Innovation mindset

Build the dashboards

Overview

BW Fishing Inc. (BWF) sells fishing supplies mainly to businesses across the country. The company has grown steadily over the last 10 years. BWF found a strategic niche in taking orders and fulfilling them immediately around the clock. Since BWF's customers order supplies at unusual hours, BWF's "always open" mantra has received customer praise. This practice, along with competitive pricing, has allowed BWF to build a loyal network of customers.

Although BWF has been successful, they have noticed a few problems in the order-to-cash process. They recently heard of a technique for analyzing the processes called process mining. Process mining is the visualization of data contained in event logs from an IT system to analyze a business process. To fully understand process mining, first review the EYARC introduction to process mining case, **Innovation_mindset_case_studies_Process_mining_Introduction.pdf**.

The IT department has extracted the necessary information from BWF's computer system to build process mining dashboards for analysis. Your task is to build the dashboards necessary to analyze BWF's order-to-cash process. To understand the data that is required for process mining, review the EYARC Innovation mindset – Process mining – Build the data set case, **Innovation_mindset_case_studies_Process_mining_Build_the_dataset.pdf**.

Order-to-cash cycle at BWF

BWF has previously documented its typical order-to-cash process in a narrative and flowchart, as covered in the EYARC Innovation mindset – Process mining – Document the process case, **Innovation_mindset_case_studies_Process_mining_Document_the_process.pdf**. These have been provided in Appendix 1 and Appendix 2, respectively, for easy reference. Carefully review this information so you have a full understanding of the standard process that BWF's management wants all employees to follow for the order-to-cash cycle.

Building the process mining dashboards

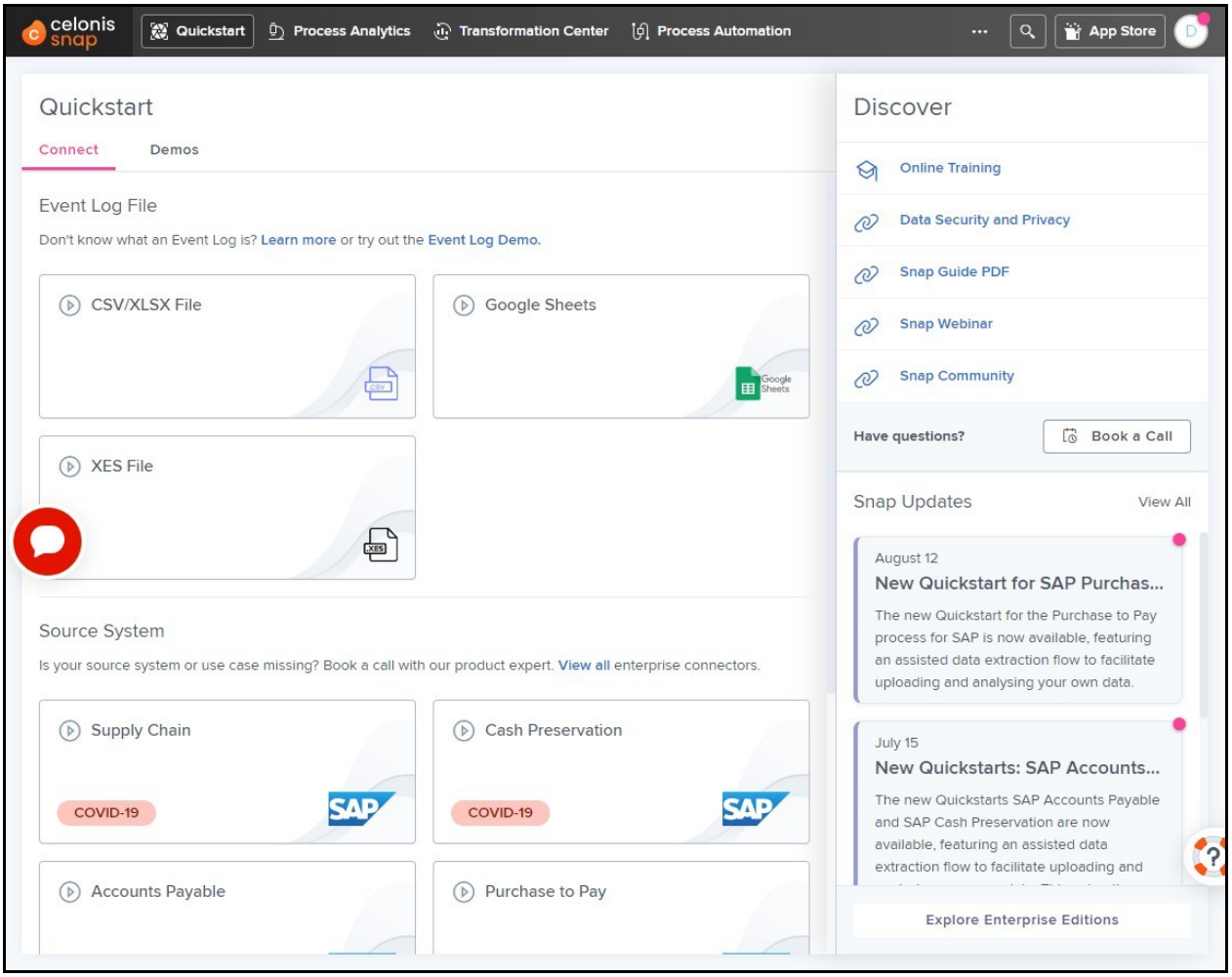
You will build dashboards using process mining software created by Celonis. Celonis provides access to a simplified, free version of its software. Understand that this software is limited from a full version of the Celonis process mining software, but it still allows you to understand the basics of building process mining visualizations.

To access the Celonis Snap software do the following:

1. Go to https://www.celonis.com/solutions/celonis-snap.
2. Click on the green button Try Process Mining for Free.
3. Complete the registration process, including activating your account when the email is sent to you.

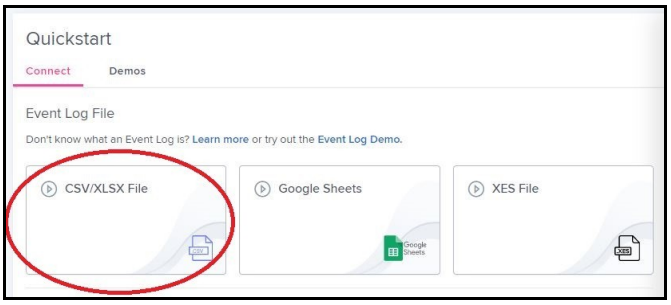
SCORE No. 12756-211US_2

4. Log in to your Celonis Snap workspace. Once logged in, you should see a screen like on the following page.



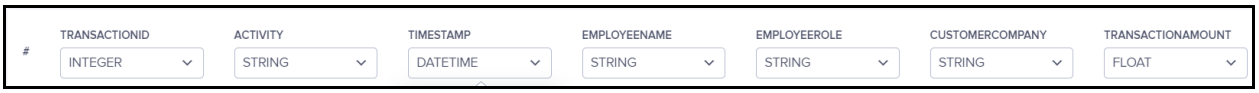
You are now ready to start building your dashboards.

A special process mining data analytics team extracted the first 1,000 transactions for you to use in building your dashboards. To use this data, you first need to load it into the Celonis software. To do this, click on the tile that says CSV/XLSX File under the Event Log File area of the screen (as shown in this screenshot).



Load the data file **Innovation_mindset_case_studies_Process_mining_Event_log_data.xlsx** by either dragging it onto the area saying Drop file here or by clicking Select File and then selecting the appropriate file.

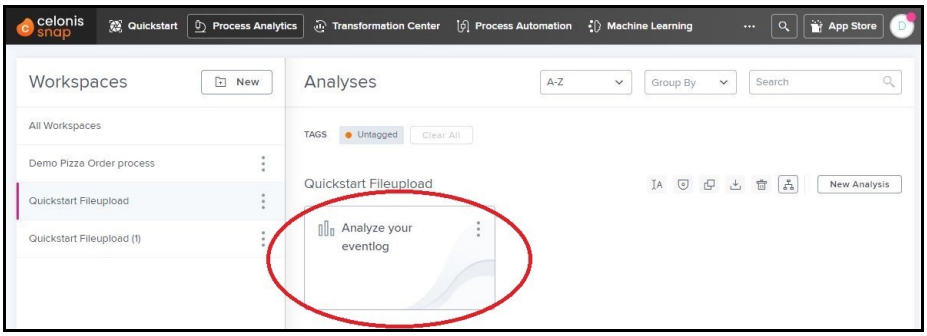
The software should automatically recognize the correct format for each column of data. Review the default file mapping and change any, if needed, to match the screenshot below (you can change the format of the Timestamp to whatever format is most common in your location). Once your data looks like below, click the Next button in the bottom right of the screen.



For the process mining visualization to build the visualizations, you must select three columns, the CaseID, Activity and Timestamp. Do this by clicking on the appropriate column when asked, as follows:

- CaseID: Click on the first column labeled TransactionID.
- Activity Name: Click on the second column labeled Activity.
- Timestamp: Click on the third column labeled Timestamp.
- Sorting: Do not click on any columns. This case does not use a sorting column. Instead, click on the Next button at the bottom right of the screen.

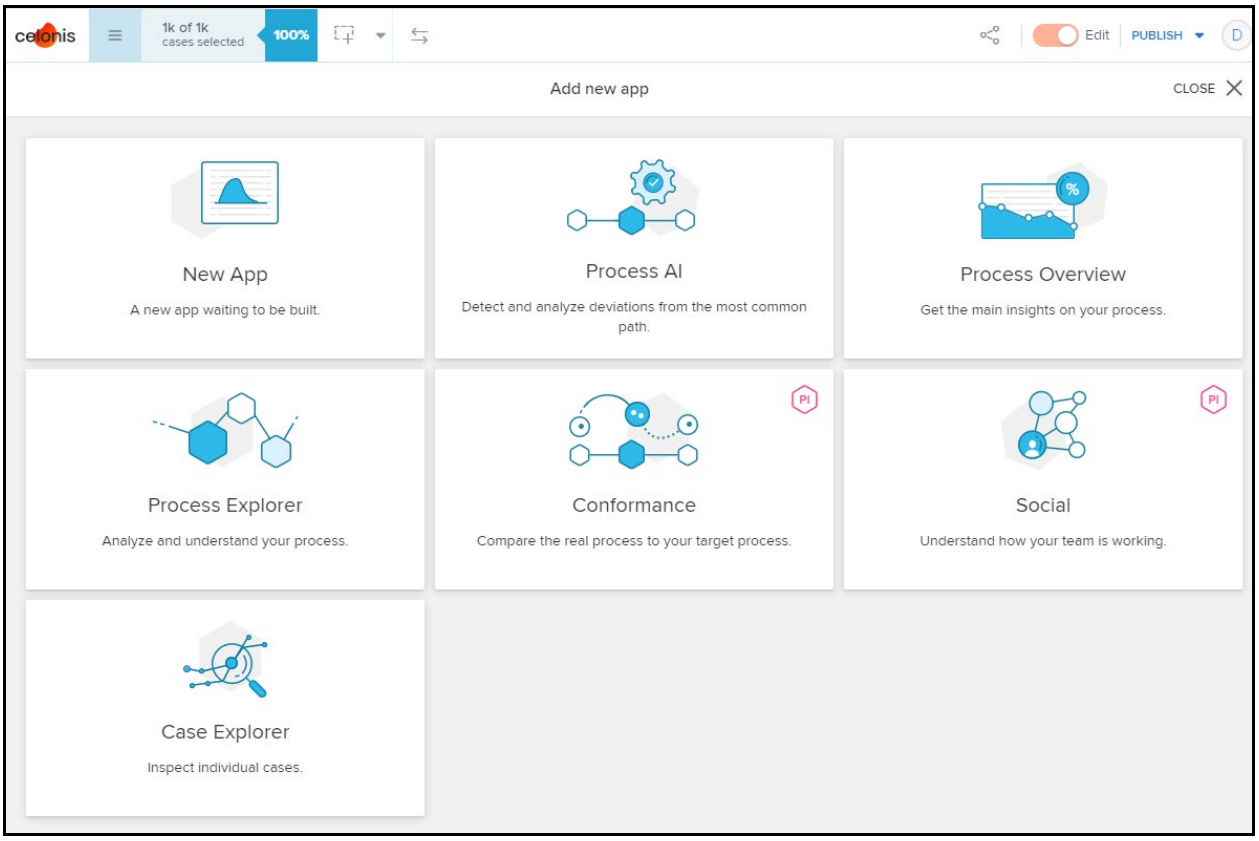
Once you have finished these steps, Celonis will create a screen that looks like the screenshot below. Click on the Analyze your eventlog tile (circled in the screenshot below).



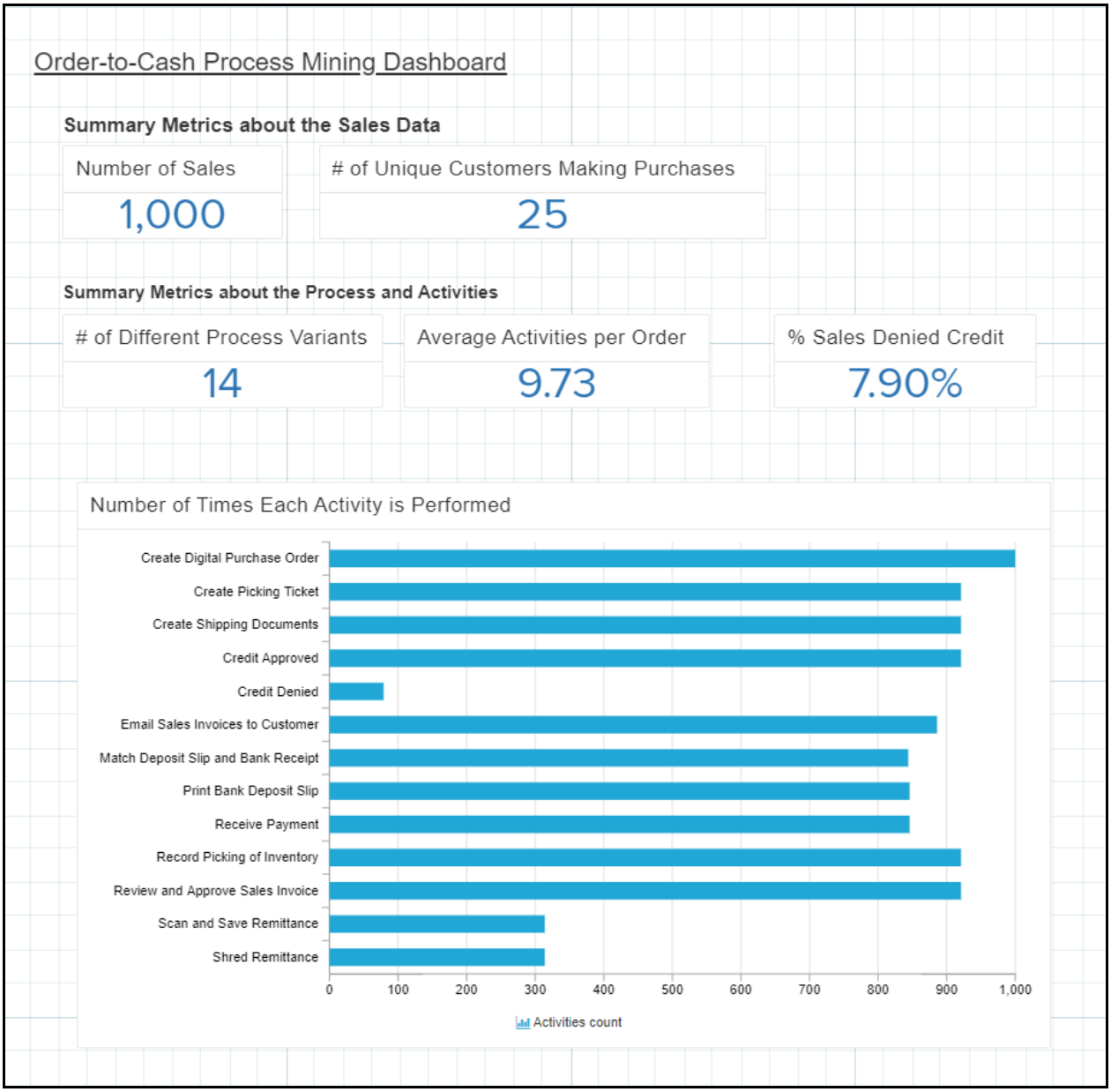
Celonis will now create seven tabs with pre-populated dashboards. For this assignment, we want you to have the experience of creating your own dashboards to see how the software works. Thus, we will have you delete these dashboards and make your own new ones.

To delete the current dashboards, click on the Edit button in the top right of the screen. Whenever you want to make changes to a dashboard, you have to be in the edit mode by toggling this button. Once in edit mode, right-click on each tab at the bottom of the screen and select Delete Sheet. Select OK when the dialog box pops up asking if you are sure that you want to delete this sheet.

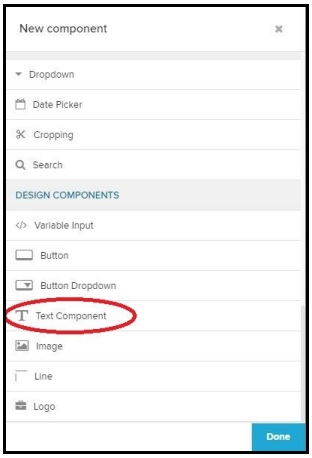
To begin making new dashboards, click on the blue plus (+) icon on the bottom left of the screen. It will bring up a screen that looks like this:



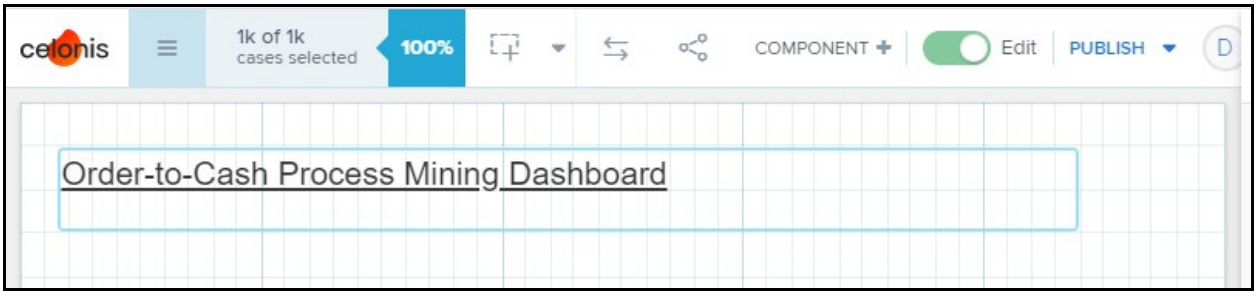
The first dashboard to build is an overview dashboard that provides general statistics about the data in the order-to-cash cycle. When finished, this dashboard will look like the following:



To start building this dashboard, click on the New App tile. You will then click on Component at the top of the screen (the green arrow is pointing at it). Start by adding a title to the dashboard. To do this, find the Text Component listed near the bottom of the list in the New Component window. Click and drag this component to the top of your dashboard.

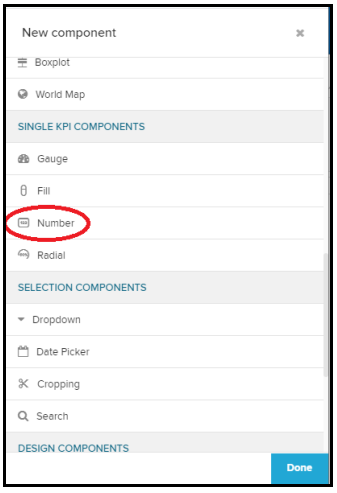


When you drag the component onto your dashboard, a properties window will open on the right side of your screen (labeled Text Component). Inside this dialog box, you can enter the text, change the font and otherwise manipulate the Text Component icon. Change the properties until your label looks like the following:



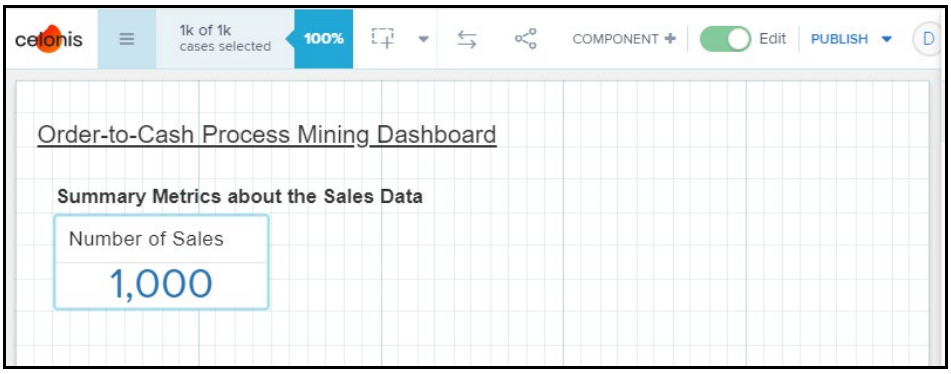
Perform similar steps to add the titles Summary Metrics about the Sales Data and Summary Metrics about the Process and Activities to the dashboard.

Add the number of sales to the dashboard. To do this, click on Component and Number as shown in the screenshot below and drag it onto your dashboard.



Again, edit the properties of this item by using the dialog box that displays on the right side of the screen when you have the item selected. Add a title, and then compute the number of sales using the KPI portion of the screen. To do this, click on the f(x) next to the KPI editor.

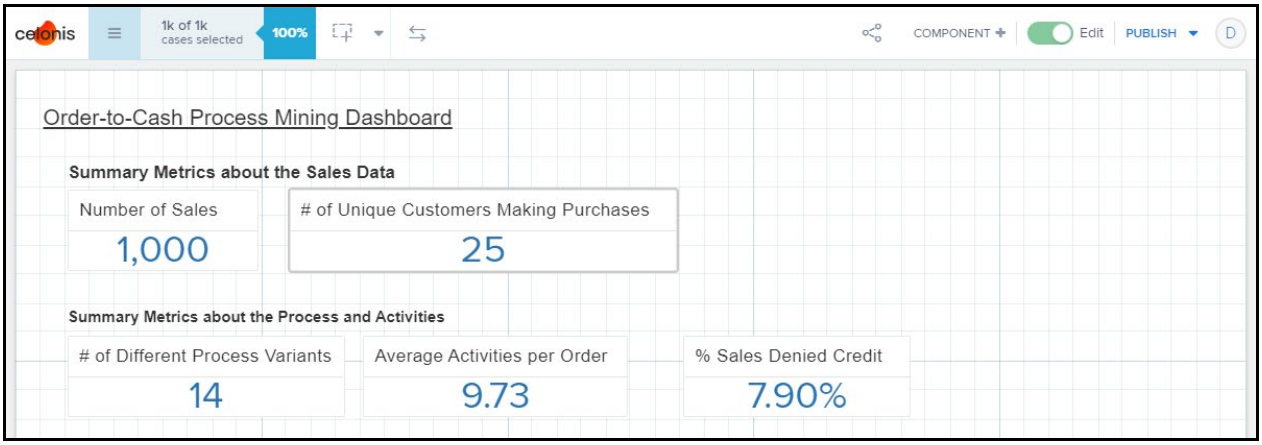
This brings up the editor to enter formulas for computing important statistics. Click on Case count that is at the top of the list of KPIs to add. This will add the formula COUNT_TABLE("_CEL_CSV_ACTIVITIES_CASES") to the editor pane. This formula computes the number of cases that are included in the data set. You can preview the calculation by clicking on the green button Refresh at the bottom of the screen. When finished, click on Done at the bottom right side of the screen. Finish formatting the item until it looks like the image below.



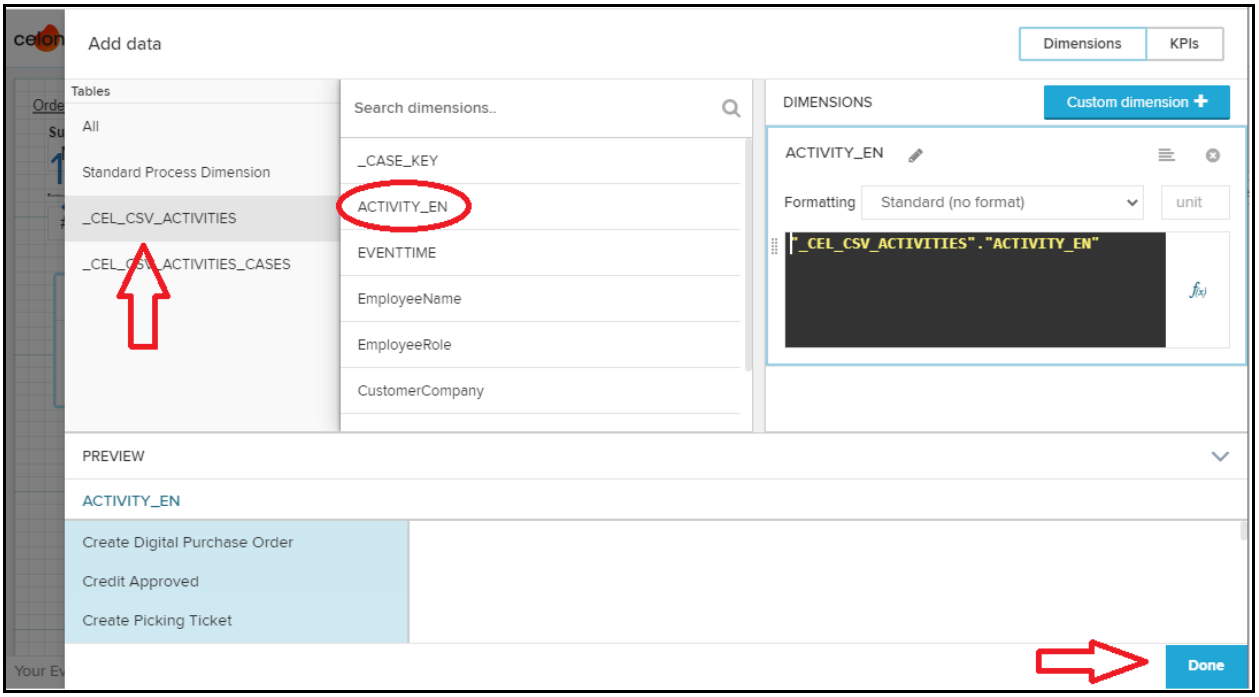
Add the following items to the screen. Hints are provided about how to compute each one.

- # of Unique Customers Making Purchases: You need to count the distinct instances of the data item CustomerCompany. This is located in the KPI editor under _CEL_CSV_ACTIVITIES, then selecting the CustomerCompany attribute and then selecting Count Distinct.
- # of Different Process Variants: This is located in the KPI editor under Standard Process KPI, and then selecting Number of Variants. This represents how many different paths transactions take in the data.
- Average Activities per Order: This is located in the KPI editor under Standard Process KPI, and then selecting Average events per case. This represents how many activities the average transaction will go through in the process.
- % Sales Denied Credit: This is located in the KPI editor under Standard Process KPI, and then selecting Ratio of cases flowing through an activity. The formula will then need to be edited in the editor window by adding the name of the activity Credit Denied between the quotes so the formula looks like this: KPI("Ratio," MATCH_ACTIVITIES(NODE['Credit Denied']) = 1). This shows how many transactions flowed through the activity Credit Denied, meaning that these customers were denied the credit to make the purchase.

When finished, your dashboard should now look like the following:

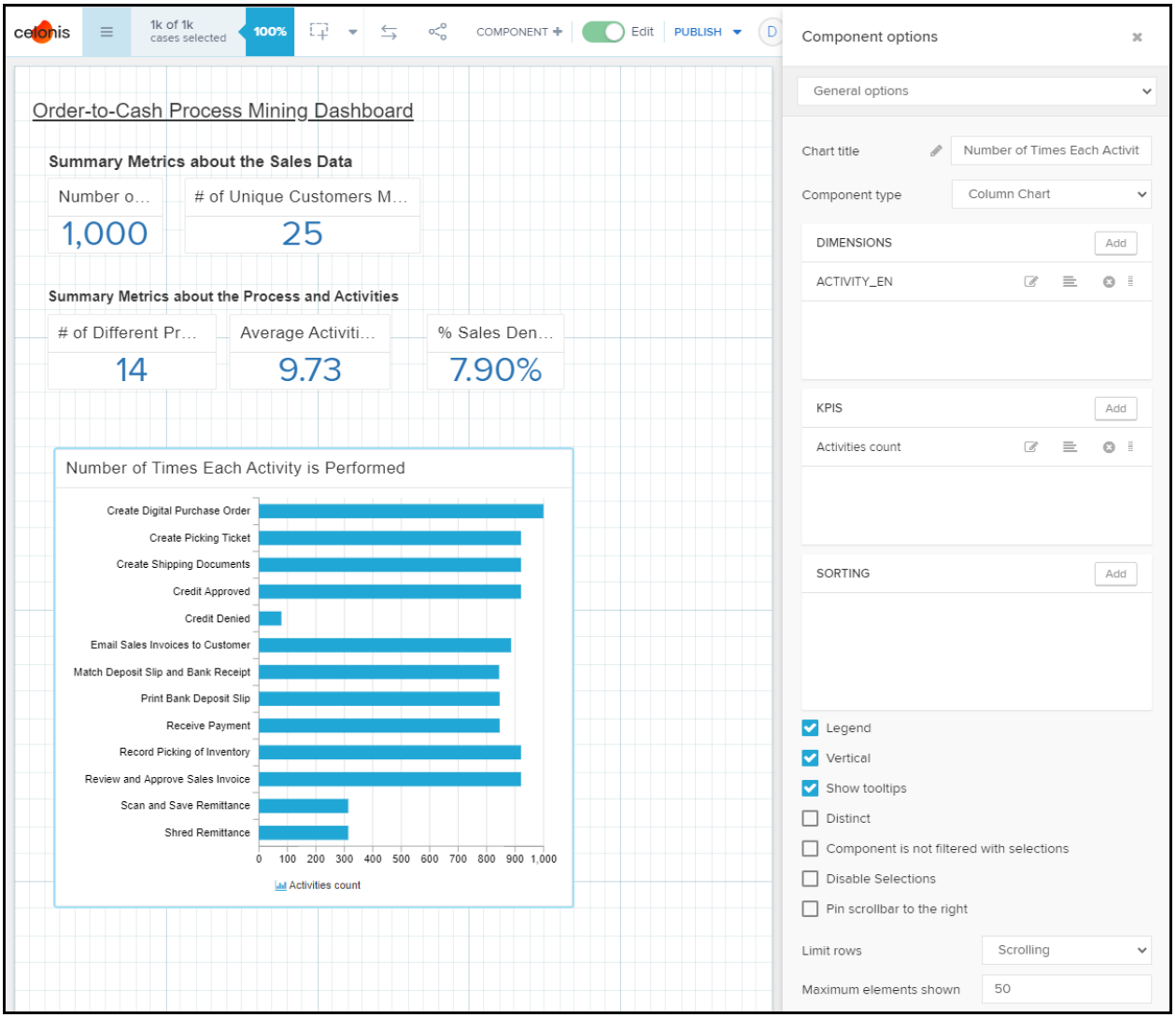


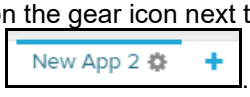
Now, add the bar chart that shows the number of times each activity is performed in the data. To do this, click on Component at the top of the screen and then select Column Chart. Add the chart title and then you need to add the appropriate component to the Dimensions section and the KPIs section. The dimension that you want to plot is ACTIVITY_EN. To do this, click on the Add button in the Dimensions section and then select _CEL_CSV_ACTIVITIES and ACTIVITY_EN. Click Done in the bottom right to add it. The image shows this:



Add to the KPIs section the Activities count by following a similar process. The Activities count is located in Standard Process KPI and then is labeled Activities Count.

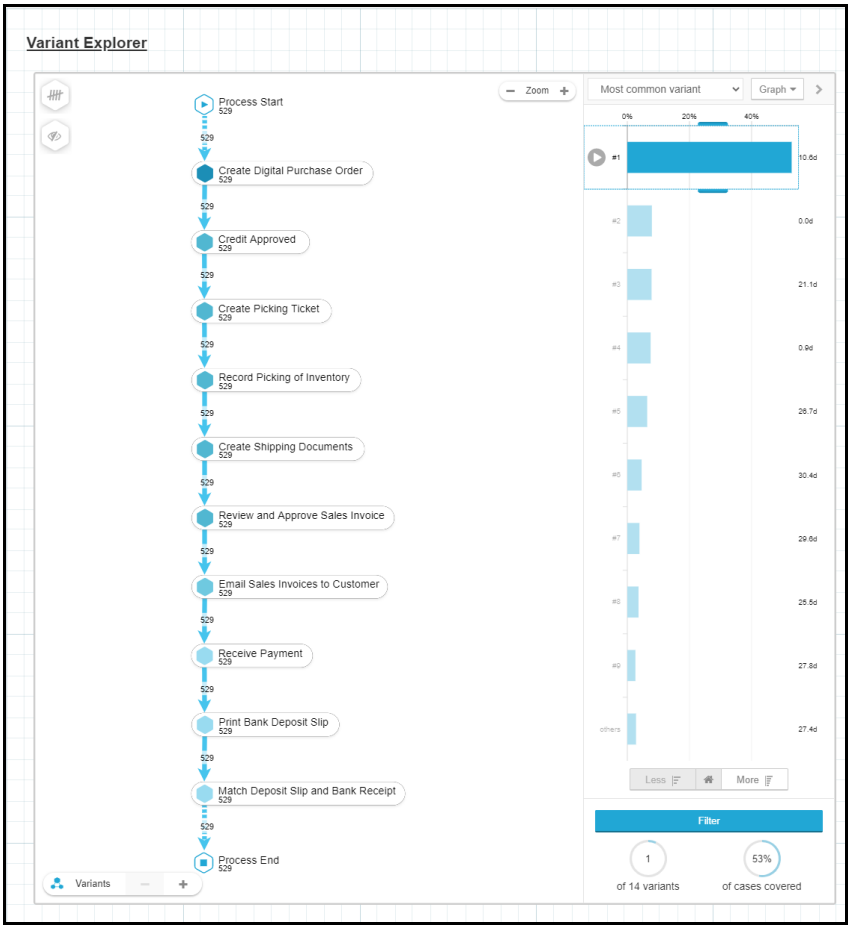
To make the visualization a horizontal bar chart, select the option Vertical in the properties pane. The finished view (with the properties window displayed), looks like the following:



You have now finished the first dashboard. On the bottom of the screen, click on the gear icon next to the name of the tab (it will probably be something like New App 2). It looks like this 

. Then change the sheet title to be Overview.

Add a second dashboard by clicking on the blue plus symbol at the bottom of the screen. Again, select to add a New App. This second dashboard will look like this:



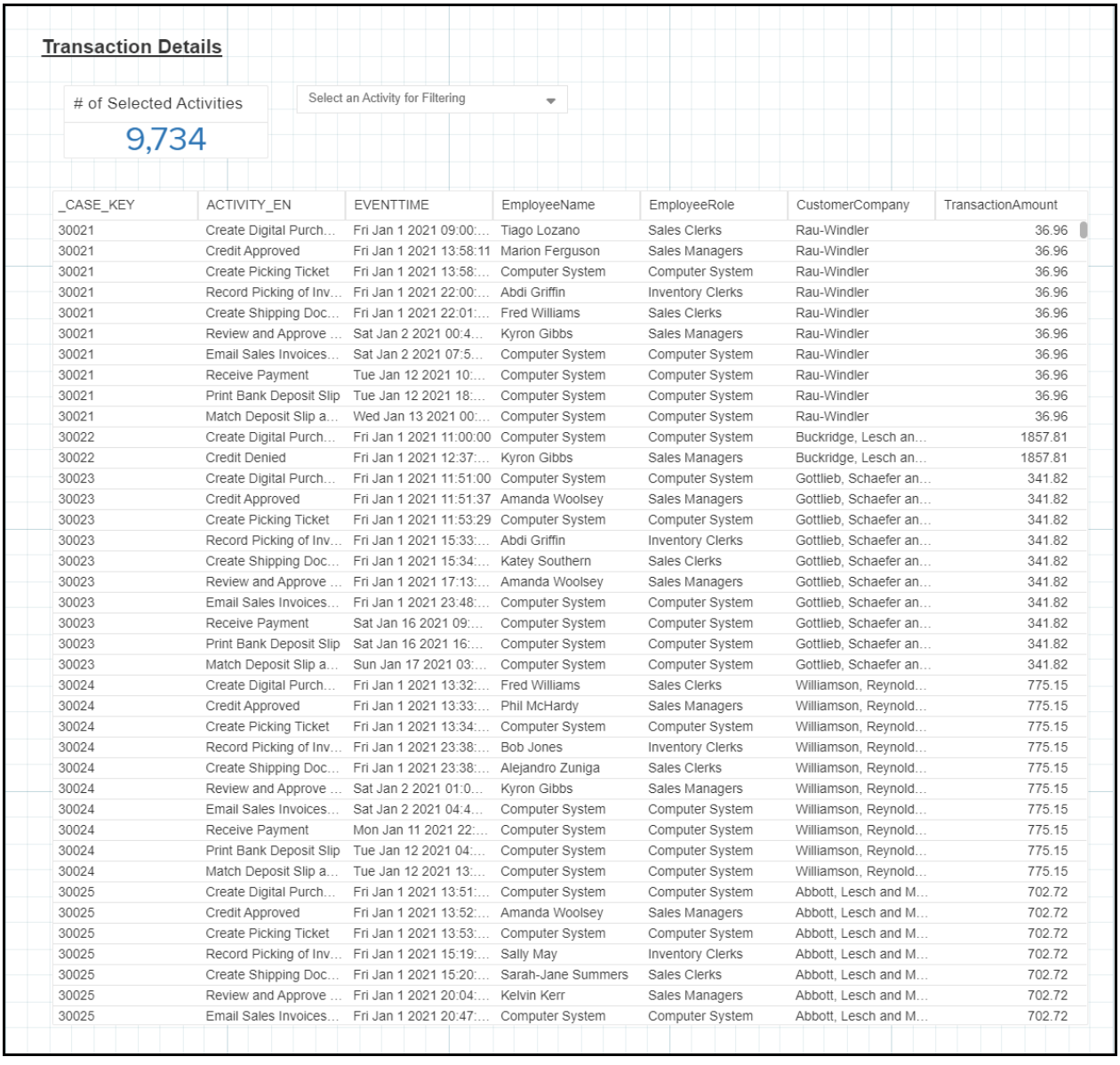
Begin by adding a title to the dashboard, as you did for the Overview dashboard. Once you have added the title, add the variant explorer. The variant explorer is one of the most powerful views of the data and is the essence of process mining. The variant explorer shows all process variants that are in the data you uploaded. A process “variant” is a sequence of process activities with a start event and a final event. At BWF, the starting event is always Create Digital Purchase Order. The ending event can vary depending on how a specific transaction is completed, thus resulting in multiple variants in a process. This dashboard is useful because it shows the events that are processed as expected and, more importantly, events that are processed outside of the expected process. The program automatically creates all of the visualizations in the variant explorer. You can customize the properties of the variant explorer as you desire. When finished, it should look like the dashboard image above.

To add the variant explorer, click on Component at the top of the screen. Then select Variant Explorer from the list (it is near the top) and click and drag it onto the dashboard canvas.

To try using the Variant Explorer, you must switch out of the Edit mode. To do this, toggle the switch at the top right of the screen to turn off editing. It looks like this:

Once you toggle this switch, you can use the Variant Explorer dashboard. When finished, click on the Edit button to return to edit the dashboard. Once back in editing mode, rename the tab to Variant Explorer.

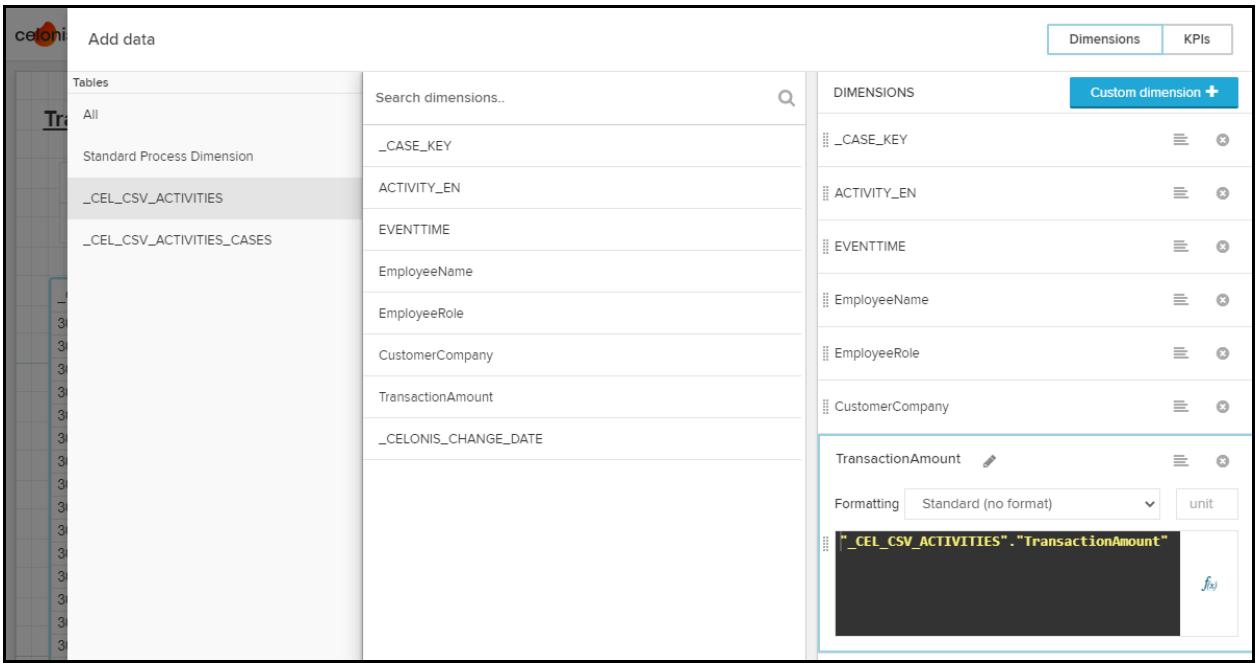
Add a third dashboard by clicking on the blue plus symbol at the bottom of the screen. Again, select to add a New App. This second dashboard will look like this:



_CASE_KEY	ACTIVITY_EN	EVENTTIME	EmployeeName	EmployeeRole	CustomerCompany	TransactionAmount
30021	Create Digital Purch...	Fri Jan 1 2021 09:00:...	Tiago Lozano	Sales Clerks	Rau-Windler	36.96
30021	Credit Approved	Fri Jan 1 2021 13:58:11	Marion Ferguson	Sales Managers	Rau-Windler	36.96
30021	Create Picking Ticket	Fri Jan 1 2021 13:58:...	Computer System	Computer System	Rau-Windler	36.96
30021	Record Picking of Inv...	Fri Jan 1 2021 22:00:...	Abdi Griffin	Inventory Clerks	Rau-Windler	36.96
30021	Create Shipping Doc...	Fri Jan 1 2021 22:01:...	Fred Williams	Sales Clerks	Rau-Windler	36.96
30021	Review and Approve ...	Sat Jan 2 2021 00:4...	Kyron Gibbs	Sales Managers	Rau-Windler	36.96
30021	Email Sales Invoices...	Sat Jan 2 2021 07:5...	Computer System	Computer System	Rau-Windler	36.96
30021	Receive Payment	Tue Jan 12 2021 10:...	Computer System	Computer System	Rau-Windler	36.96
30021	Print Bank Deposit Slip	Tue Jan 12 2021 18:...	Computer System	Computer System	Rau-Windler	36.96
30021	Match Deposit Slip a...	Wed Jan 13 2021 00:...	Computer System	Computer System	Rau-Windler	36.96
30022	Create Digital Purch...	Fri Jan 1 2021 11:00:00	Computer System	Computer System	Buckridge, Lesch an...	1857.81
30022	Credit Denied	Fri Jan 1 2021 12:37:...	Kyron Gibbs	Sales Managers	Buckridge, Lesch an...	1857.81
30023	Create Digital Purch...	Fri Jan 1 2021 11:51:00	Computer System	Computer System	Gottlieb, Schaefer an...	341.82
30023	Credit Approved	Fri Jan 1 2021 11:51:37	Amanda Woolsey	Sales Managers	Gottlieb, Schaefer an...	341.82
30023	Create Picking Ticket	Fri Jan 1 2021 11:53:29	Computer System	Computer System	Gottlieb, Schaefer an...	341.82
30023	Record Picking of Inv...	Fri Jan 1 2021 15:33:...	Abdi Griffin	Inventory Clerks	Gottlieb, Schaefer an...	341.82
30023	Create Shipping Doc...	Fri Jan 1 2021 15:34:...	Katey Southern	Sales Clerks	Gottlieb, Schaefer an...	341.82
30023	Review and Approve ...	Fri Jan 1 2021 17:13:...	Amanda Woolsey	Sales Managers	Gottlieb, Schaefer an...	341.82
30023	Email Sales Invoices...	Fri Jan 1 2021 23:48:...	Computer System	Computer System	Gottlieb, Schaefer an...	341.82
30023	Receive Payment	Sat Jan 16 2021 09:...	Computer System	Computer System	Gottlieb, Schaefer an...	341.82
30023	Print Bank Deposit Slip	Sat Jan 16 2021 16:...	Computer System	Computer System	Gottlieb, Schaefer an...	341.82
30023	Match Deposit Slip a...	Sun Jan 17 2021 03:...	Computer System	Computer System	Gottlieb, Schaefer an...	341.82
30024	Create Digital Purch...	Fri Jan 1 2021 13:32:...	Fred Williams	Sales Clerks	Williamson, Reynold...	775.15
30024	Credit Approved	Fri Jan 1 2021 13:33:...	Phil McHardy	Sales Managers	Williamson, Reynold...	775.15
30024	Create Picking Ticket	Fri Jan 1 2021 13:34:...	Computer System	Computer System	Williamson, Reynold...	775.15
30024	Record Picking of Inv...	Fri Jan 1 2021 23:38:...	Bob Jones	Inventory Clerks	Williamson, Reynold...	775.15
30024	Create Shipping Doc...	Fri Jan 1 2021 23:38:...	Alejandro Zuniga	Sales Clerks	Williamson, Reynold...	775.15
30024	Review and Approve ...	Sat Jan 2 2021 01:0...	Kyron Gibbs	Sales Managers	Williamson, Reynold...	775.15
30024	Email Sales Invoices...	Sat Jan 2 2021 04:4...	Computer System	Computer System	Williamson, Reynold...	775.15
30024	Receive Payment	Mon Jan 11 2021 22:...	Computer System	Computer System	Williamson, Reynold...	775.15
30024	Print Bank Deposit Slip	Tue Jan 12 2021 04:...	Computer System	Computer System	Williamson, Reynold...	775.15
30024	Match Deposit Slip a...	Tue Jan 12 2021 13:...	Computer System	Computer System	Williamson, Reynold...	775.15
30025	Create Digital Purch...	Fri Jan 1 2021 13:51:...	Computer System	Computer System	Abbott, Lesch and M...	702.72
30025	Credit Approved	Fri Jan 1 2021 13:52:...	Amanda Woolsey	Sales Managers	Abbott, Lesch and M...	702.72
30025	Create Picking Ticket	Fri Jan 1 2021 13:53:...	Computer System	Computer System	Abbott, Lesch and M...	702.72
30025	Record Picking of Inv...	Fri Jan 1 2021 15:19:...	Sally May	Inventory Clerks	Abbott, Lesch and M...	702.72
30025	Create Shipping Doc...	Fri Jan 1 2021 15:20:...	Sarah-Jane Summers	Sales Clerks	Abbott, Lesch and M...	702.72
30025	Review and Approve ...	Fri Jan 1 2021 20:04:...	Kelvin Kerr	Sales Managers	Abbott, Lesch and M...	702.72
30025	Email Sales Invoices...	Fri Jan 1 2021 20:47:...	Computer System	Computer System	Abbott, Lesch and M...	702.72

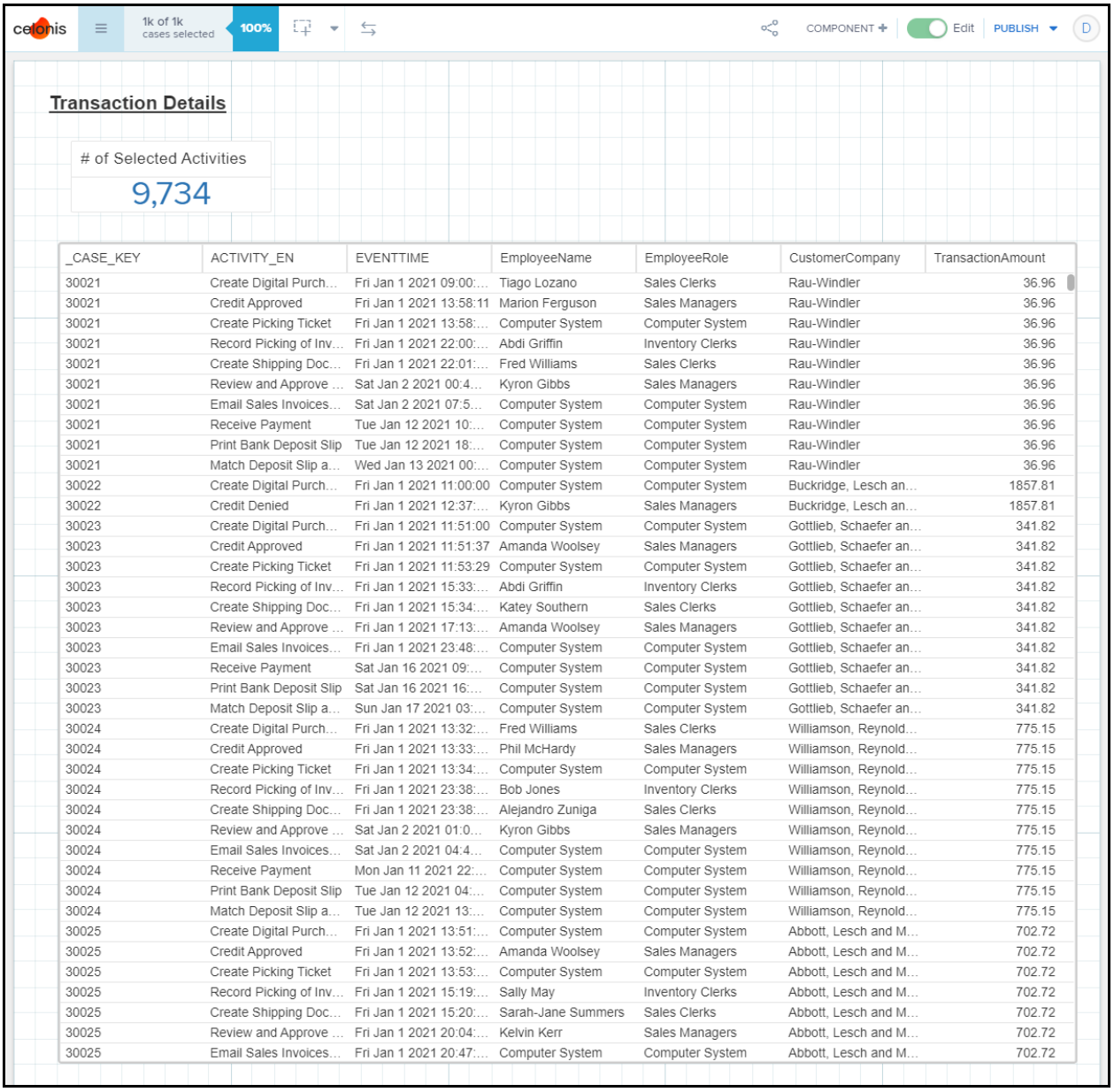
Begin by adding the title and changing the name of the tab to Transaction Details. Just as you did for the first and second dashboards, also add the item # of Selected Activities. The # of Selected Activities is chosen by selecting Standard Process KPI and then Activities count in the KPIs editor.

Next, add the details about all of the transactions to the dashboard. To do this, add the component OLAP Table. This table should display the dimensions _CASE_KEY, ACTIVITY_EN, EVENTTIME, EmployeeName, EmployeeRole, CustomerCompany and TransactionAmount. To add these, click on the Add button next to Dimensions. Then select _CEL_CSV_ACTIVITIES and choose all of the relevant activities. For adding EVENTTIME, select the option No Transformation. The screen should look like this when you are finished:



You can arrange the order of items by dragging the dimensions up or down on the right. You can also use the preview pane at the bottom to see what the data will look like. When finished, click the Done button at the bottom right of the screen.

Under Advanced options, check the box Allow multiple columns sorting and then click the Done button at the bottom right of the screen. The screen should now look like this:



_CASE_KEY	ACTIVITY_EN	EVENTTIME	EmployeeName	EmployeeRole	CustomerCompany	TransactionAmount
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30021	Credit Approved	Fri Jan 1 2021 13:58:11	Marion Ferguson	Sales Managers	Rau-Windler	36.96
30021	Create Picking Ticket	Fri Jan 1 2021 13:58:...	Computer System	Computer System	Rau-Windler	36.96
30021	Record Picking of Inv...	Fri Jan 1 2021 22:00:...	Abdi Griffin	Inventory Clerks	Rau-Windler	36.96
30021	Create Shipping Doc...	Fri Jan 1 2021 22:01:...	Fred Williams	Sales Clerks	Rau-Windler	36.96
30021	Review and Approve ...	Sat Jan 2 2021 00:4...	Kyron Gibbs	Sales Managers	Rau-Windler	36.96
30021	Email Sales Invoices...	Sat Jan 2 2021 07:5...	Computer System	Computer System	Rau-Windler	36.96
30021	Receive Payment	Tue Jan 12 2021 10:...	Computer System	Computer System	Rau-Windler	36.96
30021	Print Bank Deposit Slip	Tue Jan 12 2021 18:...	Computer System	Computer System	Rau-Windler	36.96
30021	Match Deposit Slip a...	Wed Jan 13 2021 00:...	Computer System	Computer System	Rau-Windler	36.96
30022	Create Digital Purch...	Fri Jan 1 2021 11:00:00	Computer System	Computer System	Buckridge, Lesch an...	1857.81
30022	Credit Denied	Fri Jan 1 2021 12:37:...	Kyron Gibbs	Sales Managers	Buckridge, Lesch an...	1857.81
30023	Create Digital Purch...	Fri Jan 1 2021 11:51:00	Computer System	Computer System	Gottlieb, Schaefer an...	341.82
30023	Credit Approved	Fri Jan 1 2021 11:51:37	Amanda Woolsey	Sales Managers	Gottlieb, Schaefer an...	341.82
30023	Create Picking Ticket	Fri Jan 1 2021 11:53:29	Computer System	Computer System	Gottlieb, Schaefer an...	341.82
30023	Record Picking of Inv...	Fri Jan 1 2021 15:33:...	Abdi Griffin	Inventory Clerks	Gottlieb, Schaefer an...	341.82
30023	Create Shipping Doc...	Fri Jan 1 2021 15:34:...	Katey Southern	Sales Clerks	Gottlieb, Schaefer an...	341.82
30023	Review and Approve ...	Fri Jan 1 2021 17:13:...	Amanda Woolsey	Sales Managers	Gottlieb, Schaefer an...	341.82
30023	Email Sales Invoices...	Fri Jan 1 2021 23:48:...	Computer System	Computer System	Gottlieb, Schaefer an...	341.82
30023	Receive Payment	Sat Jan 16 2021 09:...	Computer System	Computer System	Gottlieb, Schaefer an...	341.82
30023	Print Bank Deposit Slip	Sat Jan 16 2021 16:...	Computer System	Computer System	Gottlieb, Schaefer an...	341.82
30023	Match Deposit Slip a...	Sun Jan 17 2021 03:...	Computer System	Computer System	Gottlieb, Schaefer an...	341.82
30024	Create Digital Purch...	Fri Jan 1 2021 13:32:...	Fred Williams	Sales Clerks	Williamson, Reynold...	775.15
30024	Credit Approved	Fri Jan 1 2021 13:33:...	Phil McHardy	Sales Managers	Williamson, Reynold...	775.15
30024	Create Picking Ticket	Fri Jan 1 2021 13:34:...	Computer System	Computer System	Williamson, Reynold...	775.15
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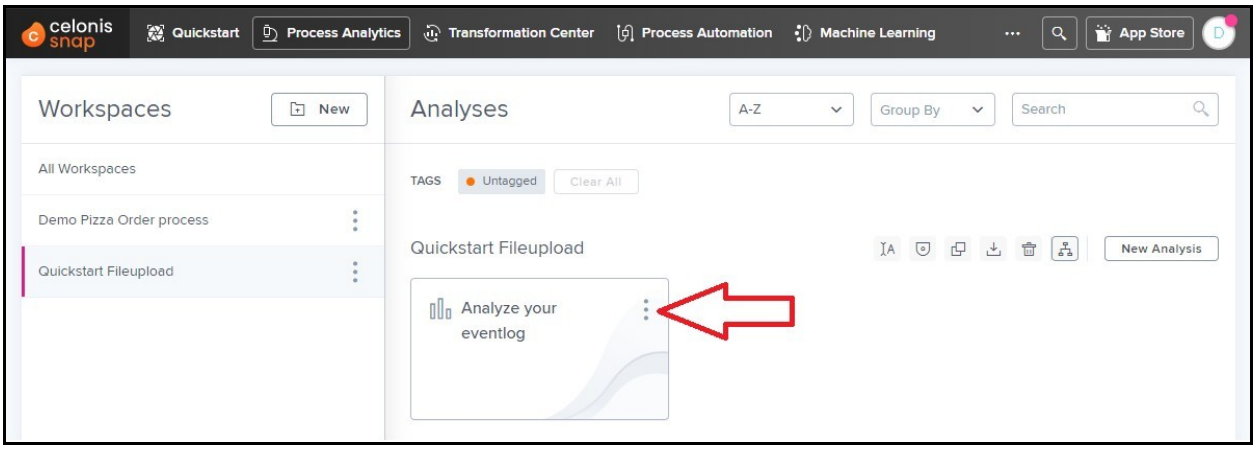
30025	Create Picking Ticket	Fri Jan 1 2021 13:53:...	Computer System	Computer System	Abbott, Lesch and M...	702.72
30025	Record Picking of Inv...	Fri Jan 1 2021 15:19:...	Sally May	Inventory Clerks	Abbott, Lesch and M...	702.72
30025	Create Shipping Doc...	Fri Jan 1 2021 15:20:...	Sarah-Jane Summers	Sales Clerks	Abbott, Lesch and M...	702.72
30025	Review and Approve ...	Fri Jan 1 2021 20:04:...	Kelvin Kerr	Sales Managers	Abbott, Lesch and M...	702.72
30025	Email Sales Invoices...	Fri Jan 1 2021 20:47:...	Computer System	Computer System	Abbott, Lesch and M...	702.72

Add more functionality to the dashboard by adding the ability to filter the rows by activity. To do this, click on Component at the top of the screen and click and drag Dropbdown onto the dashboard (make sure *not* to select the Button Dropdown item). Change the title of the Dropdown item to Select an Activity for Filtering. Click on the f(x) to bring up the formula editor. Inside the formula editor, select _CEL_CSV_ACTIVITIES and choose ACTIVITY_EN and click Done. Return and format your dashboard to look like the previous image. Remember, to use the filtering activity, you must exit the edit mode.

Final deliverable

Now that you have made the three dashboards, you are ready to prepare your final deliverable. To do this, you need to do the following:

1. Delete the tab labeled Your Event Data that was retained until you built a new dashboard.
2. Publish your dashboard by clicking on the Publish button in the top right of the screen. This will make all of your edits on the dashboard permanent. When you edit, none of the editing changes are displayed for others until you publish the changes.
3. Return to the Celonis introduction screen by clicking on the Celonis icon in the top left of the screen. Once there, click on the three dots next to the name of the file you just created (see screenshot below).



4. Select the option Public link and click the box Enable public link. The program will then display the URL link to your dashboards. Copy this link and submit it for grading.

Appendix 1

Order-to-cash process at BW Fishing Inc.

BW Fishing Inc. (BWF) sells fishing supplies mainly to other businesses across the country. The company has grown steadily over the last 10 years. BWF found a niche in taking orders and immediately fulfilling them around the clock. BWF's customers work at unusual hours and it has been able to build loyalty with its "always open" mantra. This practice, along with competitive pricing, has allowed BWF to build a loyal network of customers.

BWF processes most sales digitally; yet, employees still perform a valuable role in the process. The sales process at BWF involves employees working in four different roles: salesclerks, sales managers, inventory clerks and accounting clerks. There are multiple employees who function in each of these roles, and all employees in a role can perform the activities related to their role. Because the process is highly digitized, it is common to have many different employees perform the tasks related to one transaction.

The process begins when BWF receives an order from a customer via phone or online. For a phone order, the salesclerk enters the customer information into the computer system and then the system automatically creates a purchase order and logs the information in the sales database. For an online order, the customer's information is digitally captured in the computer system, then the system automatically creates a purchase order and logs the information in the sales database. Most of BWF's customers are businesses, so it does not collect payment at the time of the order. Instead, BWF bills them after the customer receives the inventory they have ordered.

The salesclerk reviews the order and determines whether the customer's credit should be approved by the sales manager to make the sale. The credit approval process requires judgment. All sales more than $3,000 must be approved by the manager. Sales less than this threshold may require approval, depending on the salesclerk's judgment.

If the order needs sales manager approval, the salesclerk digitally sends the order to the sales manager. The sales manager reviews information in the sales database and uses their professional judgment to decide if the customer's credit is sufficient. If the customer does not have sufficient credit, the sales manager updates the digital purchase order to show that the order is rejected (which is logged in the sales database). The sales manager then notifies the customer that the credit is not approved and the process is ended.

If the customer's credit is approved, the sales manager digitally signs the purchase order in the sales database. The system then creates a digital picking ticket. If the customer did not need credit approval, the system automatically creates the digital picking ticket upon the approval of the salesclerk. Once the picking ticket is created, the sales database is automatically updated.

Inventory clerks in the warehouse receive notification of the digital picking ticket and use the digital picking ticket to pick and package the inventory. The inventory clerks open the digital bill of lading and print a copy of the digital bill of lading and packing slip, which are included with the inventory sent to the customer. The inventory clerk digitally signs off that they performed the task. If the warehouse does not have all of the ordered inventory, the company ships the goods it does have and the system creates a new digital picking ticket for the non-shipped items. The company then fills the new digital picking ticket once the inventory is in stock.

Once the inventory clerk has finished entering their information into the sales database, the system automatically creates a digital sales invoice. An accounting clerk reviews the digital sales invoice for completeness and accuracy by comparing the sales invoice to the purchase order and the picking ticket.

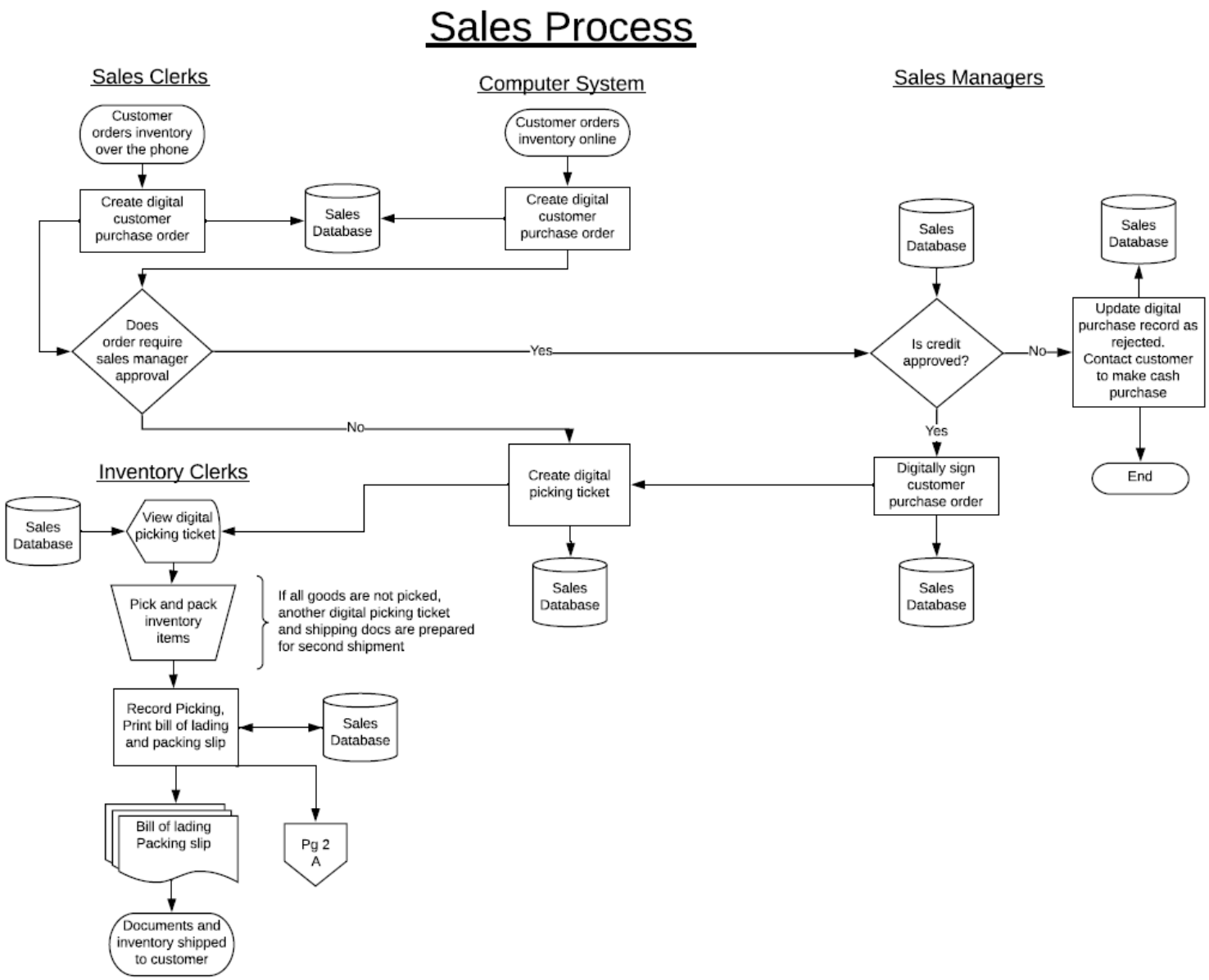
If the information does not match, the accounting clerk notifies the sales manager, who investigates and corrects the problem. If the sales invoice is accurate and complete, the accounting clerk digitally signs that the review is complete. The system automatically sends the customer the approved sales invoice via email.

The process continues when the customer pays for their order. Customers can make an electronic payment (automated clearinghouse or wire transfer) or pay with a check. When the customer pays with a check, two accounting clerks open the mail and immediately endorse the check as “for deposit only” and then enter the check details and the information from the remittance advice into a digital cash receipts pre-list, which is stored in the sales database. Two clerks open the mail together to prevent one clerk from misappropriating assets, creating a kiting scheme or other fraudulent activities. If the customer pays electronically, the system automatically enters the information into the sales database. The accounting clerks also scan any remittance information, which is stored in the sales database, and the physical remittance document is shredded. Scanning and shredding are noted in the database when they are completed.

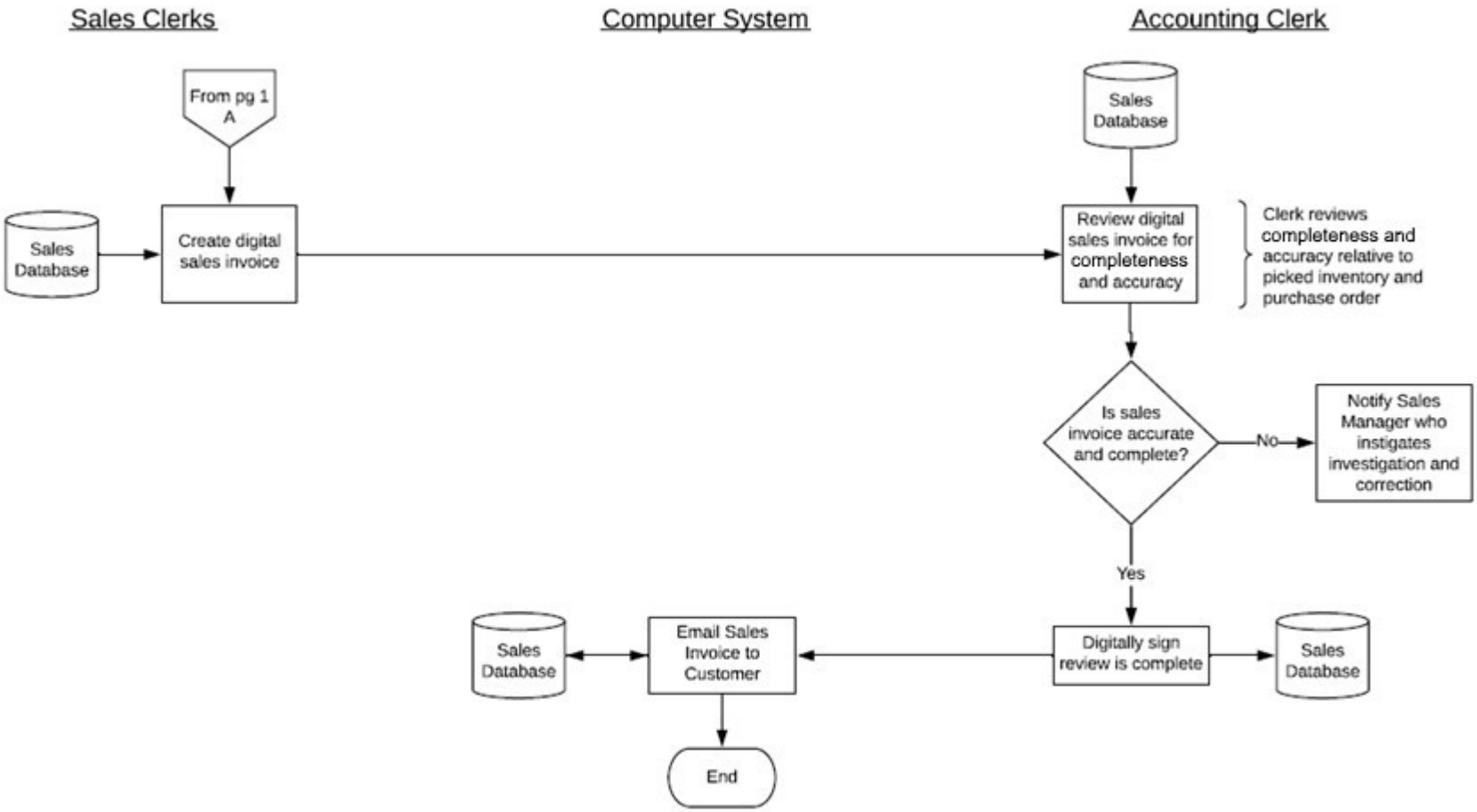
All endorsed checks are sent to the sales manager. The sales manager prints a deposit slip and takes the deposit slip and endorsed checks to the bank on the same day the cash is received.

Daily, the bank sends an email acknowledging all deposits for the day. The salesclerks verify that the bank deposit amount (excluding electronic deposits) matches the amount on the cash pre-list. If it does, the salesclerk adds their digital signature that they reviewed the match. If it does not, the salesclerk immediately notifies the controller for further investigation and follow-up.

Appendix 2



Sales Process - Continued



Cash Receipts Process