a checkbox next to it. Check boxes are used when the system allows multiple choices. We can choose as many views as we like here. Checkbox screens also include select all and de-select all buttons. We'll select all our views and de-select all our views. For our demonstration, we'll select basic data one and basic data two. The green check mark is the continue button. Anytime we see this button, we can click it or we can press enter on our keyboard. That brings us to our change material. In our description field, we see this material is called small widgets. This transaction and many other transactions use tabs. Tabs separate the information in a transaction where there are many fields. To navigate between the tabs, we can click on the tab itself. We'll click basic data two now. Or we can click the ellipsis, the three dots. This will bring up all available tabs. Then we can choose our tab from this dropdown menu. We'll click on plant stock tab. This brings up a dialog box. Dialogue box is asked for more information before we can proceed. We'll enter plant 1710 and press continue. Let's make a simple change to this material. We'll change the description from small widgets to small widgets red. And we'll click save to save our changes. We now get a green success message that our material has been saved successfully. We've seen the red error message and the green success message. There's a third information message that's important. It is the yellow message. We're going to hop over to a different transaction to demonstrate this. We're now in the create sales order transaction. We've pre-populated some information to demonstrate the warning message. We'll now try to save the sales order by clicking save. We'll choose a sales area for customer and click continue. Now we get our yellow warning message. The yellow warning message here is basically saying, there probably should be some more information. It should include the customer's purchase order number and the customer's reference date. However, these fields don't have a red asterisk. They're not required by the system, so we could press enter and continue on in our transaction. There are many common icons, buttons and system messages in SAP. After spending some time in different transactions, end users get very familiar with all of their functions.

Multiple SAP sessions

- [Instructor] Oftentimes, we're going to want to do multiple things in SAP at once. Now, we're going to look at how to use multiple sessions and navigate from within transactions in the SAP GUI. We can have up to six sessions open at one time. To open a new session, we go to the three lines in the top left corner, click and select new GUI window from the dropdown menu. We can now see that we have two SAP, easy access screens

available meaning we have two SAP sessions open. Once we're in a transaction, transaction code navigation changes a little bit. We're going to enter into display a sales order with transaction code va03. Maybe we realized what we need to do instead is display a purchase order. The T code for displaying a purchase order is me23n. We'll try to enter that T code directly in our command field without going back to the SAP easy access screen and press enter. The system gives us a red error message telling us we must fill out all our required fields first. There are two important codes to remember in this situation. The first is /n as in November. We must type forward slash and n and then the T code immediately after. So we type /n then the T code me23n and press enter. Now, we're taken into the display purchase order transaction. The other important code to remember is used to open a new session in a new transaction. This code is /o as in Oscar. So if we want to display a purchase order in one session, and we want to open another session where we're displaying a sales order, we can type /ova03. We now have multiple SAP sessions with different transactions open in each of them. Remember, /n navigates to a new transaction in the same session and /o opens a new transaction in a new session.

Searching for data and using wildcards

- [Instructor] To use SAP effectively, we have to find the data we want to work with. Whether it's a customer number or a material number, it's impossible to have it all memorized. Any editable fields in the SAP gooey that are not freeform text fields allow us to search for the data we need. To demonstrate, let's enter and display a material transaction using the code mm03. We need to display a material but let's imagine, we don't know the material number we need. When we click on the material field, the match code button appears. Anytime the match code button shows up in SAP, we have the opportunity to search. We'll click the match code button now, this opens our search screen. The search screen allows us to search using a large variety of data combinations. By clicking the three dots on the right side of this screen, we can see all the tabs with the possible search combinations. Let's assume that we know the material we're searching for has a description called, forklift. So we'll search by material number/material description. Now in our material description field we'll enter forklift and press, Start Search. Our search returned one exact match which has material CM-FL-V00. We'll click this and press Copy. We now have this material number entered into our material field. Sometimes we will only have partial information for our searches. Wild cards allow a search when we only have some information. The search wild card in SAP is the asterisk. As an example, what if we know we're searching for material that has forklift somewhere in the description but it's not an exact match. To demonstrate it, we'll delete this material and again, we'll press the magical button. This time in our material description, we'll use our asterisk wildcard, type forklift and type, asterisk again. This search is telling the system that anything can come before or after the word forklift but the search should return all those results for us. We'll now press Start Search. We now see that we have 11 materials that have the word forklift in the material description field. We

can use wildcards in any searchable fields in SAP. Wildcards make searching in SAP much easier and more accurate. Even when we only have partial information available.

Printing in SAP

- [Instructor] Setting up the default printer in SAP is really helpful to get physical outputs from our system, and it's one of the first things to do when working in a new SAP system. Let's set up our default printer now. To do this, we'll go to More, System, User Data. This opens our Maintain User Profile screen. From here, we'll click the Defaults tab. Now, under Spool Control, we need to set up our default printer in the output device field. To do this, we'll click in there and choose the match code button. We'll leave all our fields blank and choose Start Search. Our search returned three possible default printers. At larger organizations, this list can be massive. We'll choose LP01 and select Copy. We'll also check the Print Now box. If left unselected, the system retains printing requests in the spool system until they are released for printing all at once. We'll also check the Delete After Output box. This indicates whether lists are to be deleted immediately after printing, otherwise, if left unchecked, what has been requested to be printed stays in the spool system until an expiration date. Now we can Save. We see we get a success message that our user ID, student 001, has changed. It's important to note that our default printer will not take effect until we log off and log back onto the system. To do this we'll press Exit and confirm Yes, we do want to log off. Now we can log back on. We'll enter client, username, student 001, and password, and press Enter. Our default printer is now set. To demonstrate printing, we'll enter VA05 and press Enter. This is our list of sales orders reports. We're going to run this without any selection criteria by pressing Execute. Now on most report results screens, we'll see our print icon, which is in our top right next to the Exit button. When we click this, we'll be able to print a physical copy to the default printer we just set up. Setting up our default printer and printing can be crucial when we need a physical copy of important system information.

Basic report selection criteria for SAP

- [Instructor] Reporting an SAP is only useful when we're able to define and narrow our selection criteria so the report results become meaningful to us. Let's enter a report transaction so we can look at entering our selection criteria. We'll enter our list of sales orders report using transaction code va05 and pressing enter. This brings us to the report selection screen. This is a good example of what many reports selection screens look like. It's broken down into five parts. First, the sales document data area allows us to define the objects we want to include or exclude in our report. It could be typical for someone running this report to enter the sold to party. This is another way of asking the report to show us all the sales orders for only one customer. The next area is persons responsible. This is where we could look at all the sales orders created by one employee at our organization. We'll scroll down and up next is the partner area. This is where we could define different business partners that made orders. Next is the organizational data area. If we wanted to see all the sales orders for only one sales organization or only one

distribution channel, we'd enter that here. Finally, we have the selection criteria area. The radio button currently selected will show us all the sales orders. We could choose to report on only the open sales orders by selecting that radio button. We're going to keep this report broad, so we're going to scroll back up, we'll click on our order type field and choose the match code button. From here, we'll choose OR for standard orders and click copy. This could be quite a large report as we haven't entered very specific search criteria. This is a good time to point out the stop transaction feature. If we're ever running a report and this system is taking a long time to return our results, we can stop the transaction. This is done by clicking on the three bars in the top left corner of the screen and selecting stop transaction from the dropdown menu. This will take us all the way back out to the SAP easy access screen but sometimes this is a good option when we realize we want to narrow our report further. Okay, let's execute this report. We'll click execute. We see we have our list of sales orders report results and we have 114 sales orders. Defining our selection criteria is a key component to effective reporting.

Using the multiple selection tool in SAP

- [Instructor] Now, let's have a look at how to fine-tune our report selection criteria using the multiple selection tool. To do this, we'll enter va05, which is our list of sales order report and press Enter. This brings us to our list of sales orders selection criteria screen. The button at the end of each of these fields is the multiple selection button. We'll click the multiple selection button at the end of our order type field. The multiple selection screen has four tabs. It has options to select multiple single values. We can also select different ranges of values. Ranges are important in fields that use numbers and dates. We can also exclude single values. And finally, we have the option to exclude ranges. In our example, we want to exclude the return order type. So we'll click exclude single values. In the first line item, we'll click the Matchcode button to see our options. We want to exclude returns from our report, so we'll click RE and click copy. To copy this criteria into our selection criteria, we'll click the Copy button. We'll also make a multiple selection in our organizational data. Let's scroll down. And this time in the sales organizational field, we'll click the multiple selection button. Here we want to include sales organization 1010, and 1710. Again, we'll click Copy. Now we see our multiple selection button has changed. When we hover over it, it says multiple selection active. We'll now execute this report. Our results show all sales orders at sales organizations 1710 and 1010, while excluding any returns from our report results. The multiple selection tool enables more robust reporting as we can get very specific about what we include and what we exclude in our report selection criteria.

Creating search variants in SAP

- [Instructor] Sometimes, we need to run reports with the same search criteria over and over again. Search variants are a great shortcut to do just that. Let's create one now. To do this, we'll enter our list of sales orders report using transaction code VA05. Let's say we need to run the report on a weekly basis to see open sales orders in sales organization

1710. First, we'll enter our sales organization. We'll scroll down, and then, our organizational data area, in our sales organizational field, we'll enter 1710. Again, we only want to see open sales orders. So under our selection criteria area, we'll choose open sales orders. Now we're ready to save this as a variant. We'll choose the save as variant button. First, we need to name our variant. We'll call this 1710 OPOR, and in our description, we'll call this 1710 open orders. Now we'll press save. We see in our footer that we get a success message that our variant 1710 OPOR has been saved successfully. To make sure this works, we'll clear our sales organization field, and we'll choose the all sales orders radio button. Now, we'll call our variant. To do this, we'll go to the get variant icon, and we'll choose 1710 OPOR, and press choose. We now see that our sales organization has been repopulated with 1710, and our selection criteria, the radio button has been shifted to open sales orders. We're now ready to execute the report. Our report results return 20 entries. We can see in the first column that the sales organization shows results are only from sales organization 1710. Search variants can be a big timesaver for reports we run frequently with the same selection criteria.

Reporting layouts in SAP

[Instructor] After executing a report, SAP gives us our results in a standard format. The output won't always display all the fields we need. And sometimes the format is not very easy for us to work with. To fix this, we can edit the layout of our report results and save it as what SAP calls a display variant. To demonstrate, we'll run our list of sales order report. To enter this transaction, we'll enter T code va05 and press Enter. We're going to run this report without any selection criteria, so we'll press Execute. A great trick when running any report is to optimize the width of all of our columns. To do this, we'll right-click and choose Optimize Width. This makes the data much easier for us to work with. Our default output has 11 columns. By default, the system is displaying only the data it thinks is important. There are many hidden rows of data. To see these, we'll click the Change Layout icon. This brings up the Change Layout screen. SAP sometimes calls this our layout and sometimes calls this our display variant. On the left side of the screen, we see all of the columns that are displayed in our report under Displayed Columns. It also shows the column position. Customer Reference is in position one, which is first in the left. Document Date is in position two, which is second from left, and so on. On the right, we've got the Column Set. These are all the possible columns that are currently hidden. As we can see, there's a ton of information that's not displayed by default. To move any of these fields into the displayed layout, we can select them and click the single left arrow. To demonstrate, we'll move Sales Organization and Sold To Party Name over to our Displayed Columns. First we'll click Sales Organization and choose the left arrow. Next, we'll scroll down and choose Sold To Party Name and again click the left arrow. Now let's edit our column order. We want our Sales Organization first, so we'll click the Sales Organization and click the double up arrow, which is Move to Top. Next, we want our Sold To Party Name just above our Sold to party. So we'll select Sold To Party Name and click the up arrow. We'll click it multiple times until it's above our Sold to party. Now we'll click Adopt, and the changes to the report results are made. We can see our Sales

Organization is now in our report results in the first column. We can also see our Sold To Party Name is in our report results next to Sold to party. We can now save this layout for future use. To do this, we click the Save Layout icon. We need to name this layout. We'll call it /LIL. The reason we start with a slash is because we want to make this a global layout. When we think our colleagues might find this layout helpful, this will give them access to it. We'll also enter a description in the Name field. We'll call this LinkedIn Learning. Now we'll press Adopt. In the status bar, it shows that the layout has been successfully saved. We have successfully edited the layout of our report results. And now we can use it in the future, anytime we run this report.

Sorting reports in SAP

- [Instructor] Sometimes, we need to mold our report results to make our data more useful. The sort function is a helpful way to order our numerical or date fields. We can sort to see data in order from oldest, newest, biggest or smallest. Let's sort a report in our system. First, we need some data. We'll go into our list of sales orders report using transaction code VA05. We'll now execute this report without adding any selection criteria. In our first sorting scenario, let's say we want to see their sales order with the largest net value by item. To sort this column, we'll click the column title. Then we'll click the sort in descending order icon. We now see a little red arrow pointing down, which denotes that we've got an active sort, and that sort is descending. We can also see that our largest order by net value per item is \$120,000 U.S. In our next sorting scenario, we want to see the oldest order in our system. To do this, we'll go to our document date column and click. Now we'll click the sort in ascending icon. We can now see that the oldest order in our system is from March 4th, 2018. The little red arrow pointing up shows that we've got an active sort, and that sort is ascending. Sorting can be a powerful tool to help us visualize our SAP report results in a more useful way.

Filtering reports in SAP

- Filtering is a very useful tool to narrow report results when the report has been run too broadly. It allows us to drill down and see the more narrow results that we define. To demonstrate, we need some data. We'll enter our list of sales orders report using transaction code VA05. Now, we'll execute this report without any selection criteria defined. We can now see that our report results show 120 sales order entries. Now let's filter. First, we'll click our set filter icon. Filtering is a two-step process. First, we have to decide what we want to filter by. Let's say we want to see only sales orders that include a specific material. First, we'll click material from the column set and click the left arrow. This moves us in to our filter criteria column. The second step is to define our filter values. We'll click the define values button. This opens our determined values for filter criteria popup. We'll enter our material number fg-mat-01, and press execute. We can now see that 14 sales orders fit our new filter criteria. When we look at our material column, we see that all our sales orders contain the material fg-mat-01. Filtering is similar to narrowing a report

selection criteria, but in this case, it's done after we've already run the report. Filtering is a really useful tool to drill down within our report datasets.

Printing reports from SAP

- Sometimes we need a hard copy of our report results to share with our colleagues. Let's look at printing reports in SAP. We'll enter the list of sales orders report using transaction code va05. We'll run our report without entering any selection criteria by pressing execute. Now we'll enter the print preview function. To do this, we'll go to More, List, Print Preview. Our print preview screen gives us a slightly different look than our normal report results page, but we're happy with how everything looks here, so we'll press Print. We must set up our Output Device. We'll click the match code button and press Start Search. For the purposes of this demonstration, we're going to print to PDF, so we'll choose output device PDF1 and click Copy. We also want to ensure that our print time is set to immediately. We're ready to print, so we'll choose continue. We get a dialogue box saying that our formatting has been set. This is fine, so again, we'll press continue. Windows now opens a print dialog box for us. Because we want to print to PDF, we want to ensure that our printer is set to Microsoft Print to PDF. We're ready to print this so we'll press OK. Our report results have now been printed to PDF and we must navigate to the PDF to open it. We'll right-click and choose Open with Adobe Acrobat Reader. Our PDF is similar to how the report would look printed on a sheet of physical paper. Printing reports in SAP comes in handy when we need a hard copy to share our results the old fashioned way.

Exporting reports from SAP

- [Instructor] While we can do things like filter and sort our report results inside SAP, it's often more practical to work with our data in Excel. Let's look at exporting reports to Excel. We'll enter our List Of Sales Orders report using transaction code va05. We won't enter any selection criteria and we'll press Execute. We're now ready to export our report. We'll go to More, List, Export and Spreadsheet. We're now able to choose from available formats. We'll leave the default of Excel - Open Office XML Format, and click Continue. Now we need to name our export. We'll call this Sales Order Report, and click Save. Excel opens automatically. We now have a successful export of our report and we're able to manipulate our data with all the functionality available in Excel.

Additional SAP resources

- [Justin] Congratulations, you made it. I want to thank you so much for joining me in this course. SAP ERP is a robust software, so this is only the start. If you are eager to keep the learning going, check out my other SAP courses here on LinkedIn Learning. To dive

deeper into the specific modules, watch these three courses, SAP Financials Essential Training, Learning SAP Materials Management, and Learning SAP Sales and Distribution. To supercharge your SAP navigation and reporting skills, I encourage you to check out SAP Beyond the Basics. For my advice on all things SAP learning, click over to my website at justin.training. And finally, please, don't hesitate to contact me through my LinkedIn profile. I'd love to hear about your SAP journey. I want to thank you again for taking this course.