

Máster en Ciencia de Datos e Ingeniería de Computadores  
Minería de Procesos y Planificación Automática – Minería de procesos

# Explorando la Minería de Procesos

## Una experiencia práctica con Celonis

Bedilia Estrada-Torres  
[iestrada@us.es](mailto:iestrada@us.es)

# **Introducción**

# **Herramientas de Minería de Procesos**

# **Minería de Procesos con Celonis**

Acceso y entorno

Análisis - Spaces

Descubrimiento – Carga de datos

Descubrimiento y Vistas personalizadas

Análisis - Conformidad

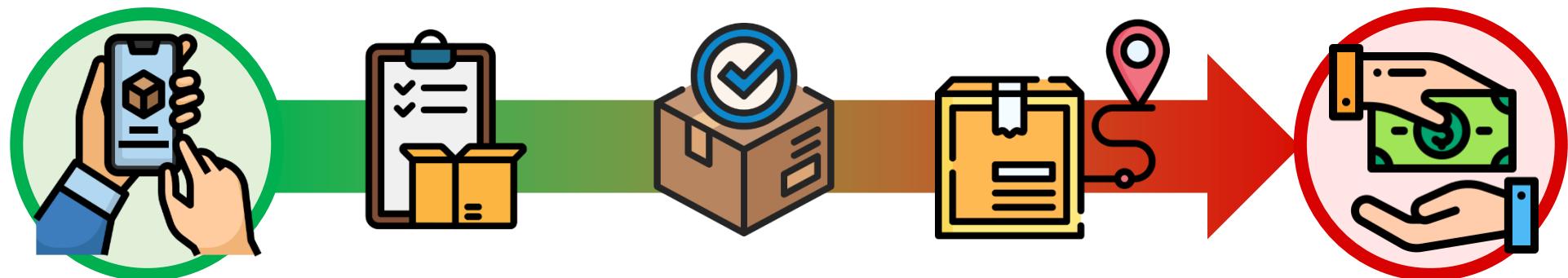
Ejercicios

# Introducción

Herramientas de Minería de Procesos  
Minería de Procesos con Celonis

# Procesos – Procesos de negocio

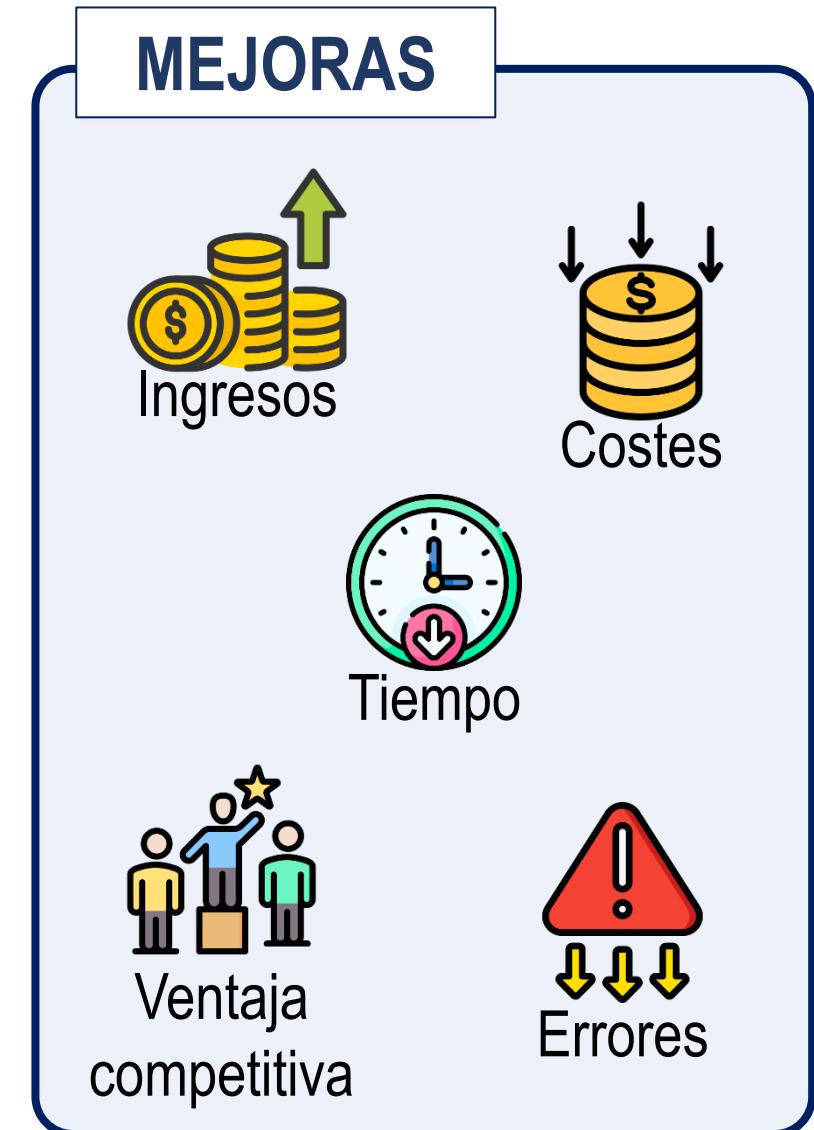
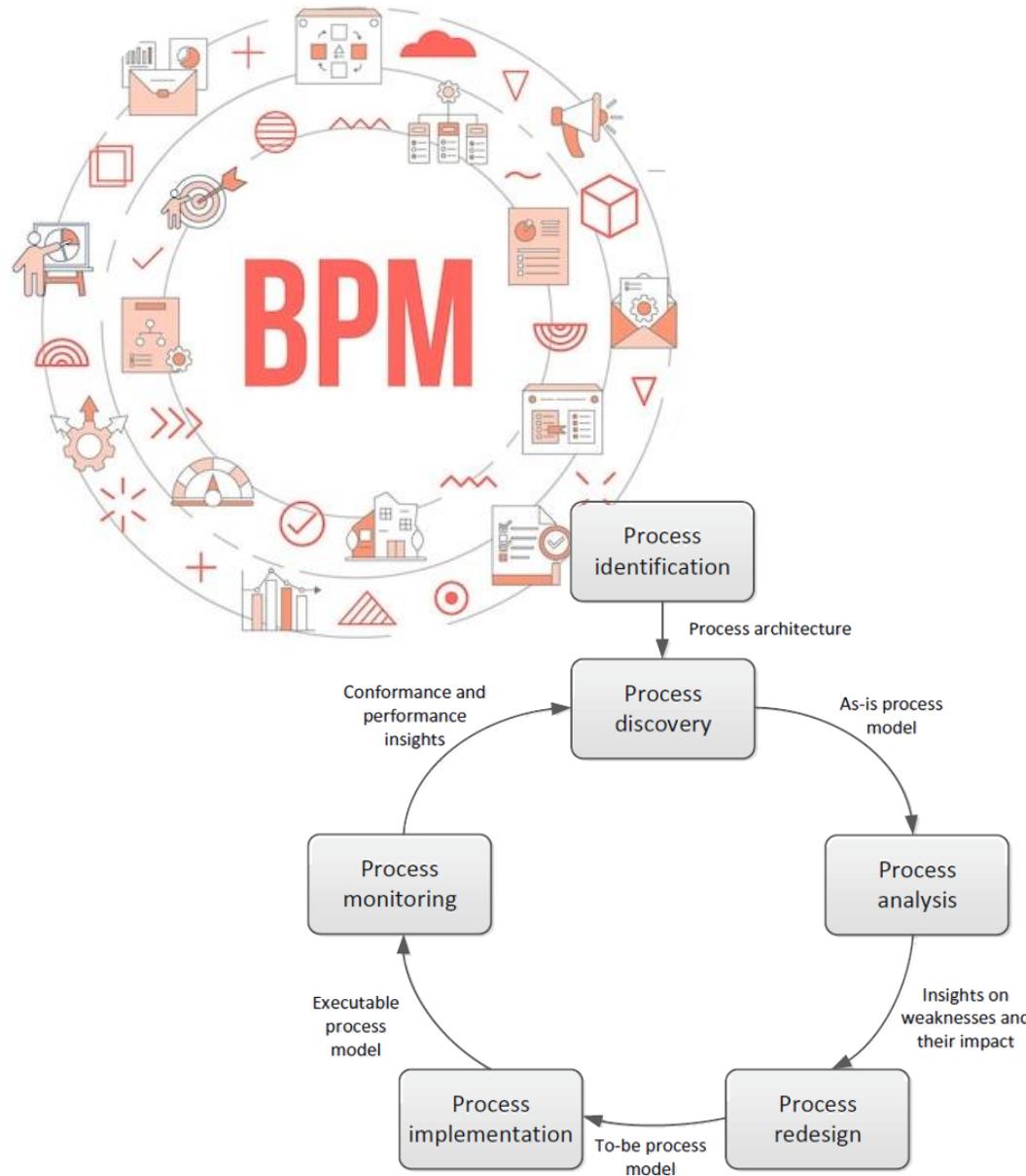
## Order-to-cash (Pedido a cobro)



## Application-to-approval (Solicitud a aprobación)

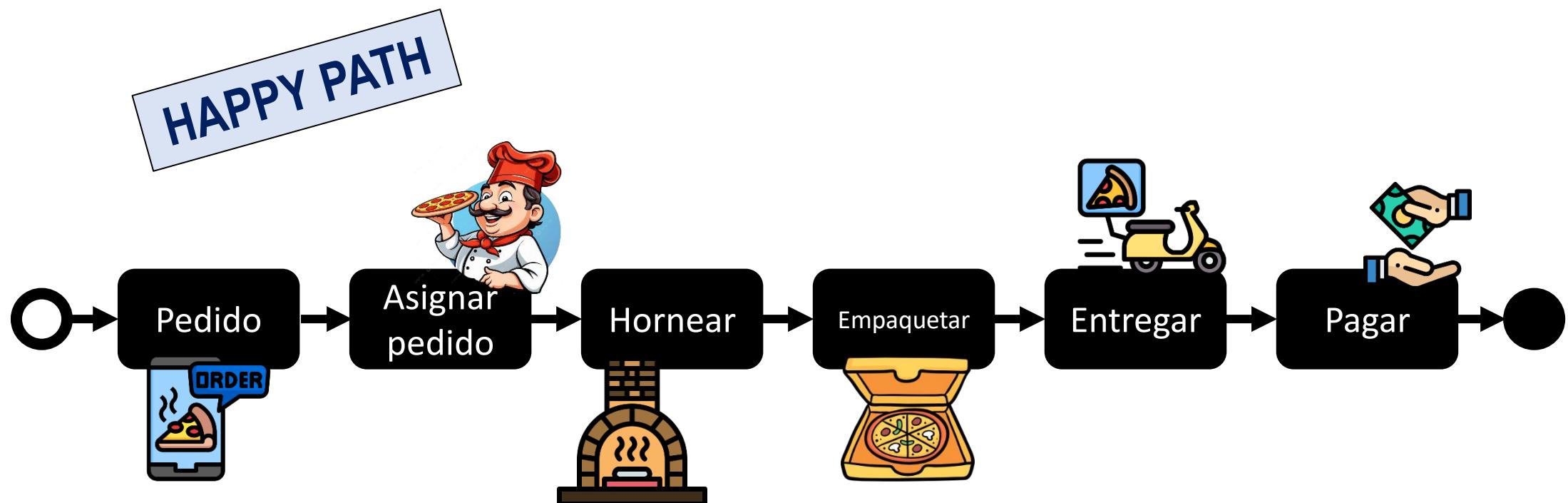


# Gestión de los Procesos de Negocio



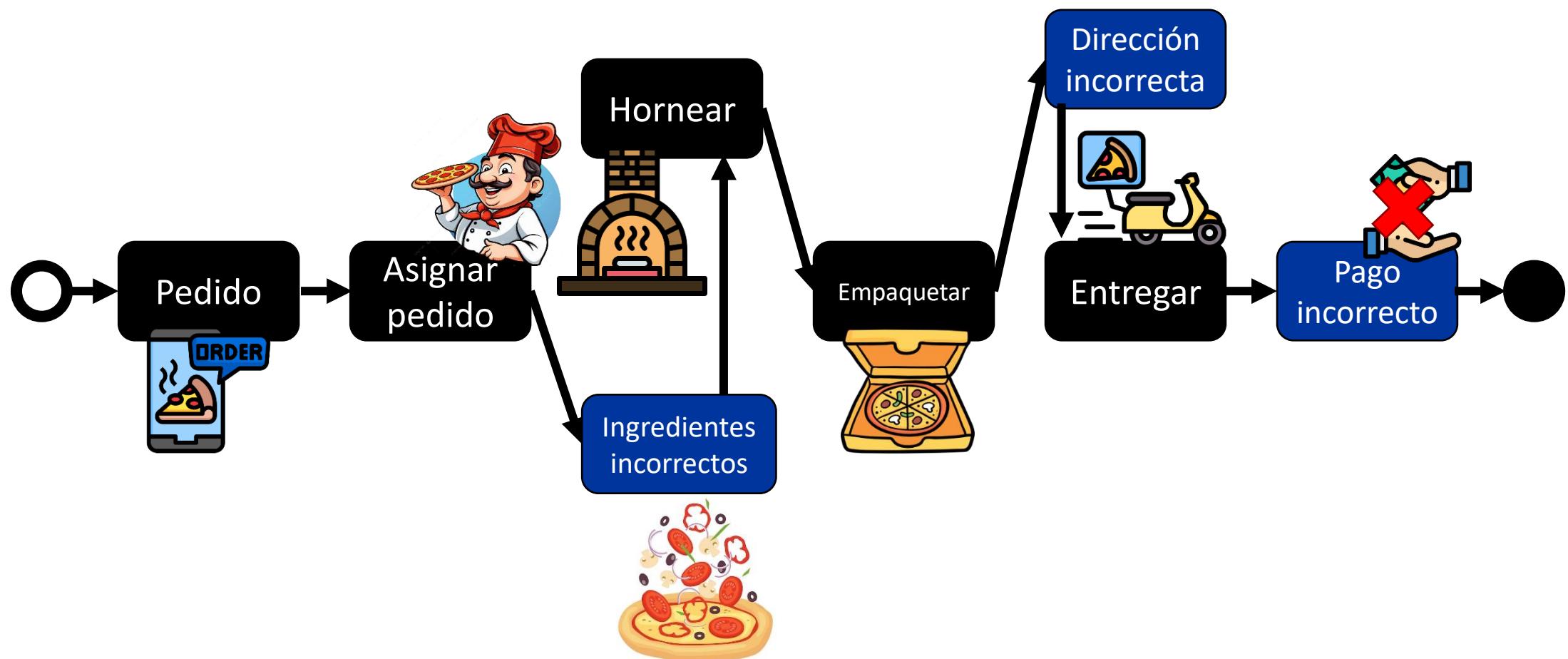
# Necesidad de analizar procesos

## Proceso simple - Pizza delivery



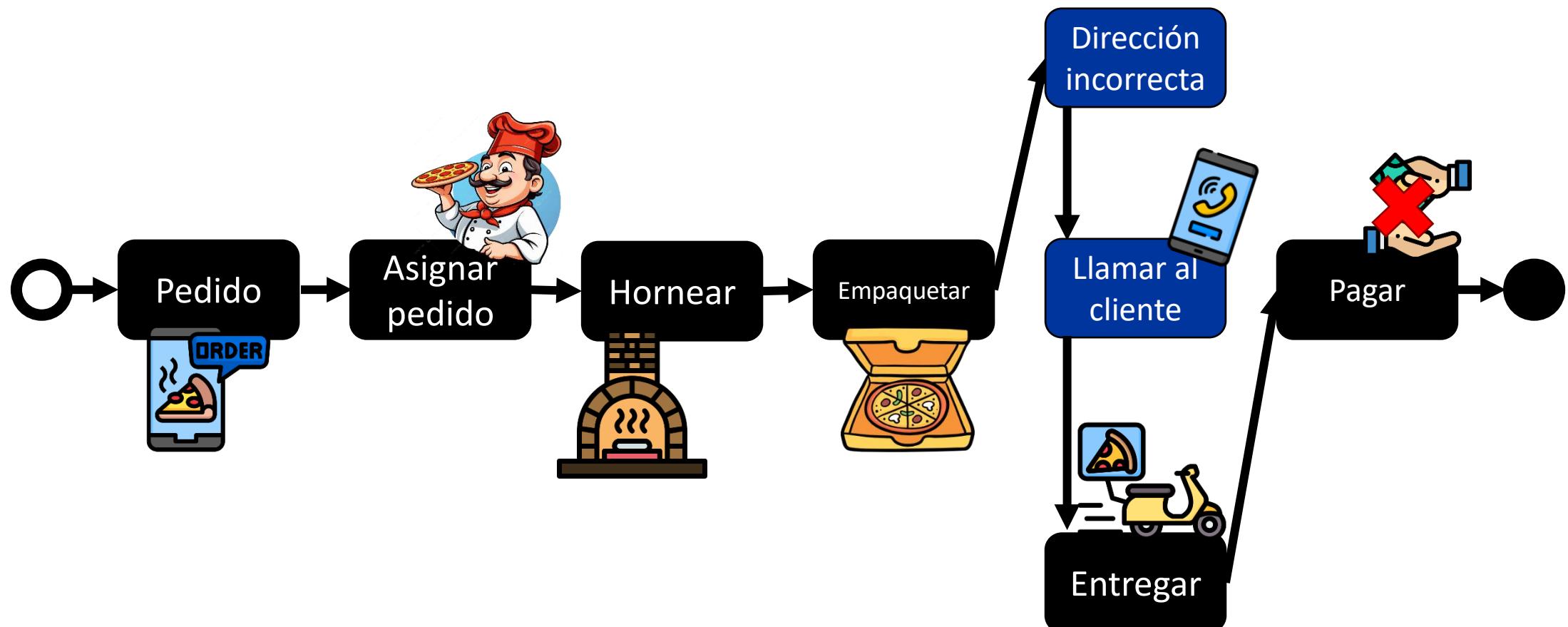
# Necesidad de analizar procesos

## Variaciones del proceso - Pizza delivery



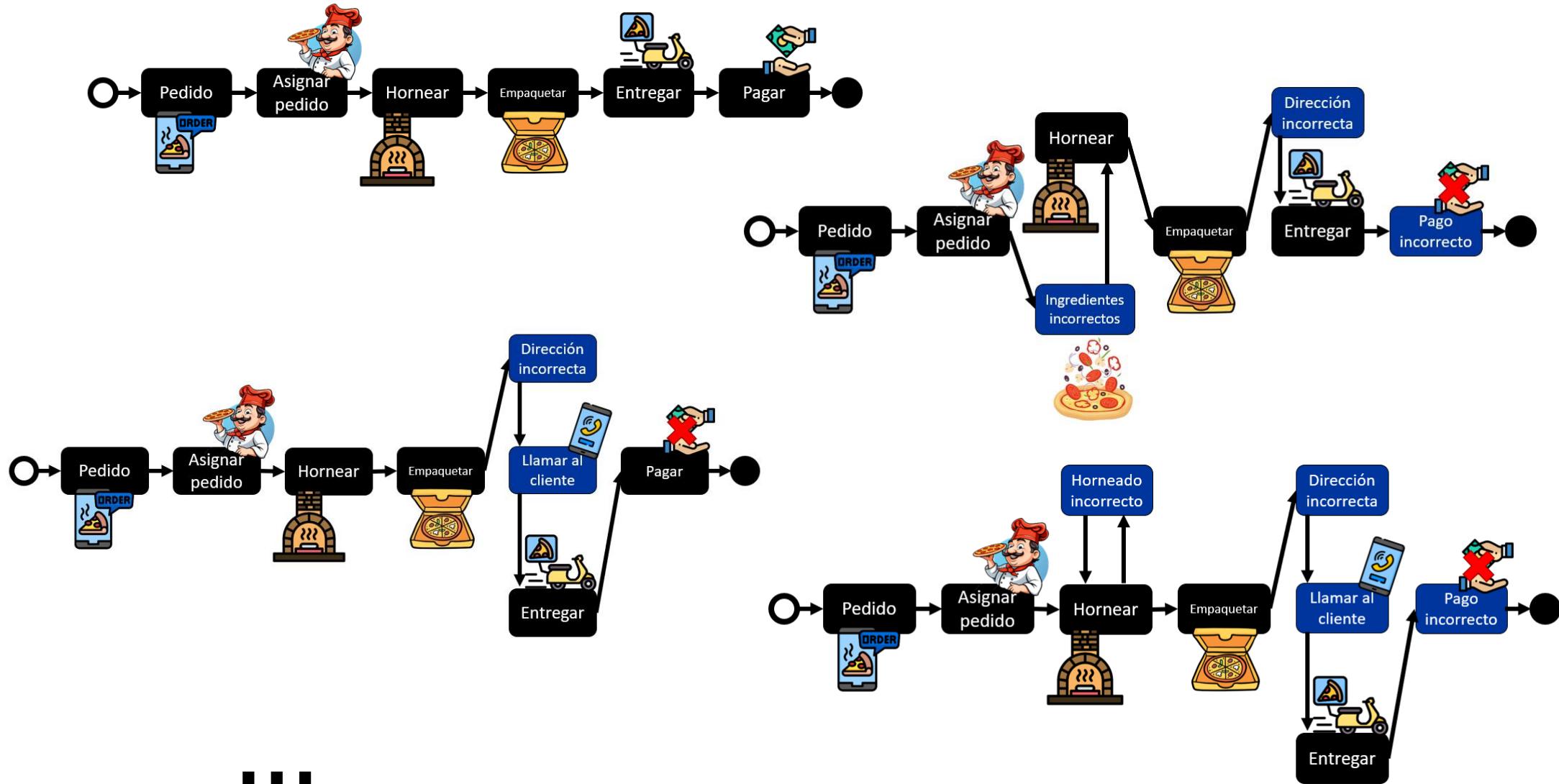
# Necesidad de analizar procesos

## Variaciones del proceso - Pizza delivery



# Necesidad de analizar procesos

## Múltiples variantes para un proceso



# ¿Qué información es relevante de proceso?

¿Cuántas variantes del proceso?



¿Variante/s que más tiempo consume?

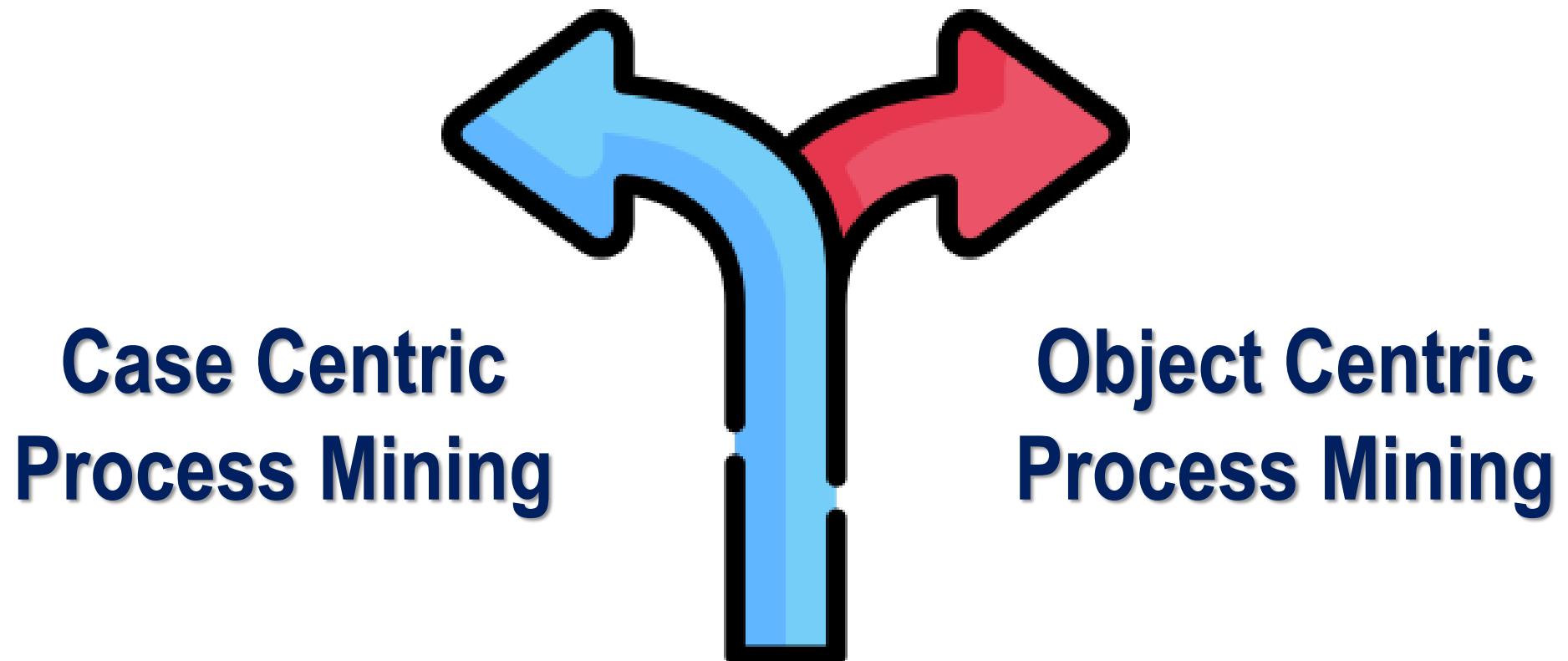
¿Frecuencia de actividades?

¿Tiempo de ejecución de tareas?

¿Variantes del proceso que más se repiten?

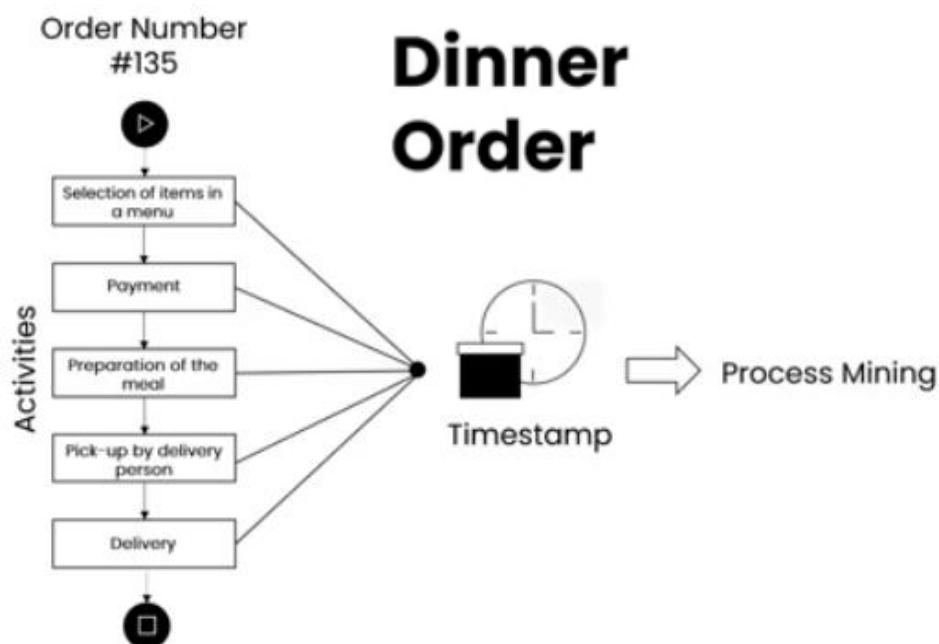
...

# Dos formas de analizar los procesos



# Case Centric Process Mining

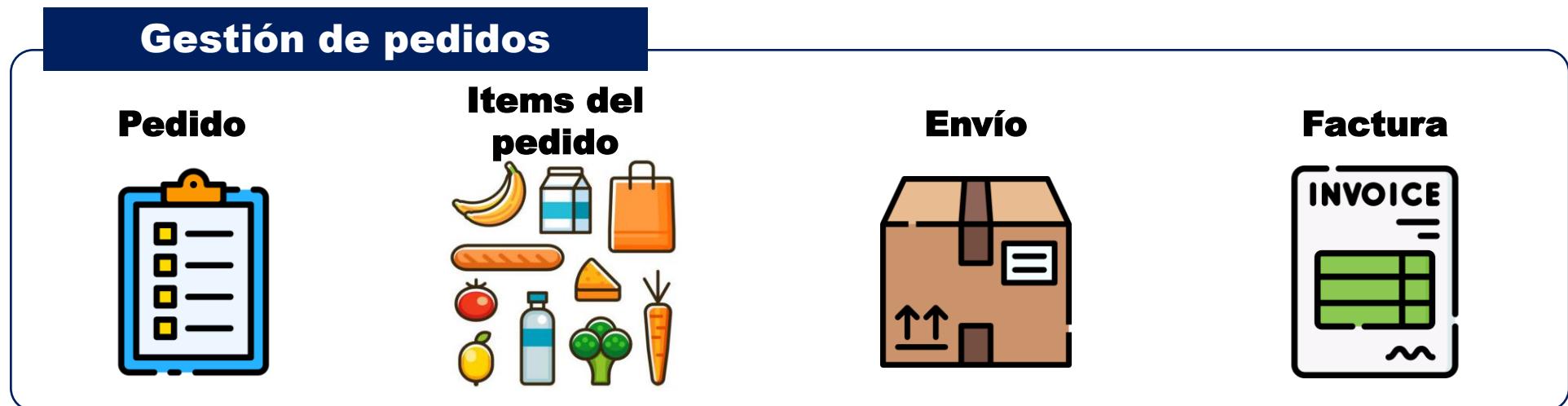
- Enfoque más común
- Un caso (objeto) por proceso
- Los eventos del proceso siguen al objeto
- Los registros de eventos representan procesos



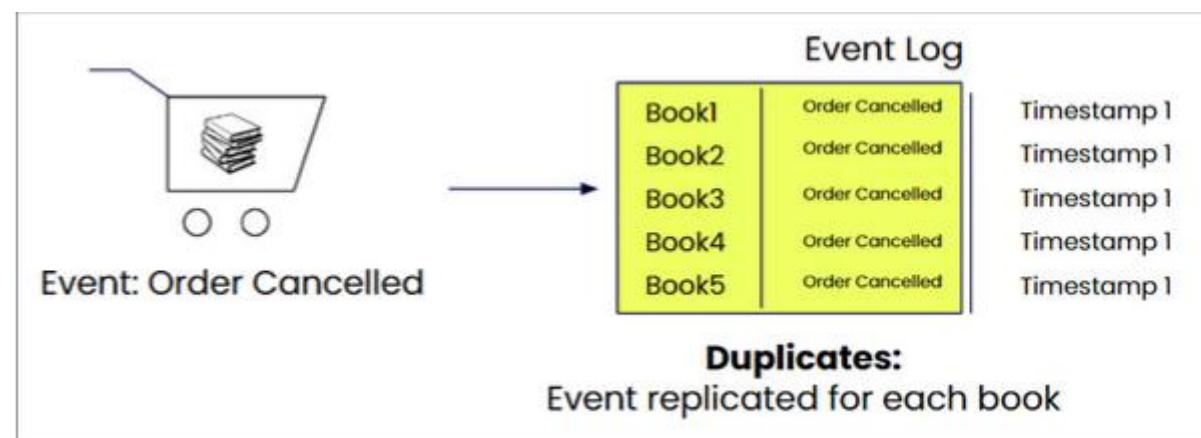
| Event Log    |                               |                     |
|--------------|-------------------------------|---------------------|
| Order Number | Activity                      | Timestamp           |
| 135          | Selection of Item in the Menu | 28.02.2020 18:37:00 |
|              | Payment                       | 28.02.2020 18:46:00 |
|              | Preparation of the Meal       | 28.02.2020 18:48:00 |
|              | Pick up by Deliverer          | 28.02.2020 19:06:00 |
|              | Arrival                       | 28.02.2020 19:26:00 |
| 136          | Selection of Item in the Menu | 29.02.2020 14:26:00 |
|              | Payment                       | 29.02.2020 14:34:00 |
|              | Preparation of the Meal       | 29.02.2020 14:45:00 |
|              | Pick up by Deliverer          | 29.02.2020 15:02:00 |
|              | Arrival                       | 29.02.2020 15:46:00 |

# Case Centric Process Mining - Limitaciones

- Perspectiva restringida – Varios objetos interactúan



- Duplica eventos



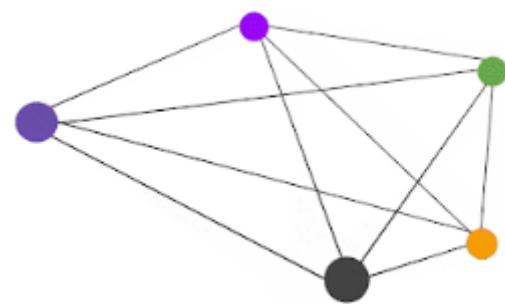
# Object Centric Process Mining

- Capacidad de capturar multiples objetos, eventos y sus relaciones.
- Capacidad de elegir las perspectivas adecuadas para analizar.

Objetos

Eventos

Relaciones



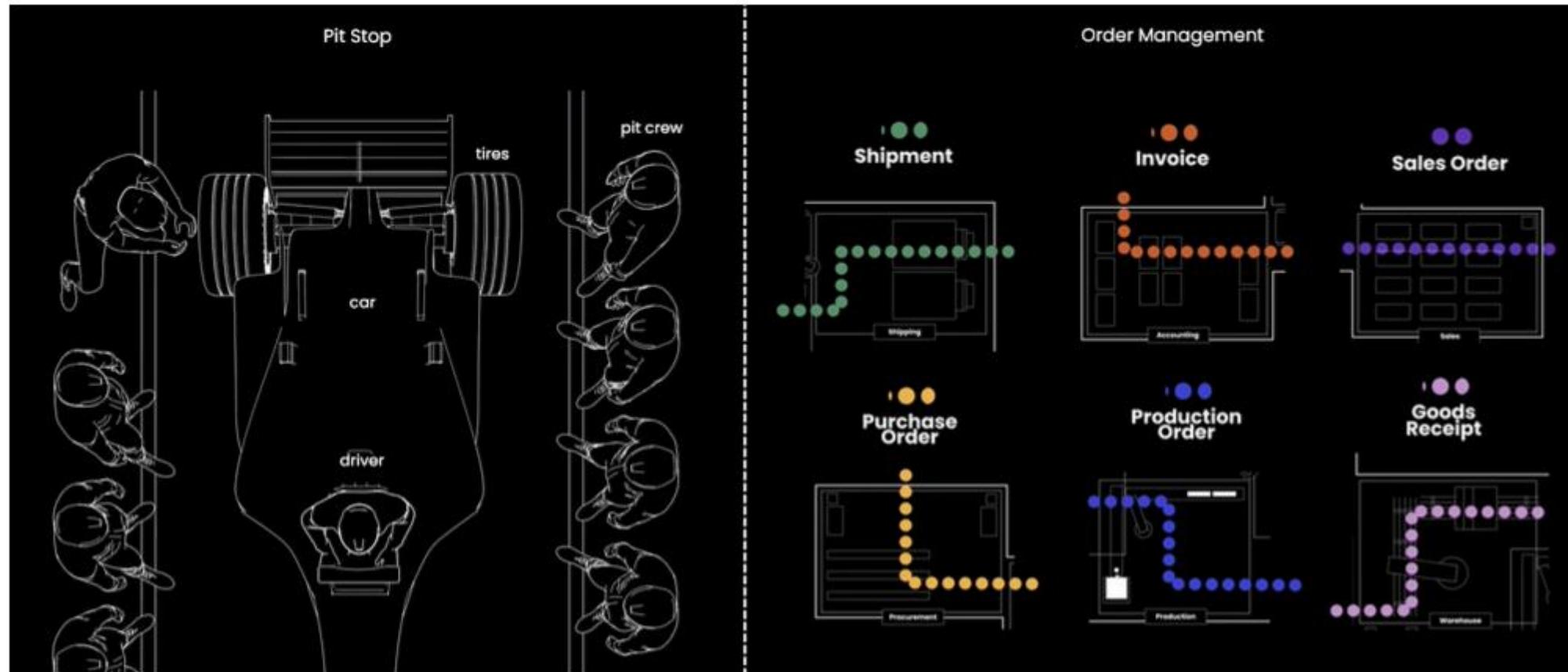
**Object-Centric  
Event Log**

# Object Centric Process Mining

Objetos

Eventos

Relaciones

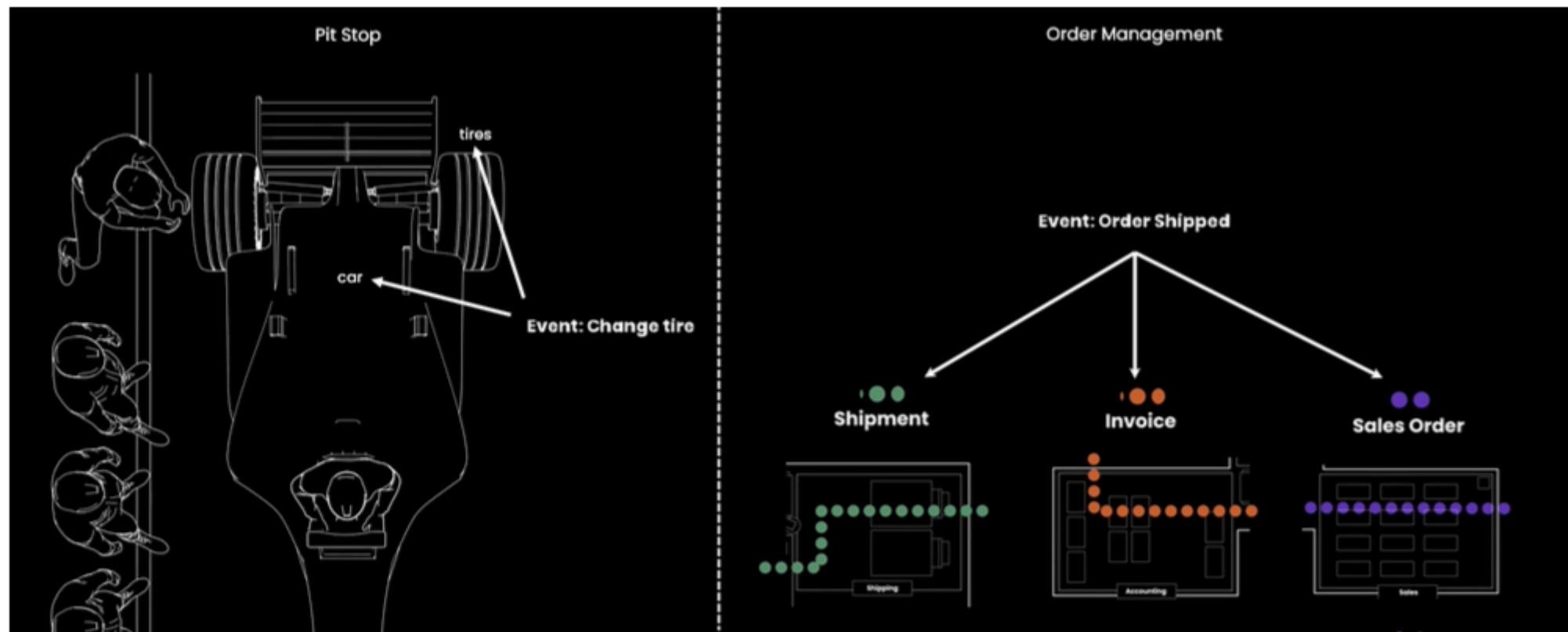


# Object Centric Process Mining

Objetos

Eventos

Relaciones

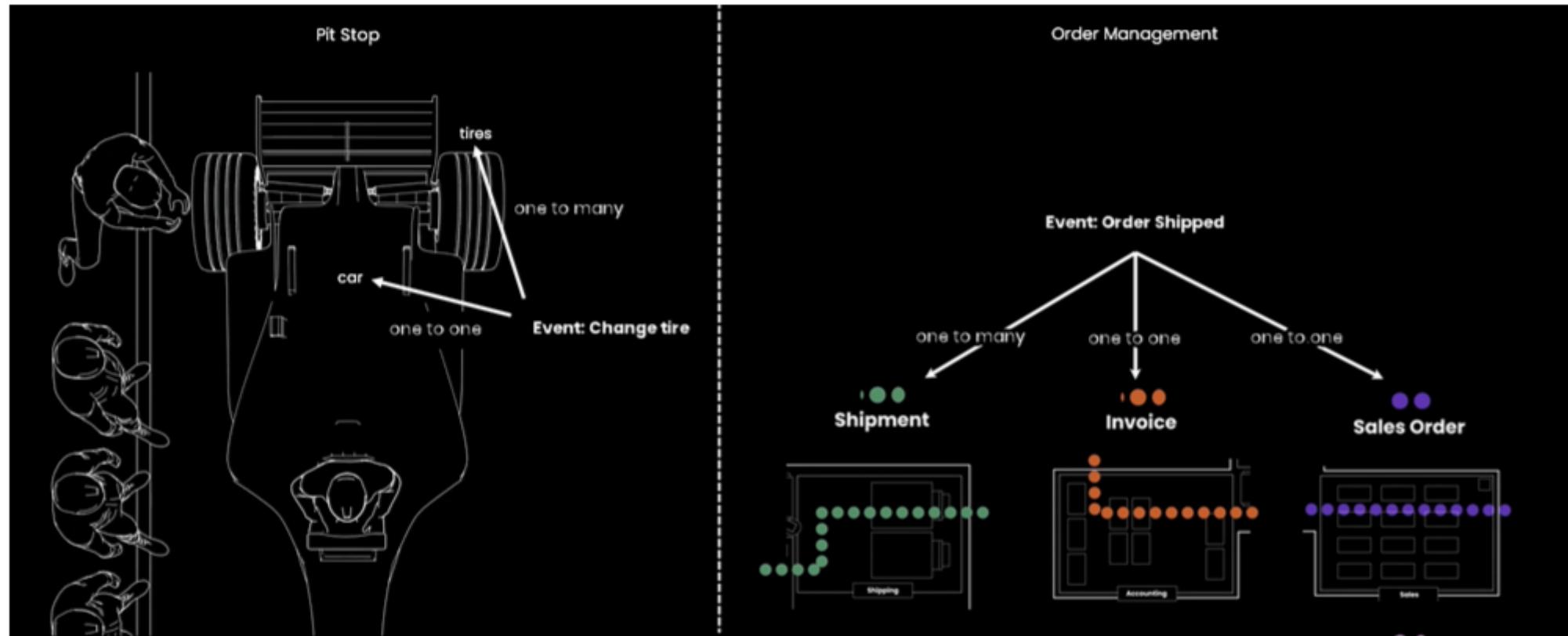


# Object Centric Process Mining

Objetos

Eventos

Relaciones

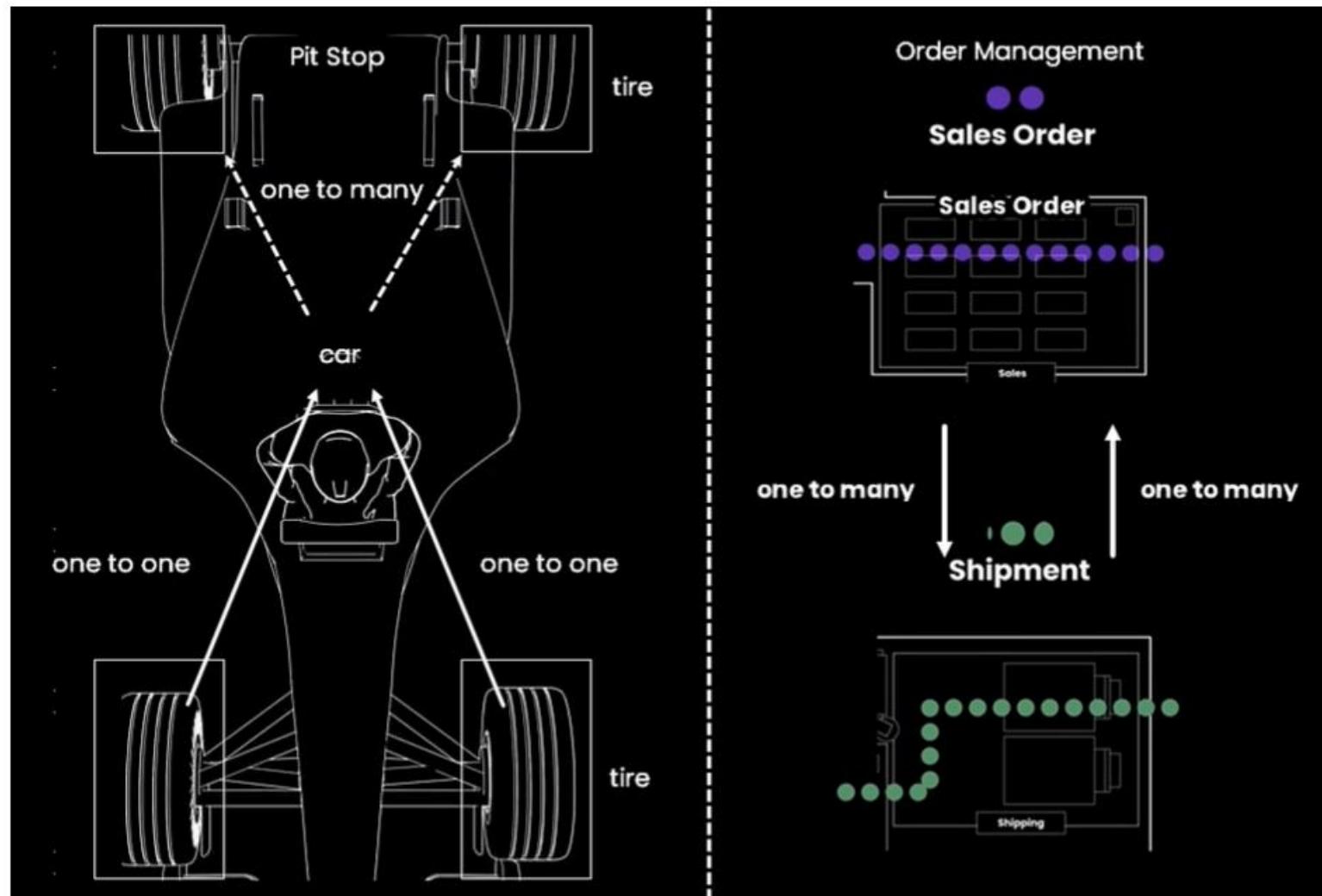


# Object Centric Process Mining

Objetos

Eventos

Relaciones



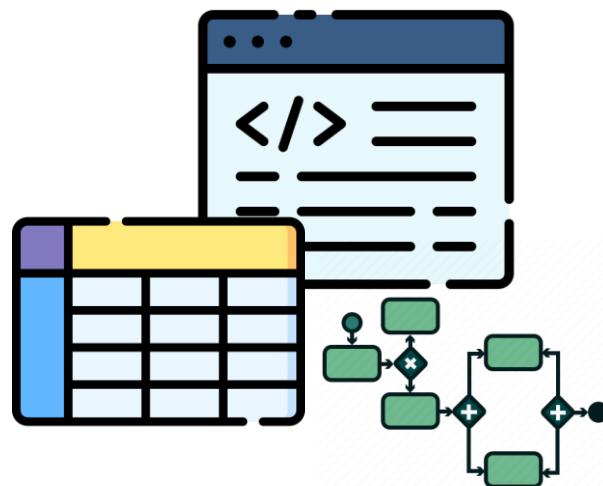
# En esta sesión...



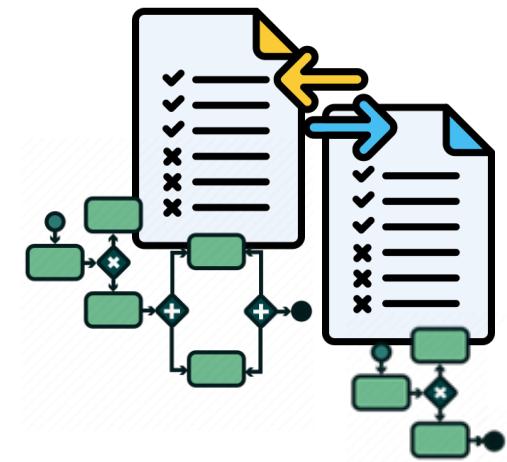
# En esta sesión...



Análisis



Descubrimiento



Conformidad

Introducción

# Herramientas de Minería de Procesos

Minería de Procesos con Celonis

# Herramientas de Minería de Procesos



<http://www.celonis.com>



<http://www.my-invenio.com>



<https://fluxicon.com/disco>



<http://minitlabs.com>



<http://www.promtools.org>



<http://apromore.org>

# Herramientas de Minería de Procesos



<http://www.celonis.com>

# Herramientas de Minería de Procesos



<http://www.celonis.com>

Introducción

Herramientas de Minería de Procesos

# **Minería de Procesos con Celonis**

Introducción

Herramientas de Minería de Procesos

# Minería de Procesos con Celonis

- Acceso y Entorno
- Análisis - Spaces
- Descubrimiento - Carga de datos
- Descubrimiento y Vistas personalizadas
- Análisis - Conformidad
- Ejercicios

Introducción

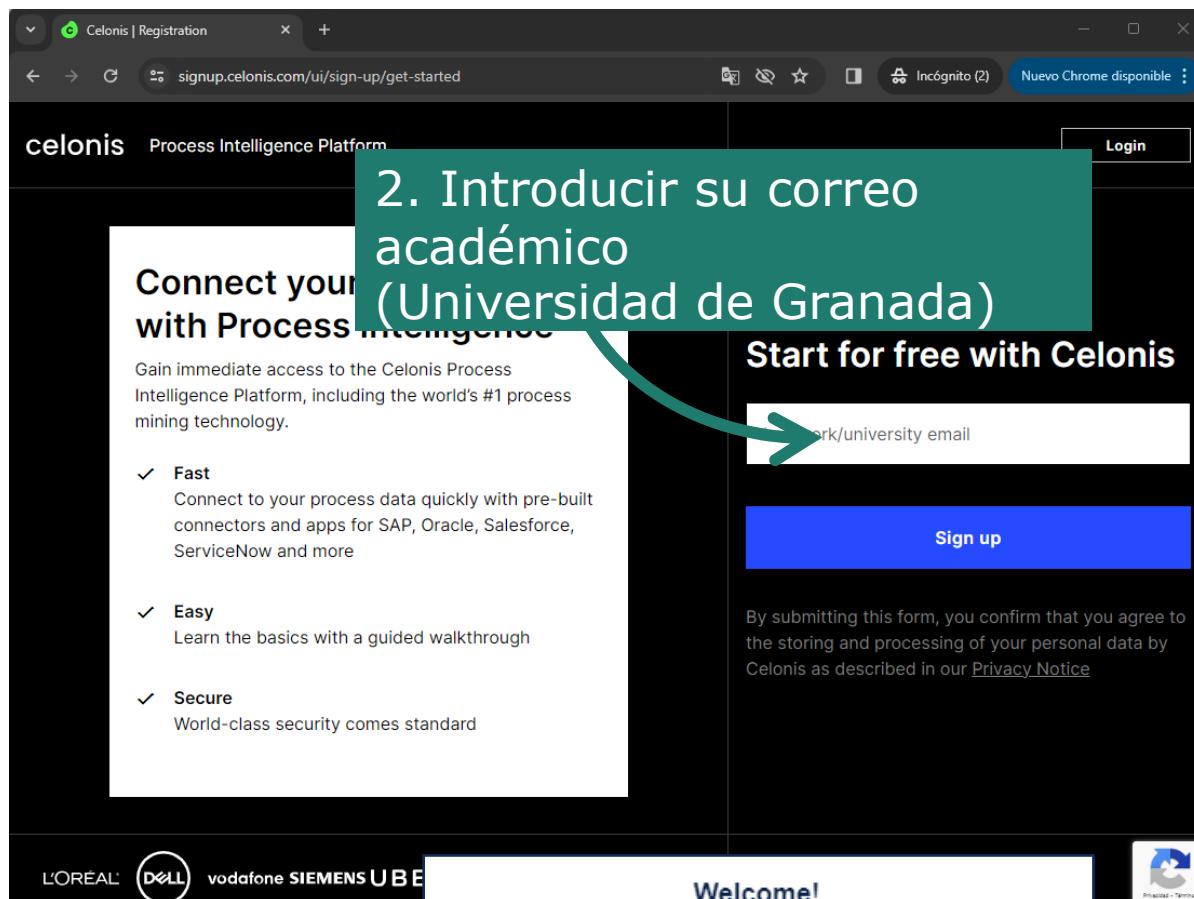
Herramientas de Minería de Procesos

# Minería de Procesos con Celonis

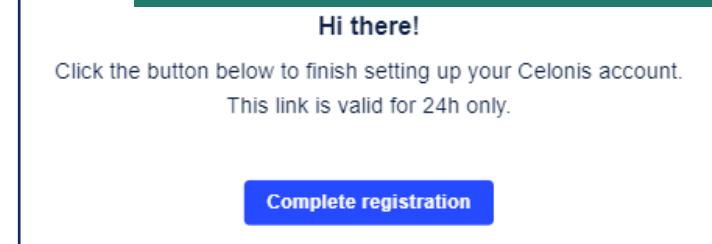
- Acceso y Entorno**
- Análisis - Spaces
- Descubrimiento - Carga de datos
- Descubrimiento y Vistas personalizadas
- Análisis - Conformidad
- Ejercicios

# Crear una cuenta en Celonis

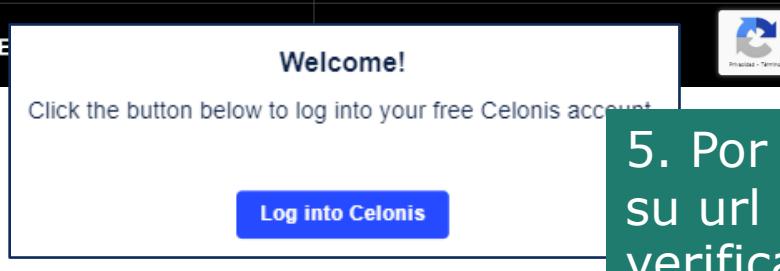
1. Acceder a <https://signup.celonis.com/>



3. Recibirá un correo electrónico. Debe seguir las instrucciones.



4. En el campo '**Seniority**', seleccione '**STUDENT**'.



5. Por último, recibirá un nuevo correo con su url de la licencia y un código de verificación para acceder a la misma.

# Acceder a Celonis

The image shows a composite view of the Celonis platform. On the left, a 'Sign in' form is displayed with fields for 'Email' and 'Password'. On the right, a 'Celonis accounts' dashboard is shown. A red box highlights the 'Celonis accounts' menu item in the sidebar. A blue arrow points from the 'Celonis accounts' section in the sidebar to the 'Celonis Academy' section in the main content area, which is also highlighted with a red box. The main content area also lists 'Celopeers Community' and 'Academic Alliance (1)'. A green banner on the right side of the dashboard reads 'Certificaciones y formación'.

celonis

Sign in

Email

Password

Forgot password?

B Bedilia Estrada  
iestrada@us.es

Celonis accounts

User profile

Password management

Format preferences

Two-factor authentication

Logout

celonis

Celonis accounts

Applications

Celonis Academy  
Become a Celonis expert now

Celopeers Community  
Your place to connect, learn, get help

Teams

Academic Alliance (1)

Bedilia Estrada's Academic Alliance  
academic-celonis.eu-2.celonis.cloud

Certificaciones y formación

# Celonis Academy

Síguenos en:

- [Facebook](#)
- [Twitter](#)
- [LinkedIn](#)
- [YouTube](#)
- [Instagram](#)
- [TikTok](#)
- [Xing](#)
- [WeChat](#)
- [Weibo](#)
- [LinkedIn](#)
- [YouTube](#)
- [Instagram](#)
- [TikTok](#)
- [Xing](#)
- [WeChat](#)
- [Weibo](#)

Búsqueda de contenidos

> Mi actividad

The Rising Stars Program

Want to focus your career in Process Mining? Looking for inspiration where to start? Then you've come to the right place! Celonis Academy offers you a unique learning experience to achieve that mission: **The Rising Stars Program**. Ignite your learning journey with foundational knowledge about Process Mining. Then specialize in your focus area:

- Business
- Técnica
- Automatización
- Research

Upon successful completion, you'll earn a **Rising Star Badge** which will set you apart when applying for process mining jobs.

Noticias de Celonis Academy Certificaciones Comunidad Soporte

Level 01: Launch

celonis Academy

Empezar ▾

- Tu viaje
- Navegación por la Academy
- Sobre Academy

Búsqueda de contenidos

Level 02: Learn

> Mi actividad

Catálogo ▾

- Por tema
- Exámenes
- Microaprendizaje (Microlearning)
- Cursos en línea
- Dirigido por un entrenador
- Itinerario de formación
- Traducido
- Webcasts
- EXPLORAR TODO

Level 03: Select

Business

Técnica

Automatización

Research

Next: Consultant Bootcamp

Want to apply the knowledge you've gained in a business project? Join us for a real-life challenge and get your hands dirty!

[Solicitar más información](#)

celonis Academy

Empezar ▾

Catálogo ▾

Rol ▾

Certificaciones Celonis

Stand out in the crowd. Get #CelonisCertified.

| Funciones de los Customers | Funciones de los Partners |
|----------------------------|---------------------------|
| Data Analyst               | Data Analyst              |
| Data Engineer              | Data Engineer             |
| IT Lead                    | IT Lead                   |
| Value Architect            | Value Architect           |
| Business User              | Project Manager           |
| Celonis Champion           | Transformation Lead       |
| Celonis Lead               |                           |
| Process Lead               |                           |

¿No conoces tu papel? Haz clic aquí

de procesos

Ler el artículo del blog

Nuestra encuesta continua a los profesionales Celonis Certified nos dice:

El 90% aprendió nuevas habilidades y conocimientos en el proceso de abordar sus lagunas respecto a los temas del Examen.

El 92% utilizaría la celebración de un Celonis Certification como factor favorable a la hora de contratar a nuevos miembros del equipo.

Las 2 razones principales para convertirse en Celonis Certified fueron la competitividad en el mercado laboral y credibilidad profesional.

ESPAÑOL -

# Acceder a Celonis

The screenshot shows the Celonis sign-in page on the left and the user profile page on the right. A red arrow points from the 'Celopeers Community' section on the right to the 'Celonis accounts' section on the left.

**Celonis accounts**

- Celoneers Community**  
Your place to connect, learn, get help
- Academic Alliance (1)**  
Bedilia Estrada's Academic Alliance  
academic-celonis.eu-2.celonis.cloud

**Comunidad y soporte**

# Celonis – Celopeers Community

**celonis | SUPPORT**

Home      Support ▾      Resources ▾     

## How can we help?

Ask questions, get answers.

How can we help?

Easily search through ALL Celonis access to Celonis expertise.

Knowledge

Documentation

Community

Academy

Need Support? Explore cases or create one!

[View Cases](#)

[Create a Case](#)

CELONIS  
EMS HEALTH STATUS  
All systems are go

**Featured Topics**

Data Extraction

Data extraction from systems like ERP and CRM is key to enabling process analysis in Celonis. Explore our knowledgebase for detailed articles on connectors, ETL processes, and best practices.

[Learn More](#)

Data Platform

Need assistance with data ingestion, transformation, or management within the Celonis Data Platform? Click here to find helpful resources and solutions.

[Learn More](#)

Studio

Have questions about building apps, customizing analyses, or automating workflows in Celonis Studio? Find expert guidance and support here.

[Learn More](#)

View

Looking for help with creating, customizing, or analyzing dashboards in Celonis View? Access helpful resources and step-by-step solutions here.

[Learn More](#)

**News & Updates**

Support News & Updates

Stay updated on changes to our customer support

Product Updates

Discover the latest features, improvements and innovations.

Academy News

Keep learning with fresh updates from the Academy.

Community News

Your hub for news, discussions and community highlights.

[View all →](#)

**Academy Training**

Data Analyst

Design, develop, and distribute Celonis solutions — including dashboards, analyses, and automations — to identify and drive value opportunities.

Data Engineer

Connect the data. Manage the technical setup for company data to feed into Celonis.

Process Lead

Secure value opportunities to solve process challenges

Celonis Lead

Lead the charge and manage the use of Celonis. Initiate a Center of Excellence.

# Acceder a Celonis

## Acceder al entorno de trabajo

The screenshot shows the Celonis sign-in interface. On the left, there is a 'Sign in' form with fields for 'Email' and 'Password'. Below the password field is a 'Forgot password?' link. On the right, a sidebar displays the user's profile (Bedilia Estrada, iestrada@us.es), account options (Celonis accounts, User profile, Password management, Format preferences, Two-factor authentication), and application links (Celonis Academy, Celopeers Community). A red box highlights 'Bedilia Estrada's Academic Alliance' under the 'Teams' section, which lists 'Academic Alliance (1)' with the URL 'academic-celonis-xxxxxx.eu-2.celonis.cloud'. A large blue arrow points upwards from the URL text area towards the highlighted alliance entry.

Acceso al entorno de trabajo

<https://academic-celonis-xxxxxx.eu-2.celonis.cloud/>

# Entorno de trabajo – Academic Alliance

## Celonis EMS (Execution Management System)

The screenshot shows the Celonis EMS interface. On the left is a vertical navigation menu with the following items:

- Quickstarts (highlighted in blue)
- Apps
- Business Miner
- Celonis Gallery
- More
- Data
- Studio
- Marketplace
- Admin & Settings
- Search
- Help Center
- Bedilia Estrada Admin

The main dashboard area has a header with the text "Celonis EMS" and "Workshop". Below the header, there is a section titled "Common process" with the subtext "Business processes for common source systems." This section contains five cards:

- Order Management (ORACLE logo)
- Procurement (ORACLE logo)
- Accounts Payable (SAP logo)
- Accounts Receivable (SAP logo)
- Procurement (SAP logo)

Below these cards is a section titled "Event log" with the subtext "Data that is formatted as an event log." It contains two cards:

- Google Sheets (with an upload icon)
- XES File (with an upload icon)

# Celonis EMS

## QUICKSTARTS

The screenshot shows the Celonis EMS interface. On the left, there's a sidebar with various navigation options: Apps, Business Miner, Celonis Gallery, More, Data, Studio, Marketplace, Admin & Settings, Search, Help Center, and a user profile for Bedilia Estrada. The 'Quickstarts' option is highlighted with a red box and a blue arrow points to it from the main content area. The main content area has a teal header box containing the text: 'Opciones principales (precargadas) del análisis de procesos y registros de eventos'. Below this, there are several cards representing different integration points:

- RACLE
- ORACLE
- ORACLE
- SAP
- Accounts Receivable
- Procurement
- Case Management
- Opportunity Management
- Incident Management
- SAP
- servicenow
- Google Sheets
- XES File

At the bottom left, there's a note: 'Event log' followed by 'What is formatted as an event log.'

# Celonis EMS

## APP

The screenshot shows the Celonis EMS interface. On the left, there's a sidebar with various menu items: Quickstarts, Apps (which is highlighted with a red border and has a blue arrow pointing to it), Business Miner, Celonis Gallery, More, Data, Studio, Marketplace, Admin & Settings, Search, Help Center, and a user profile for Bedilia Estrada Admin. The main area is titled "Acceso a Spaces (antiguo Process Analytics)". It displays several tiles for different systems: RACLE, ORACLE, ORACLE, SAP, Procurement, Case Management, Opportunity Management, Incident Management, Google Sheets, and XES File.

Acceso a  
Spaces (antiguo *Process Analytics*)

RACLE

ORACLE

ORACLE

SAP

Procurement

Case Management

Opportunity Management

Incident Management

servicenow

Google Sheets

XES File

c

Quickstarts

Apps

Business Miner

Celonis Gallery

More

Data

Studio

Marketplace

Admin & Settings

Search

Help Center

Bedilia Estrada Admin

# Celonis EMS

**APP → SPACES → Case Centric Process Analytics**

The screenshot shows the Celonis EMS interface. On the left, there's a sidebar with various icons (C, Apps, S, Order Management, ...). The main area displays a welcome message and a list of available spaces under 'Suggested (5)'. A red box highlights the 'Case-Centric Process Analytics' space, which contains three sub-spaces: '1: Welcome to Celonis', '2: Pizzeria Mamma Mia in Views', and '3: Order to Cash in Views'. Below this section, another row shows '6: Object-Centric Order Management' and '7: Accounts Receivable Execution App'. At the bottom, there are links to 'See all (7)' and 'See all (5)'.

Welcome back, Bedilia Estrada

Here you will see all the spaces available to you

Suggested (5) Package & Asset Starred Last Viewed

View Order Management Viewed 6 minutes ago

Package 6: Object-Centric Order Management Viewed 6 minutes ago

View Welcome to Celonis Viewed 7 minutes ago

Package 1: Welcome to Celonis Viewed 7 minutes ago

Analysis Pizzeria Analysis Viewed 7 minutes ago

All spaces (3) Name Last viewed

Analysis is an older version of Celonis and it will be deprecated by March 15. It is suggested th...

[Analysis] Case-Centric Proce...

Case-Centric Process Analytics

1: Welcome to Celonis

2: Pizzeria Mamma Mia in Views

3: Order to Cash in Views

See all (7)

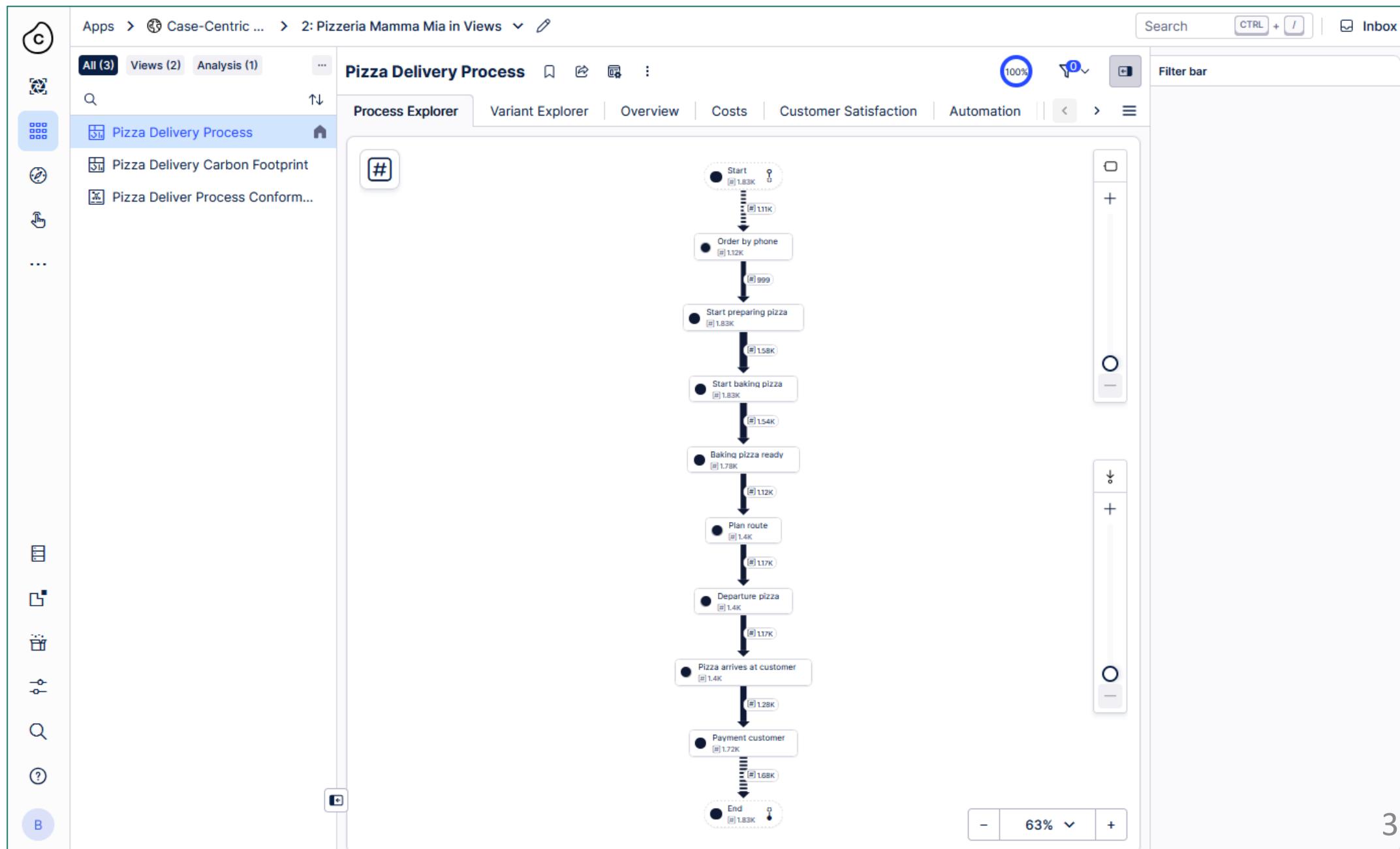
6: Object-Centric Order Management

7: Accounts Receivable Execution App

See all (5)

# Celonis EMS

**APP → SPACES → Case Centric Process Analytics**



# Celonis EMS

## BUSINESS MINER

The screenshot shows the Celonis EMS interface with the following elements:

- Left Navigation Bar:** Includes "Quickstarts", "Apps" (with "Business Miner" highlighted by a red box and a blue arrow pointing to it), "Celonis Gallery", "More", "Data", "Studio", "Marketplace", "Admin & Settings", "Search", "Help Center", and a user profile for "Bedilia Estrada Admin".
- Header:** Shows the Celonis logo and the text "Business Miner".
- Content Area:** Displays various application cards:
  - Business Miner:** Oracle logo.
  - Order Management:** Oracle logo.
  - Procurement:** SAP logo.
  - Accounts Payable:** SAP logo.
  - Accounts Receivable:** SAP logo.
  - Procurement:** SAP logo.
  - Case Management:** salesforce logo.
  - Opportunity Management:** salesforce logo.
  - Incident Management:** servicenow logo.
- Log Import Options:** Buttons for "Google Sheets" and "XES File".

# Celonis EMS

## BUSINESS MINER

**Explore**

**AP Business**

**Process Explorations**

**Create Exploration**

**Studio**

**Marketplace**

**Admin & Settings**

**Más información**

<https://academy.celonis.com/learn/video/lets-talk-about-business-miner>

<https://academy.celonis.com/courses/introduction-to-business-miner/>

The screenshot shows the Celonis Business Miner interface. On the left, there's a sidebar with navigation links like 'Explore', 'AP Business', 'Process Explorations', 'Create Exploration' (with a hand cursor icon), 'Studio', 'Marketplace', and 'Admin & Settings'. Below these are search and help icons.

The main area is titled 'Start exploring' and 'What's your On-Time Payment (OTP) rate?'. It displays the following data:

- OTP rate:** 37.6% (highlighted in red)
- Grace period:** -3 days | +3 days
- Currency:** USD
- Payment block activities:** 2
- Short payment terms:** < 30 days
- Slow processing threshold:** > 15 days

**How can you improve your OTP rate?**

- Reduce late payments:** 18.6% OTP rate increase, 2.11M USD Cash discount
- Remove blocks:** 16.1% OTP rate increase, 2.02M USD Cash discount
- Cut processing time:** 10.5% OTP rate increase, 397K USD Cash discount
- Extend payment terms:** 0.1% OTP rate increase
- Reduce early payments:** 3.22M USD Free cash flow

At the bottom right, it says 'Thanks for the feedback!' with a timestamp of 4:53:11 and a date of 10/7/2020.

# Celonis EMS

## CEYLONIS GALLERY

The screenshot shows the Celonis EMS interface. On the left is a sidebar with a user profile icon (B) at the top, followed by a list of menu items: Quickstarts (highlighted with a blue background), Apps, Business Miner, Celonis Gallery (highlighted with a red border), More, Data, Studio, Marketplace, Admin & Settings, Search, Help Center, and Bedilia Estrada Admin. A large blue arrow points from the 'Celonis Gallery' menu item towards the main content area. The main area has a dark header with the text 'S' and 'process'. Below the header is a section titled 'Business processes for common source systems.' containing several cards: 'Order Management' (SAP logo), 'Procurement' (SAP logo), 'Accounts Payable' (SAP logo), 'Accounts Receivable' (SAP logo), 'Procurement' (SAP logo), 'Case Management' (salesforce logo), 'Opportunity Management' (salesforce logo), 'Incident Management' (servicenow logo), 'Google Sheets' (with an upload icon), and 'XES File' (with an upload icon). A large green bar with the text 'Celonis Gallery' is overlaid across the middle of the cards.

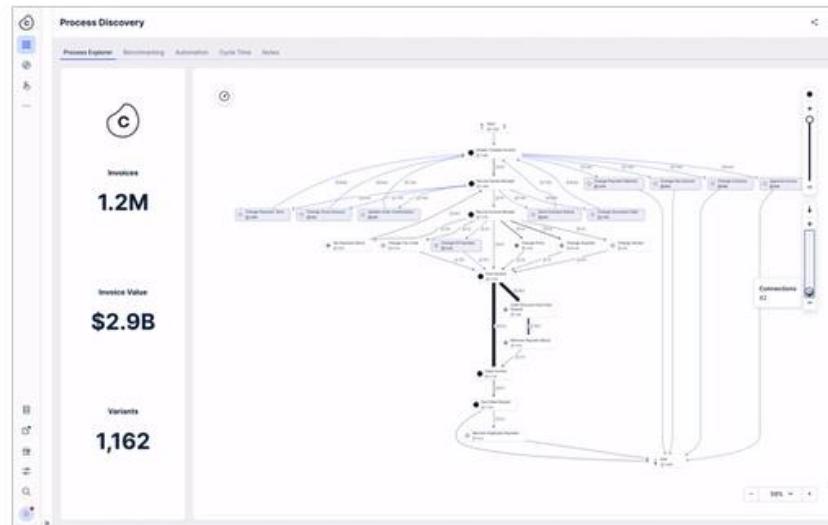
# Celonis EMS

## CEYLONIS GALLERY



### Accounts Payable

Optimize your Accounts Payable process to improve working capital and productivity while reducing spend.



Jump directly into a specific use case

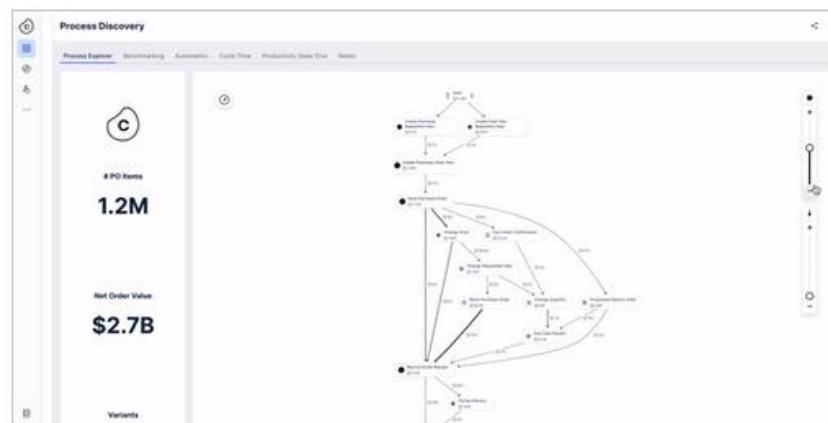
**SLA Compliance** →

**Optimize Working Capital** →

**Cost Avoidance** →

### Procurement

Find and fix inefficiencies in your Procurement process to increase productivity, optimize spend, and improve supply reliability.



Jump directly into a specific use case

**Productivity** →

**Spend Control** →

**Supply Reliability** →

# Celonis EMS

## DATA

The screenshot shows the Celonis EMS interface with the 'Data' section highlighted. The left sidebar includes 'Quickstarts', 'Apps', 'Business Miner', 'Celonis Gallery', 'More', 'Data' (which is selected and highlighted with a red border), 'Studio', 'Marketplace', 'Admin & Settings', 'Search', 'Help Center', and a user profile for 'Bedilia Estrada Admin'. The main content area displays various business process integration options, such as Order Management (ORACLE), Procurement (ORACLE), Accounts Payable (SAP), Accounts Receivable (SAP), Procurement (SAP), Case Management (salesforce), Opportunity Management (salesforce), and Incident Management (servicenow). A 'Log' section is also visible.

c

Quickstarts

Apps

Business Miner

Celonis Gallery

More

Data

Studio

Marketplace

Admin & Settings

Search

Help Center

Bedilia Estrada Admin

Order Management

Procurement

Accounts Payable

Accounts Receivable

Procurement

Case Management

Opportunity Management

Incident Management

ORACLE

ORACLE

ORACLE

SAP

SAP

salesforce

salesforce

servicenow

Log

What is formatted as an event log.

Objects and Events

Data Integration

Machine Learning

Task Mining

Data Generator

Google Sheets

XES File

# Celonis EMS

## STUDIO

The screenshot shows the Celonis EMS Studio interface. On the left, there's a sidebar with a user icon (B) at the top, followed by a list of menu items: Quickstarts, Apps, Business Miner, Celonis Gallery, More, Data, Studio (which is highlighted with a red border), Marketplace, Admin & Settings, Search, Help Center, and a profile for Bedilia Estrada Admin.

The main area is titled "S" and contains several integration components:

- Business process:** Business processes for common source systems.
  - RACLE:** Oracle Integration Cloud Service
  - ORACLE:** Oracle Database
  - ORACLE:** Oracle Database
  - SAP:** SAP ERP
  - SAP:** SAP ERP
- Procurement:** SAP ERP
- Case Management:** salesforce
- Opportunity Management:** salesforce
- Incident Management:** servicenow

At the bottom, there are two upload buttons: "Google Sheets" and "XES File".

# Celonis EMS

## OTRAS OPCIONES

The screenshot shows the Celonis EMS interface with a sidebar on the left and a main content area on the right.

**Left Sidebar:**

- Profile icon (c)
- Quickstarts
- Apps
- Business Miner
- Celonis Gallery
- More
- Data
- Studio
- Marketplace
- Admin & Settings
- Search
- Help Center
- User profile: Bedilia Estrada Admin

The "Marketplace" and "Admin & Settings" items are highlighted with a red border.

**Main Content Area:**

**Top Bar:** S

**Section: Business process**  
Business processes for common source systems.

**Grid of Integration Options:**

| RACLE | Order Management<br>ORACLE | Procurement<br>ORACLE         | Accounts Payable<br>SAP              | Accounts Receivable<br>SAP        |
|-------|----------------------------|-------------------------------|--------------------------------------|-----------------------------------|
| SAP   | Procurement<br>SAP         | Case Management<br>salesforce | Opportunity Management<br>salesforce | Incident Management<br>servicenow |
|       | Google Sheets              | XES File                      |                                      |                                   |

Introducción

Herramientas de Minería de Procesos

# Minería de Procesos con Celonis

- Acceso y Entorno
- Análisis - Spaces
- Descubrimiento - Carga de datos
- Descubrimiento y Vistas personalizadas
- Análisis - Conformidad
- Ejercicios

# Identificar información relevante

¿Cuántas variantes del proceso?



¿Variante/s que más tiempo consume?

¿Frecuencia de actividades?

¿Tiempo de ejecución de tareas?

¿Variantes del proceso que más se repiten?

...

# Celonis EMS

## APP → SPACES → Case Centric Process Analytics

The screenshot shows the Celonis EMS interface with the following details:

- Header:** Welcome back, Bedilia Estrada
- Search Bar:** Search (CTRL + /) and Inbox
- Left Sidebar:** Icons for Apps, Home, Recent, and Help.
- Suggested Spaces:**
  - Order Management (Viewed 6 minutes ago)
  - 6: Object-Centric Order Management (Viewed 6 minutes ago)
  - Welcome to Celonis (Viewed 7 minutes ago)
  - 1: Welcome to Celonis (Viewed 7 minutes ago)
  - Pizzeria Analysis (Viewed 7 minutes ago)
- All spaces (3):**
  - An analysis space with a warning message: "Analysis is an older version of Celonis and it will be deprecated by March 15. It is suggested th...". It contains links to [Analysis] Case-Centric Proce...
  - 2\_Pizzeria Mamma Mia
  - 2\_Pizzeria Mamma Mia - small data set
  - 3\_Pizzeria Carbon Emissions
  - See all (7)
- Case-Centric Process Analytics:** This space is highlighted with a red box. It contains:
  - Case-Centric Process Analytics (Icon: globe)
  - 1: Welcome to Celonis
  - 2: Pizzeria Mamma Mia in Views
  - 3: Order to Cash in Views
  - See all (5)
- OCPM & Executions App:**
  - 6: Object-Centric Order Management
  - 7: Accounts Receivable Execution App

# Celonis EMS

APP → SPACES → Case Centric Process Analytics

The screenshot shows the Celonis EMS interface for Case-Centric Process Analytics. The top navigation bar includes 'Apps > Case-Centric Process Analytics'. The main area displays a grid of cards for various packages and assets. A red box highlights the second card in the first row:

| Category | Name                            | Viewed         |
|----------|---------------------------------|----------------|
| Package  | 2: Pizzeria Mamma Mia in Views  | 4 minutes ago  |
| View     | Pizza Delivery Process          | 4 minutes ago  |
| View     | Pizza Delivery Carbon Footprint | 7 minutes ago  |
| Package  | Welcome to Celonis              | 15 minutes ago |
| Package  | 1: Welcome to Celonis           | 15 minutes ago |

A large blue arrow points from a green box labeled 'Paquetes' to the highlighted package card.

# Case Centric Process Analytics

Vistas y análisis

Pestañas de vistas

The screenshot shows the Case Centric Process Analytics interface with various features highlighted:

- Vistas y análisis** (Views and analysis): Points to the left sidebar containing navigation links like Apps, Case, and a search bar.
- Pestañas de vistas** (View tabs): Points to the top navigation bar with tabs for Process Explorer, Variant Explorer, Overview, Costs, Customer Satisfaction, Automation, Rework, and Case Explorer.
- Indicador de casos** (Case indicator): Points to a circular progress bar at the top right indicating 55% completion.
- Filtros** (Filters): Points to filter options for starting and ending activities.
- Área de análisis personalizado** (Custom analysis area): Points to the main content area where a process diagram is displayed.
- Selector de métricas** (Metric selector): Points to a list of metrics on the left, with "Case Frequency" highlighted.
- Selector de variantes** (Variant selector): Points to a list of variants on the right, with "Order by phone" highlighted.
- Visualizador de variantes** (Variant viewer): Points to the process diagram showing activity nodes and their transitions.

The process diagram illustrates a workflow for pizza delivery, starting from "Order by phone" and ending at "End". Activities include "Start baking pizza", "Baking pizza ready", "Departure pizza", "Plan route", "Pizza arrives at customer", "Payment customer", and "Start preparing pizza". Transitions between activities are labeled with counts such as 1.09K, 1.07K, and 1.06K.

Área de análisis personalizado

# Case Centric Process Analytics

## Views (Vistas)

**C**

Apps > Case-Centric ... > 2: Pizzeria Mamma Mia in Views < /

All (3) Views (2) Analysis (1) ...

**Pizza Delivery Process** Search CTRL + / Inbox

Process Explorer Variant Explorer **Overview** Costs Customer Satisfaction Automation Rework Case Explorer

Starting with activity Order by phone Ending with activity Payment customer

# of Orders **1089** -20.56 Average Time to Delivery **48.57 mins** -1.95 Average Customer Satisfaction **1.81 out of 5** 0.02 Total Profit **8,448 €**

Average Time to Delivery: 48.57 mins (30.00 mins)

Average Customer Satisfaction: 1.81 out of 5 (3.50 out of 5)

Total Profit: 8,448 €

**Variant Explorer**

cases covered  
1 of 45 variant  
377 of 1.09K cases

Expand Controls ↗

Start → Order by phone → Start preparing pizza → Start baking pizza → Baking pizza ready → Plan route → Departure pizza → Pizza arrives at customer → Payment customer → End

Drill Down by Pizza Size

Pizza Size: 24.33% Medium, 43.71% Small, 31.96% Large

Orders Received by Weekday

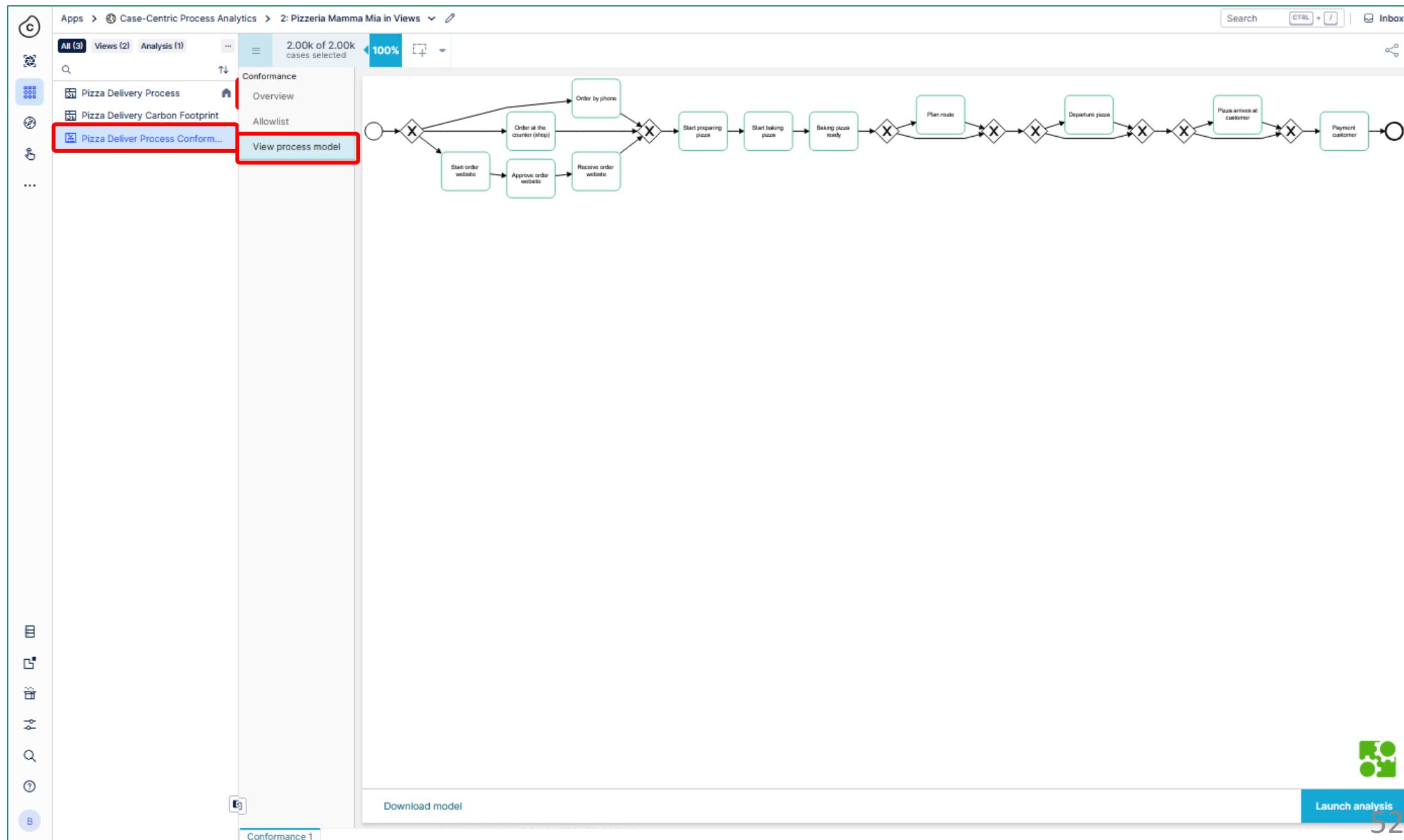
↑ # of Orders

| Weekday       | # of Orders |
|---------------|-------------|
| 1 - Monday    | ~10         |
| 2 - Tuesday   | ~10         |
| 3 - Wednesday | ~15         |
| 4 - Thursday  | ~10         |
| 5 - Friday    | ~25         |
| 6 - Saturday  | ~20         |
| 7 - Sunday    | ~30         |

**B**

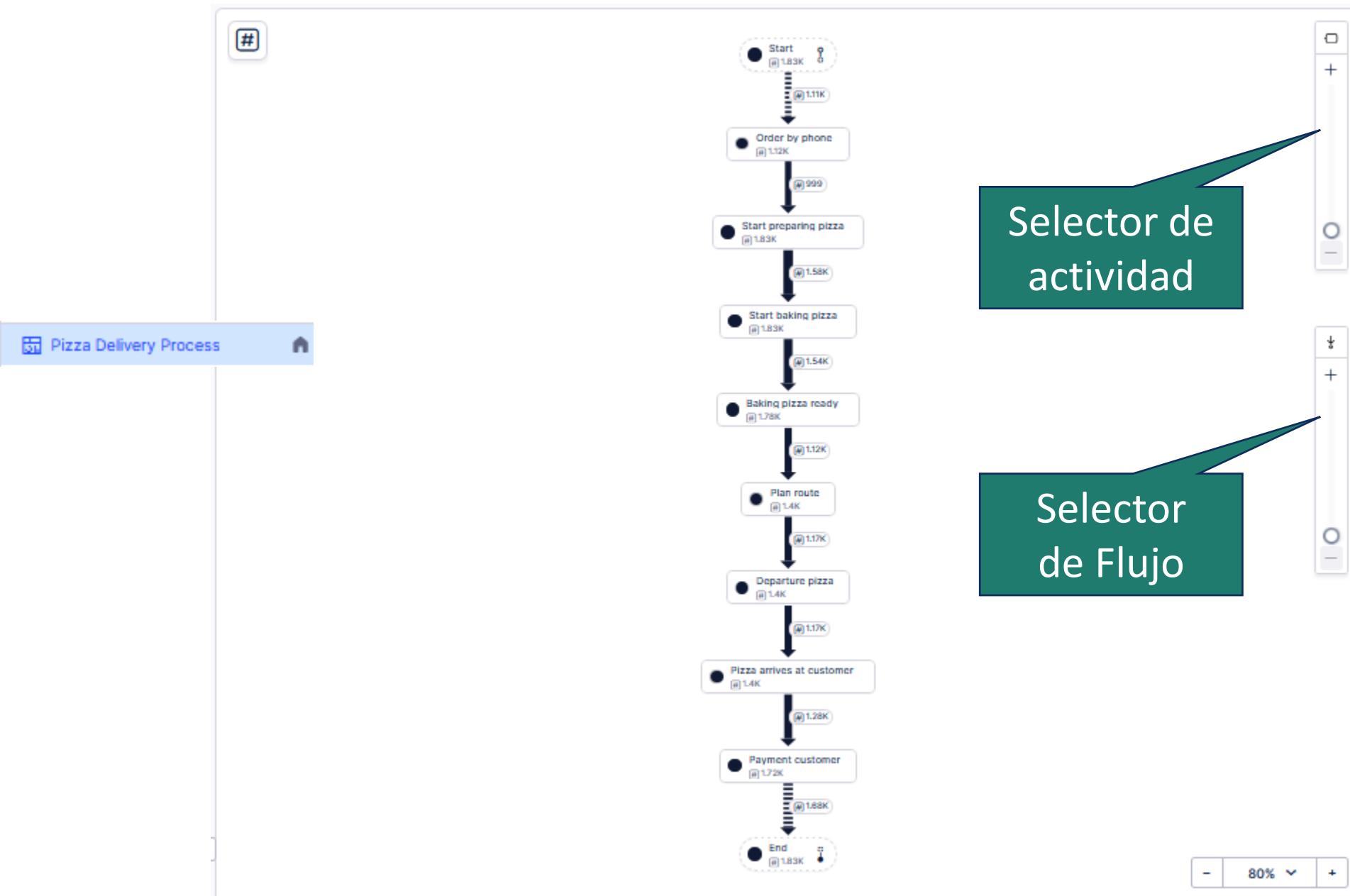
# Case Centric Process Analytics

## Analysis (Análisis)



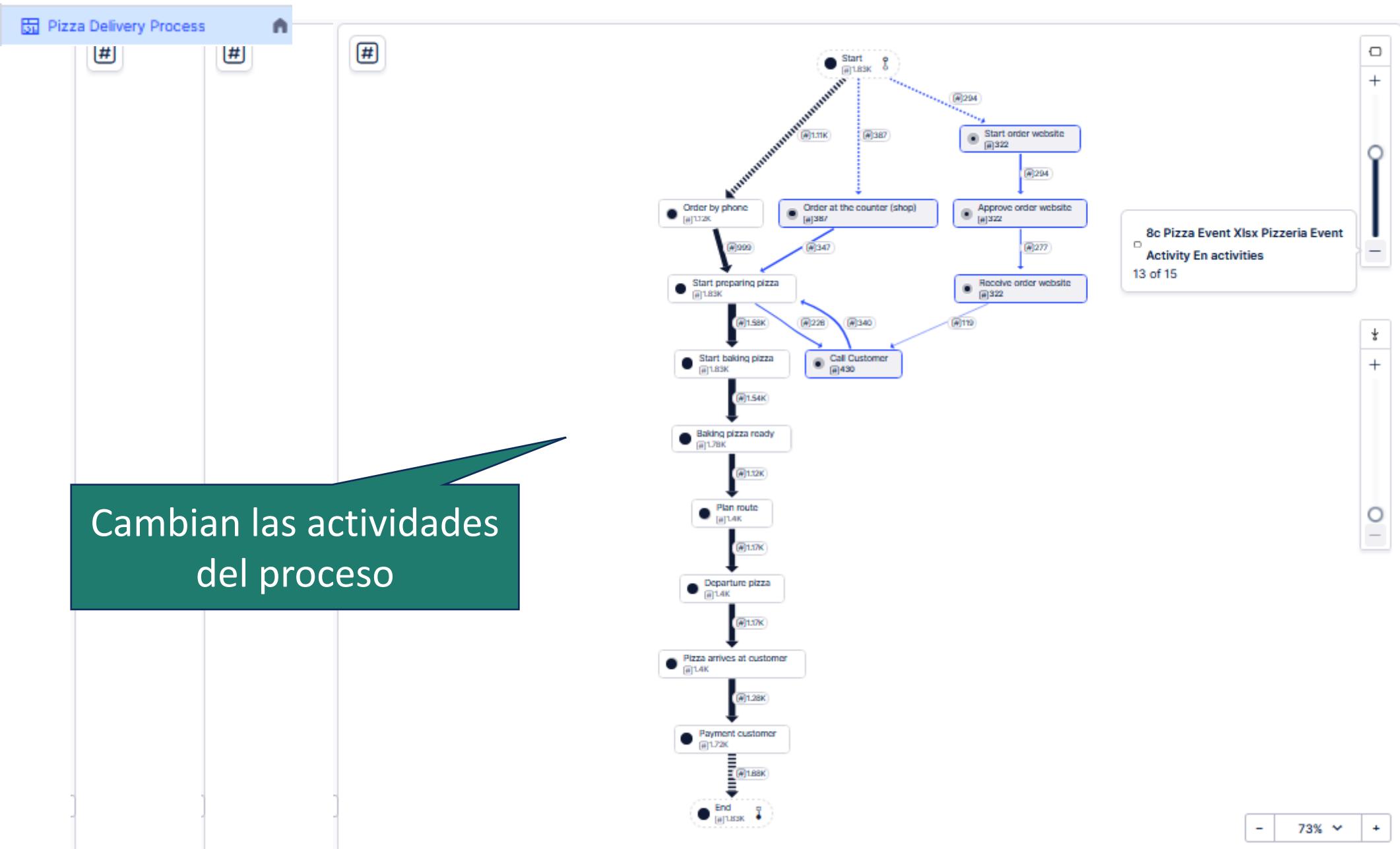
# Case Centric Process Analytics

## PROCESS EXPLORER



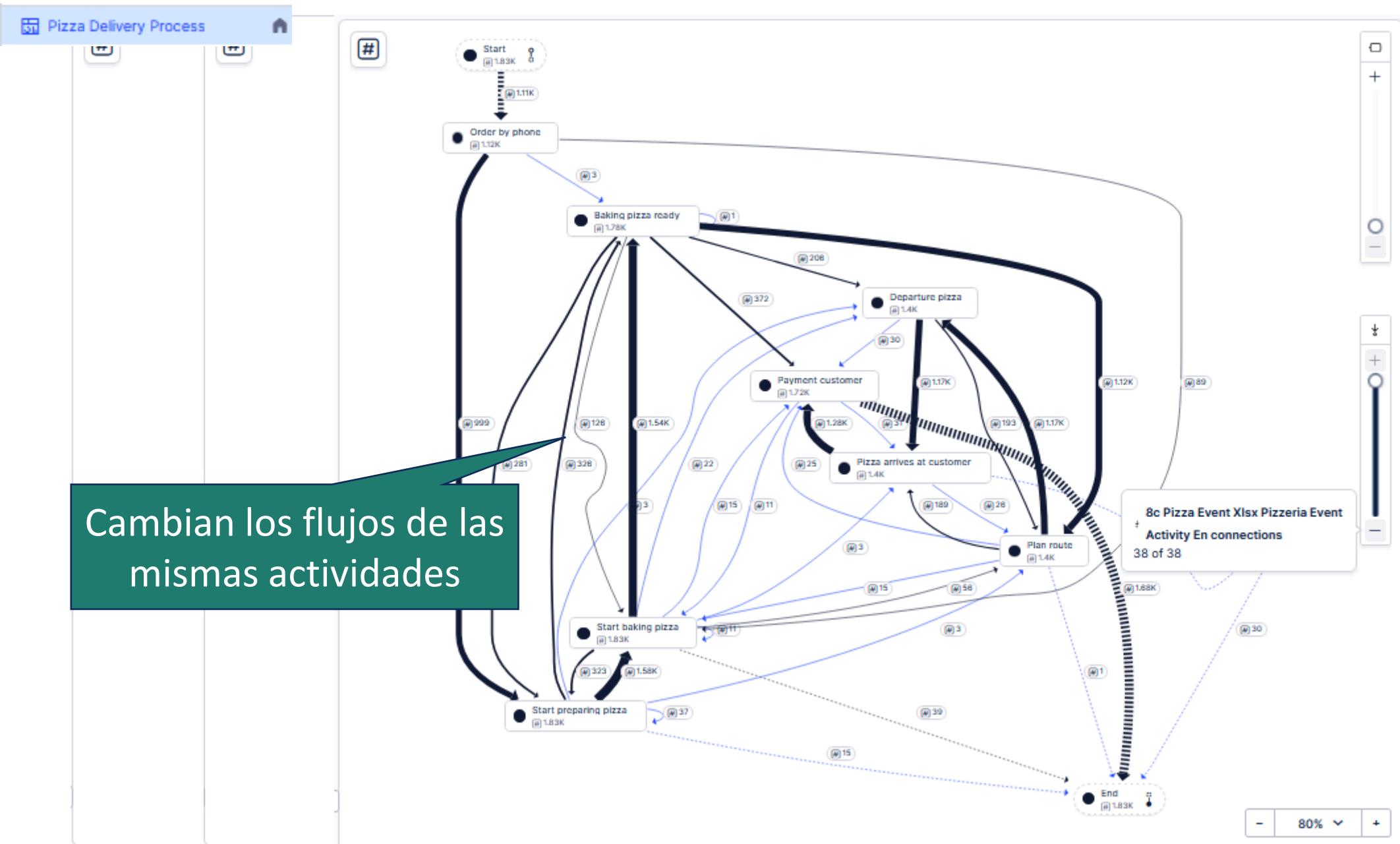
# Case Centric Process Analytics

## PROCESS EXPLORER – Selector de actividad



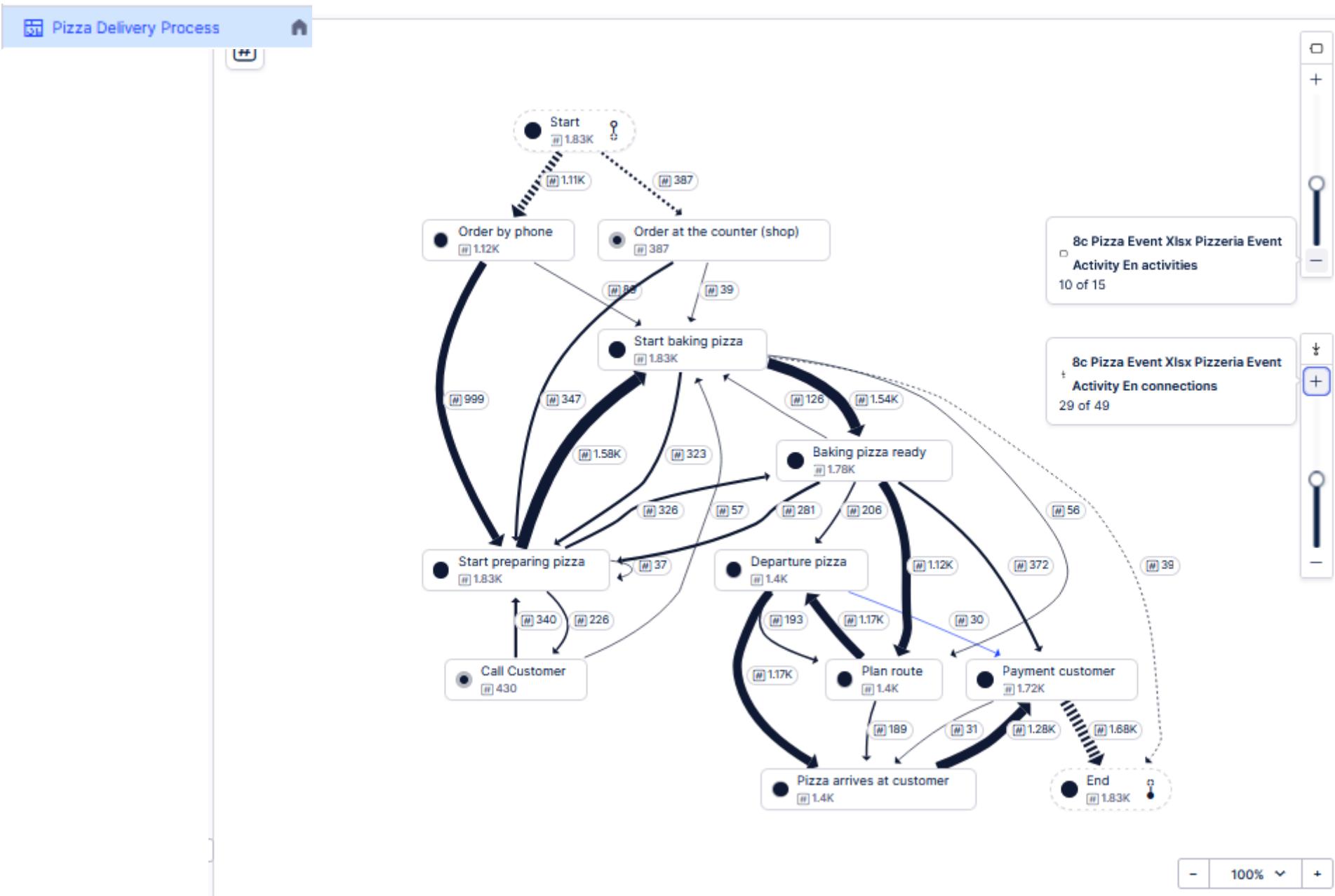
# Case Centric Process Analytics

## PROCESS EXPLORER – Selector de flujo



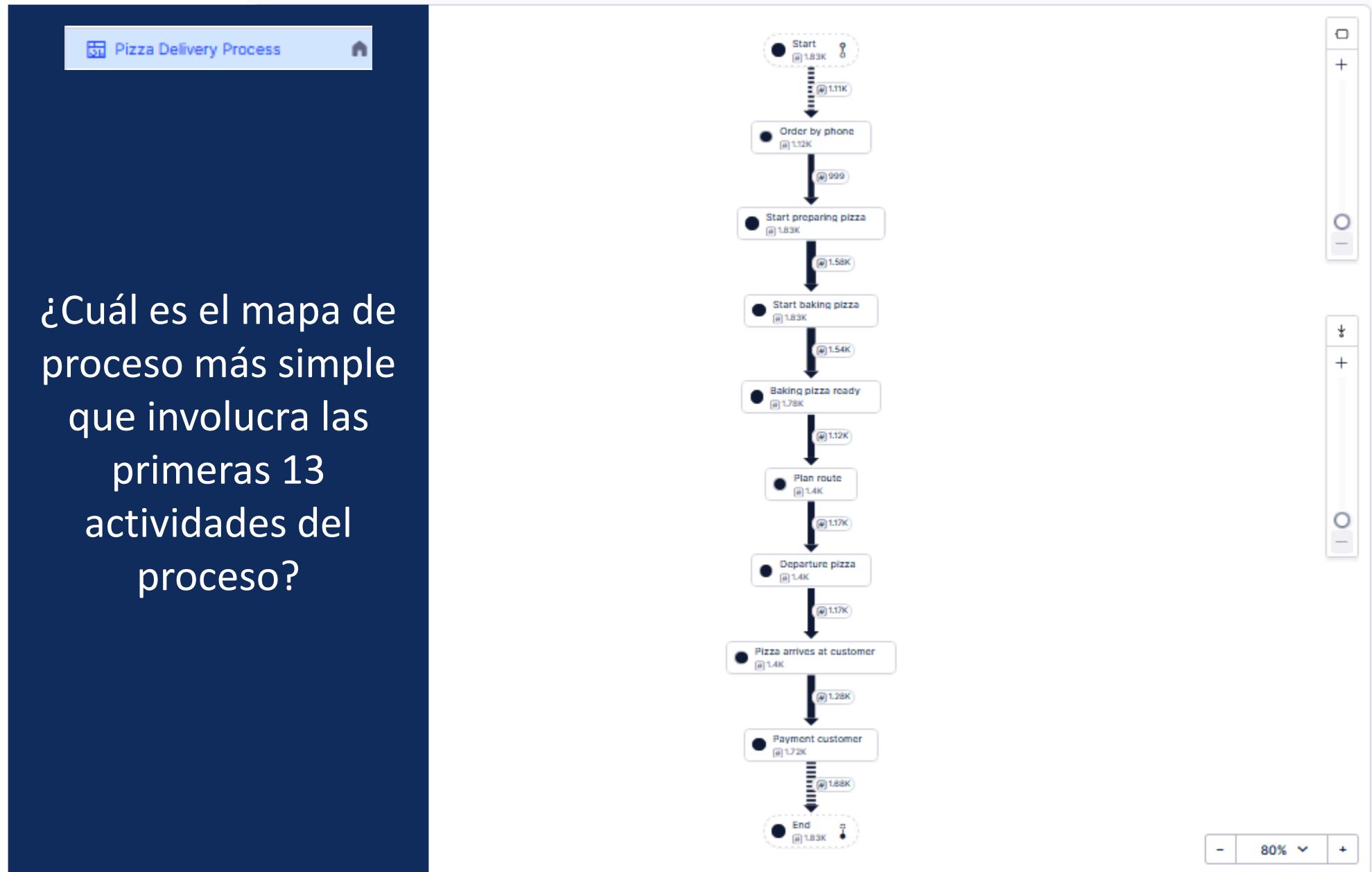
# Case Centric Process Analytics

## PROCESS EXPLORER – Selector de actividad y flujo



# Case Centric Process Analytics

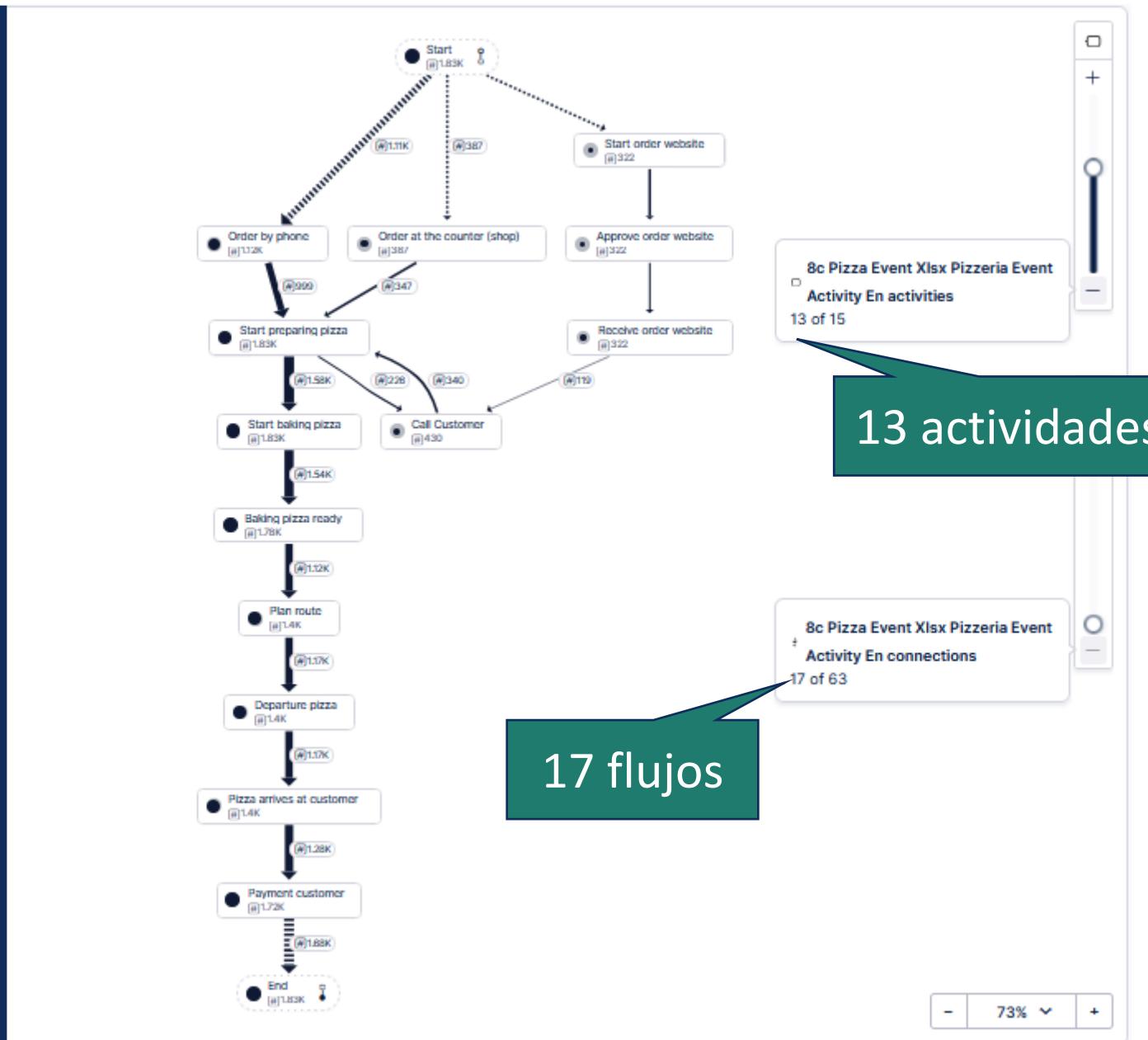
## PROCESS EXPLORER – Selector de actividad y flujo



# Case Centric Process Analytics

## PROCESS EXPLORER – Selector de actividad y flujo

¿Cuál es el mapa de proceso más simple que involucra las primeras 13 actividades del proceso?

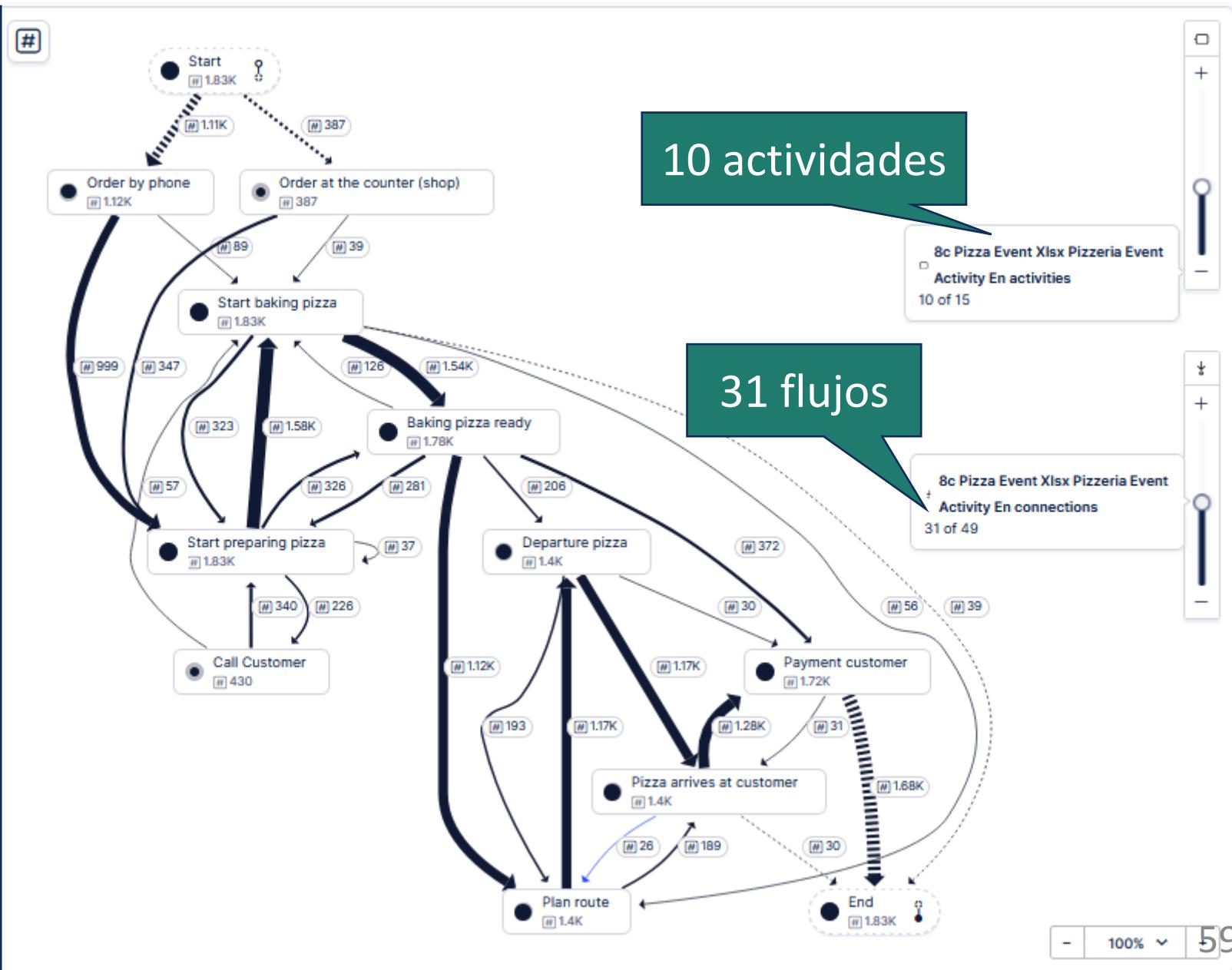


# Case Centric Process Analytics

## PROCESS EXPLORER – Selector de actividad y flujo

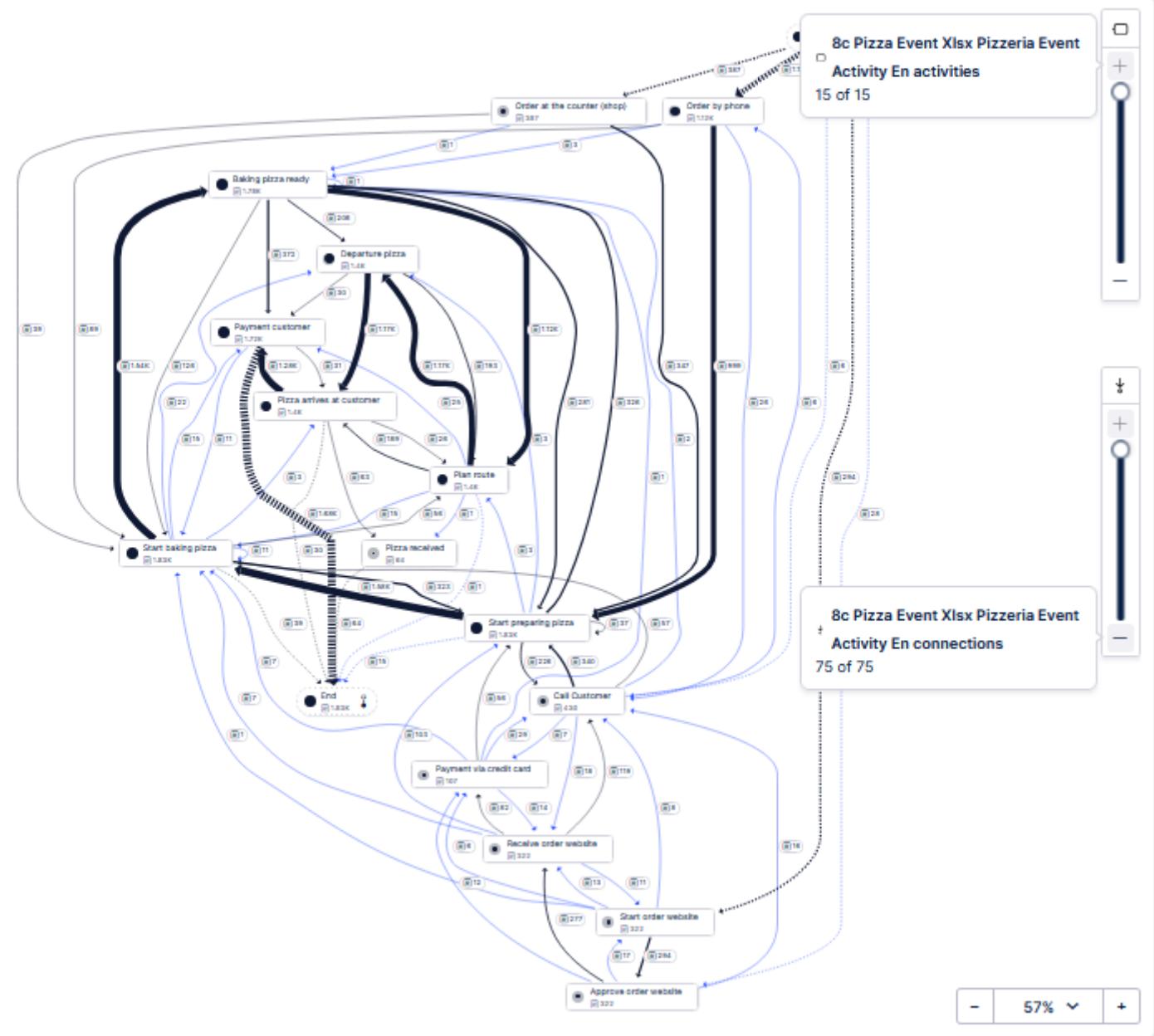
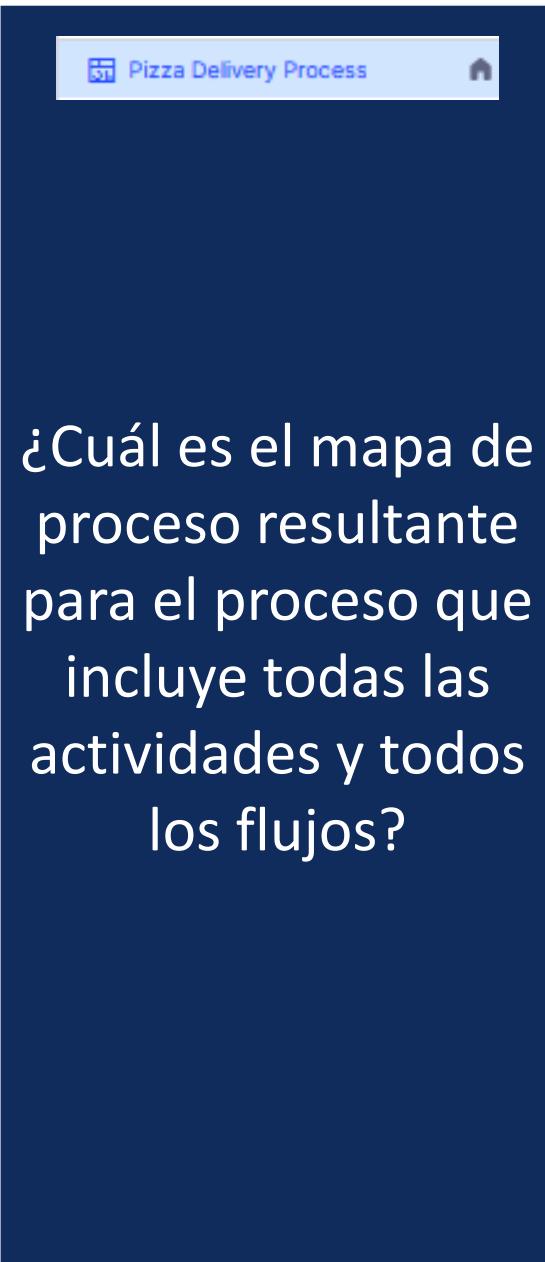
Pizza Delivery Process

¿Cuál es el mapa de proceso resultante para el proceso que incluye HASTA la actividad “Order at the counter (shop)” que refleje el 50% de complejidad de flujos?



# Case Centric Process Analytics

## PROCESS EXPLORER – Selector de actividad y flujo



# Case Centric Process Analytics

## VARIAN EXPLORER

**Variante del proceso más repetida**

| Variant | Count | Coverage | Avg TPT |
|---------|-------|----------|---------|
| #1      | 377   | 21%      | 42 min  |
| #2      | 322   | 18%      | 13 min  |
| #3      | 177   | 10%      | 1 h     |
| #4      | 159   | 9%       | 49 min  |
| #5      | 66    | 4%       | 58 min  |
| #6      | 62    | 3%       | 39 min  |
| #7      | 51    | 3%       | 1 h     |
| #8      | 40    | 2%       | 38 min  |
| #9      | 39    | 2%       | 9 min   |
| #10     | 37    | 2%       | 1 h     |
| Others  | 496   | 27%      | 44 min  |

**Flujo A seguida de B**

```

graph TD
    Start((Start)) --> Order[Order by phone  
377 Times]
    Order --> Prep[Start preparing pizza  
377 Times]
    Prep --> Bake[Start baking pizza  
377 Times]
    Bake --> Ready[Baking pizza ready  
377 Times]
    Ready --> Plan[Plan route  
377 Times]
    Plan --> Departure[Departure pizza  
377 Times]
    Departure --> Arrival[Pizza arrives at customer  
377 Times]
    Arrival --> Payment[Payment customer  
377 Times]
    Payment --> End((End))
  
```

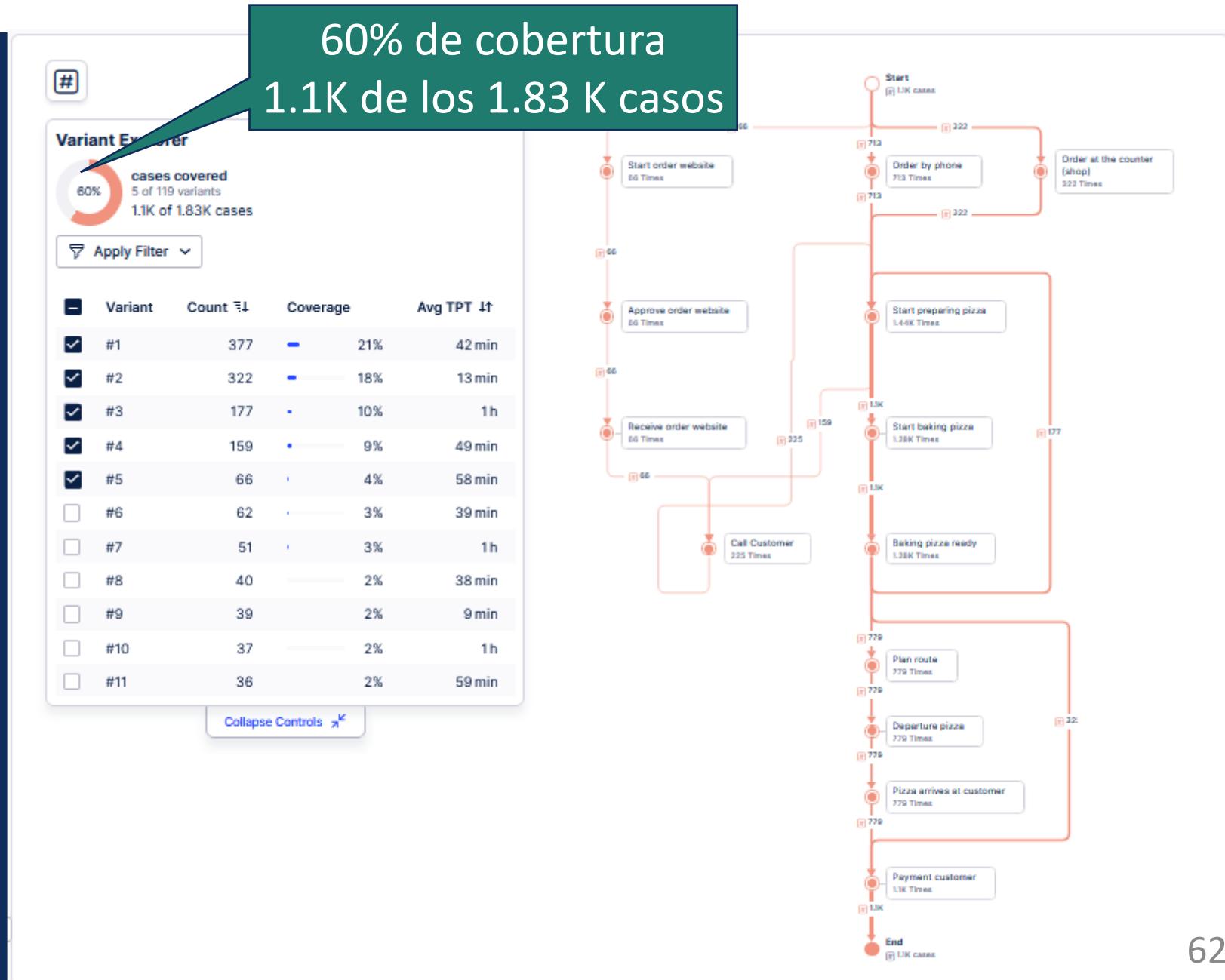
**Inicio**

**Finales**

# Case Centric Process Analytics

## VARIANT EXPLORER

¿Qué porcentaje de cobertura de casos representan las 5 variantes del proceso más repetidas?



# Case Centric Process Analytics

## VARIANT EXPLORER

Del filtro anterior,  
¿Cuántos casos  
inician con un  
pedido por  
teléfono?

**Pizza Delivery Process**

**Variant Explorer**

cases covered: 5 of 119 variants  
1.1K of 1.83K cases

| Variant | Count | Coverage | Avg TPT |
|---------|-------|----------|---------|
| #1      | 377   | 21%      | 42 min  |
| #2      | 322   | 18%      | 13 min  |
| #3      | 177   | 10%      | 1h      |
| #4      | 159   | 9%       | 49 min  |
| #5      | 66    | 4%       | 58 min  |
| #6      | 62    | 3%       | 39 min  |
| #7      | 51    | 3%       | 1h      |
| #8      | 40    | 2%       | 38 min  |
| #9      | 39    | 2%       | 9 min   |
| #10     | 37    | 2%       | 1h      |
| #11     | 36    | 2%       | 59 min  |

**Start** (# 1.1K cases)

Order by phone 713 Times

Order at the counter (shop) 322 Times

Start preparing pizza 1.44K Times

Start baking pizza 1.28K Times

Baking pizza ready

Call Customer

Receive order website 66 Times

Call Customer

713 de los casos

```

graph TD
    Start((Start)) -- "# 322" --> OrderPhone((Order by phone))
    Start -- "# 713" --> OrderCounter((Order at the counter (shop)))
    OrderPhone -- "# 322" --> PrepPizza((Start preparing pizza))
    OrderCounter -- "# 322" --> PrepPizza
    OrderPhone -- "# 713" --> ReceiveWebsite((Receive order website))
    OrderCounter -- "# 713" --> ReceiveWebsite
    ReceiveWebsite -- "# 66" --> CallCustomer1((Call Customer))
    PrepPizza -- "# 1.1K" --> BakePizza((Start baking pizza))
    PrepPizza -- "# 1.1K" --> Ready((Baking pizza ready))
    BakePizza -- "# 1.1K" --> Ready
    
```

# Case Centric Process Analytics

## VARIANT EXPLORER

¿Qué porcentaje de cobertura de casos representan las 10 variantes del proceso menos repetidas?

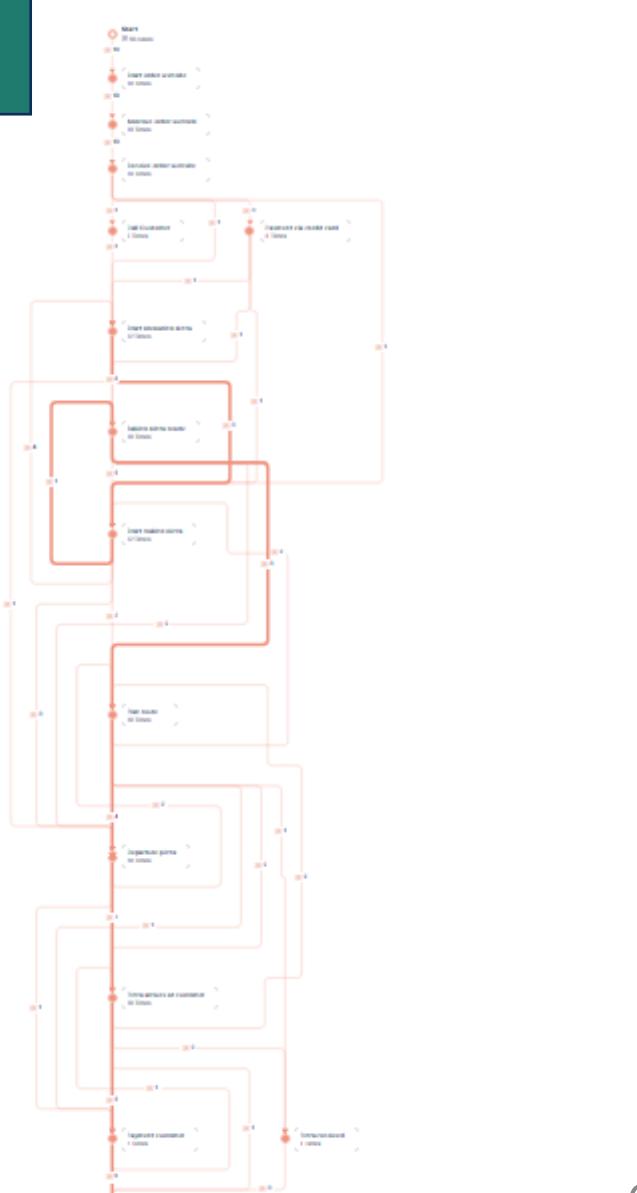
Pizza Delivery Process

### Variant Explorer

1% cases covered  
10 of 119 variants  
10 of 1.83K cases

| Variant | Count | Coverage | Avg TPT |
|---------|-------|----------|---------|
| #108    | 1     | 0%       | 27 min  |
| #109    | 1     | 0%       | 60 min  |
| #110    | 1     | 0%       | 40 min  |
| #111    | 1     | 0%       | 1h      |
| #112    | 1     | 0%       | 24 min  |
| #113    | 1     | 0%       | 56 min  |
| #114    | 1     | 0%       | 53 min  |
| #115    | 1     | 0%       | 40 min  |
| #116    | 1     | 0%       | 35 min  |
| #117    | 1     | 0%       | 46 min  |
| #118    | 1     | 0%       | 1h      |

**1% de cobertura  
10 de los 1.83 K casos**

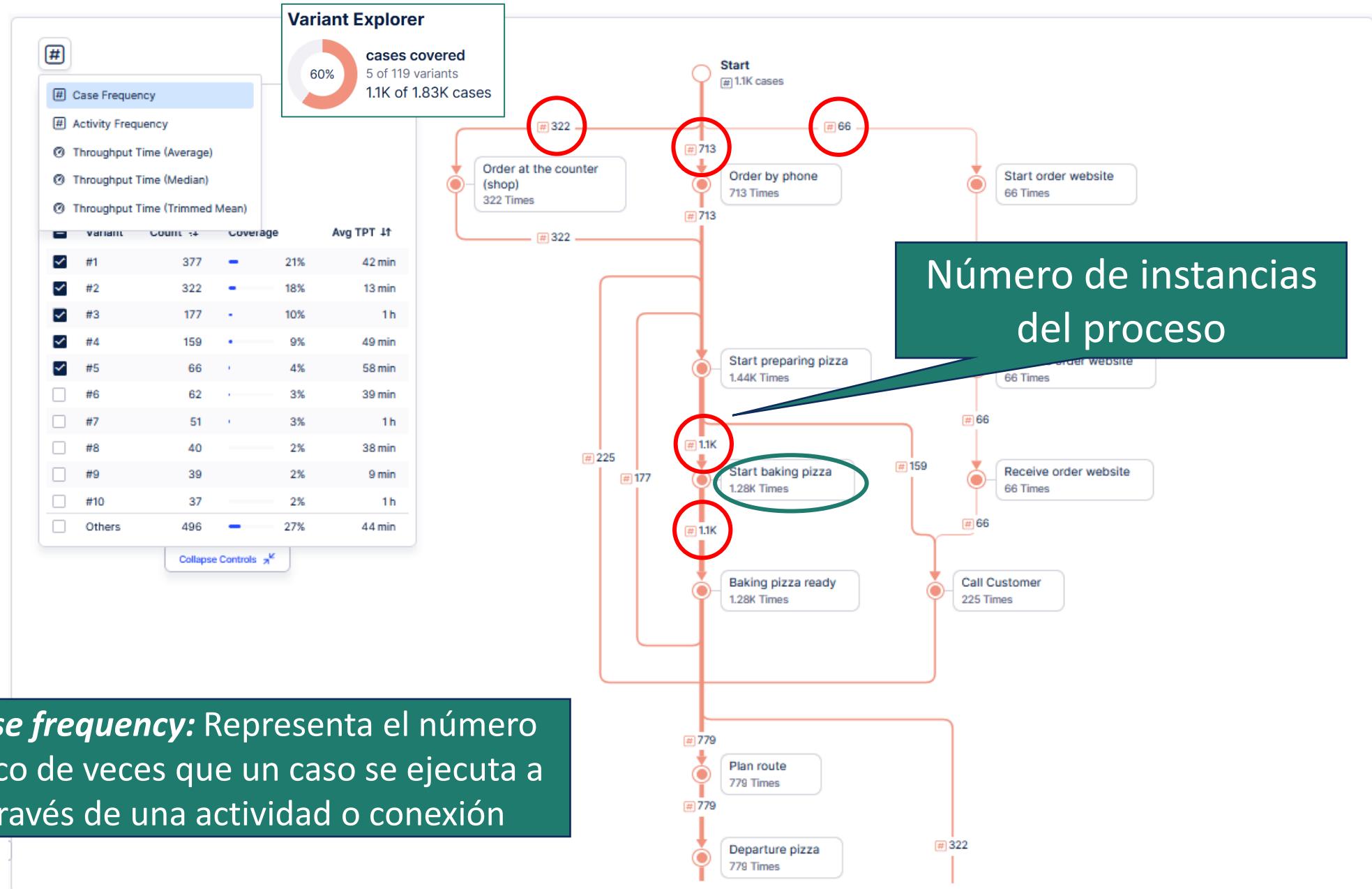


# Case Centric Process Analytics

¿Qué información se muestra del proceso?

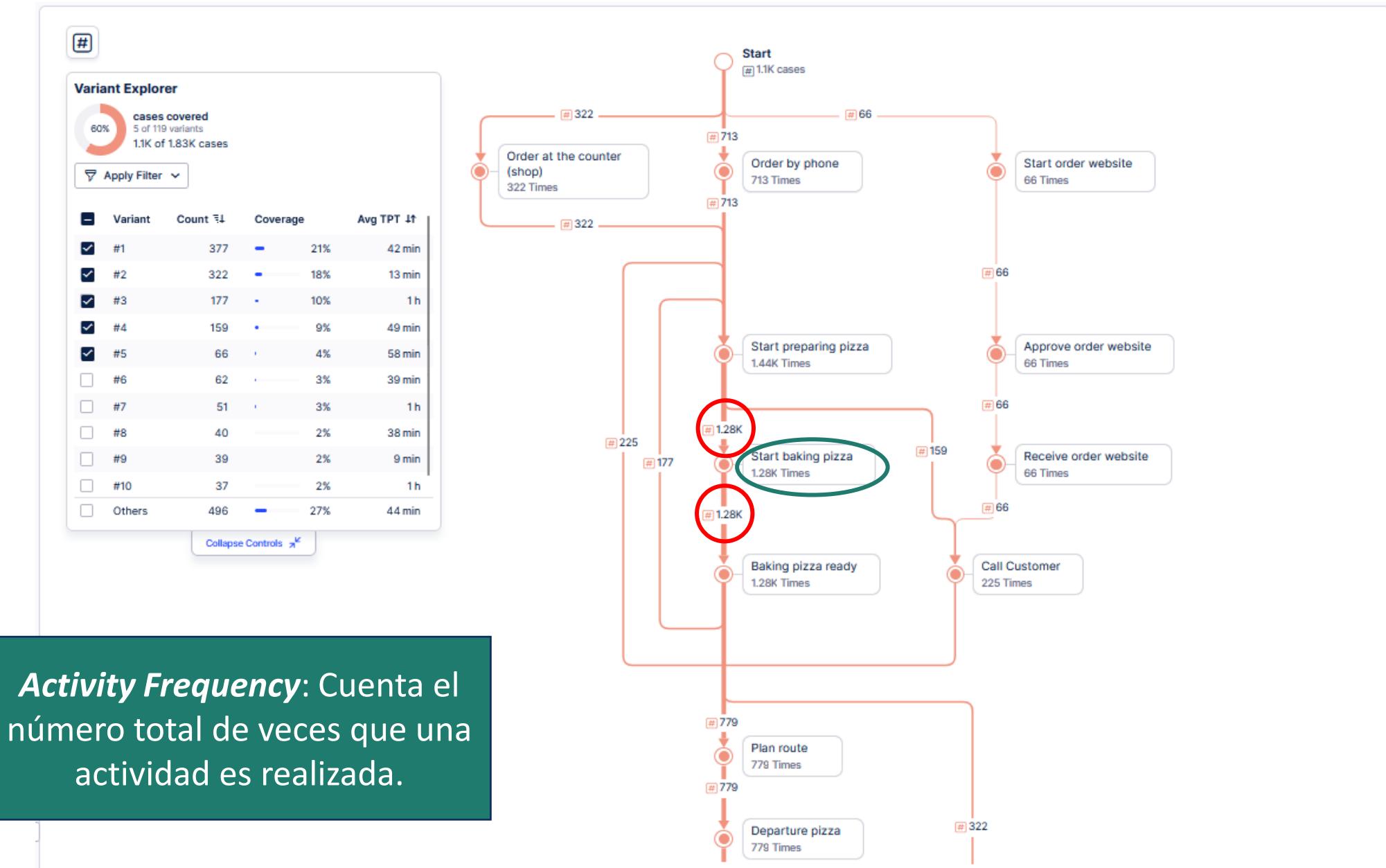
# Case Centric Process Analytics

## VARIAN EXPLORER – Case Frequency



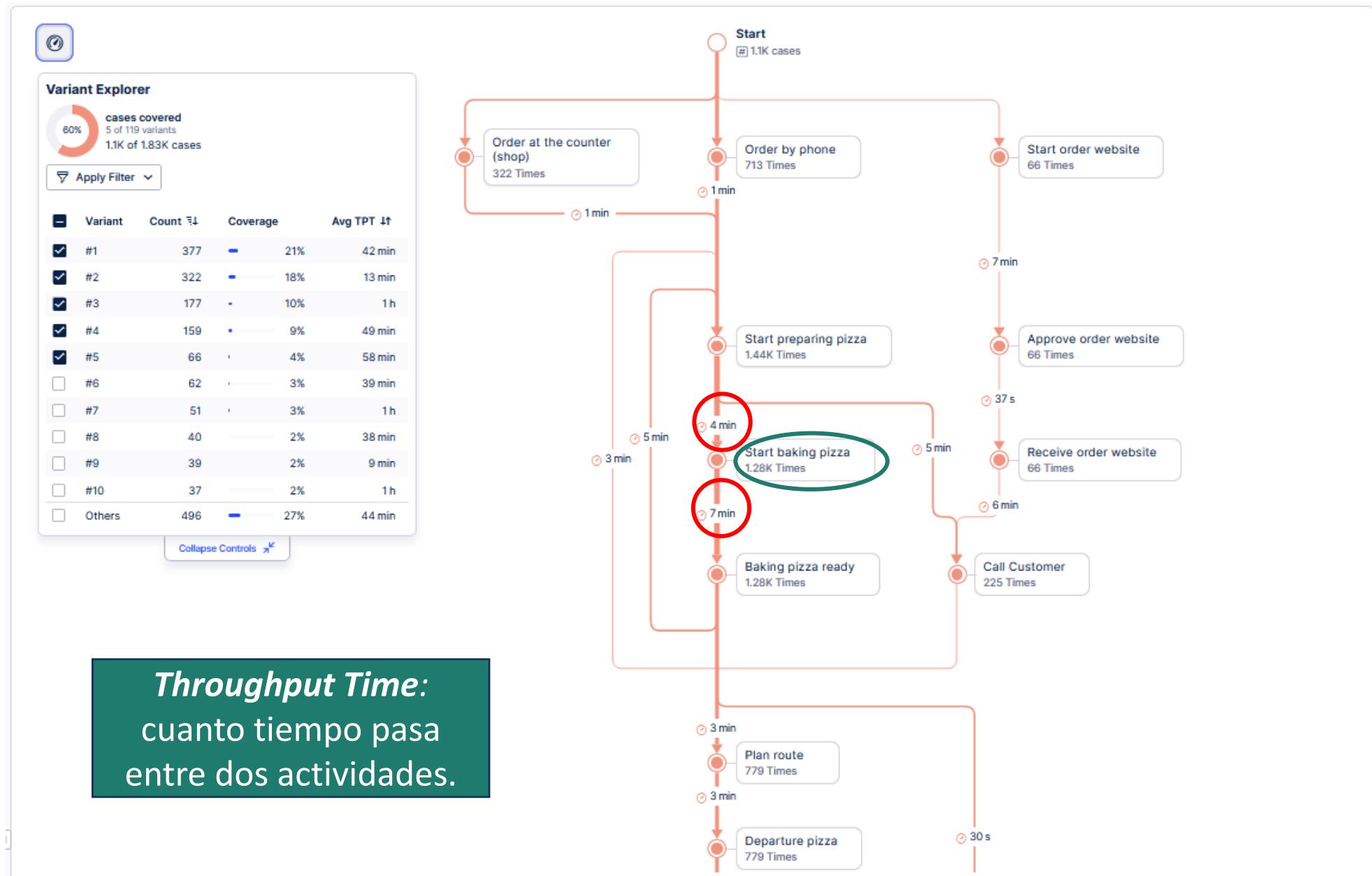
# Case Centric Process Analytics

## VARIAN EXPLORER – Activity Frequency



# Case Centric Process Analytics

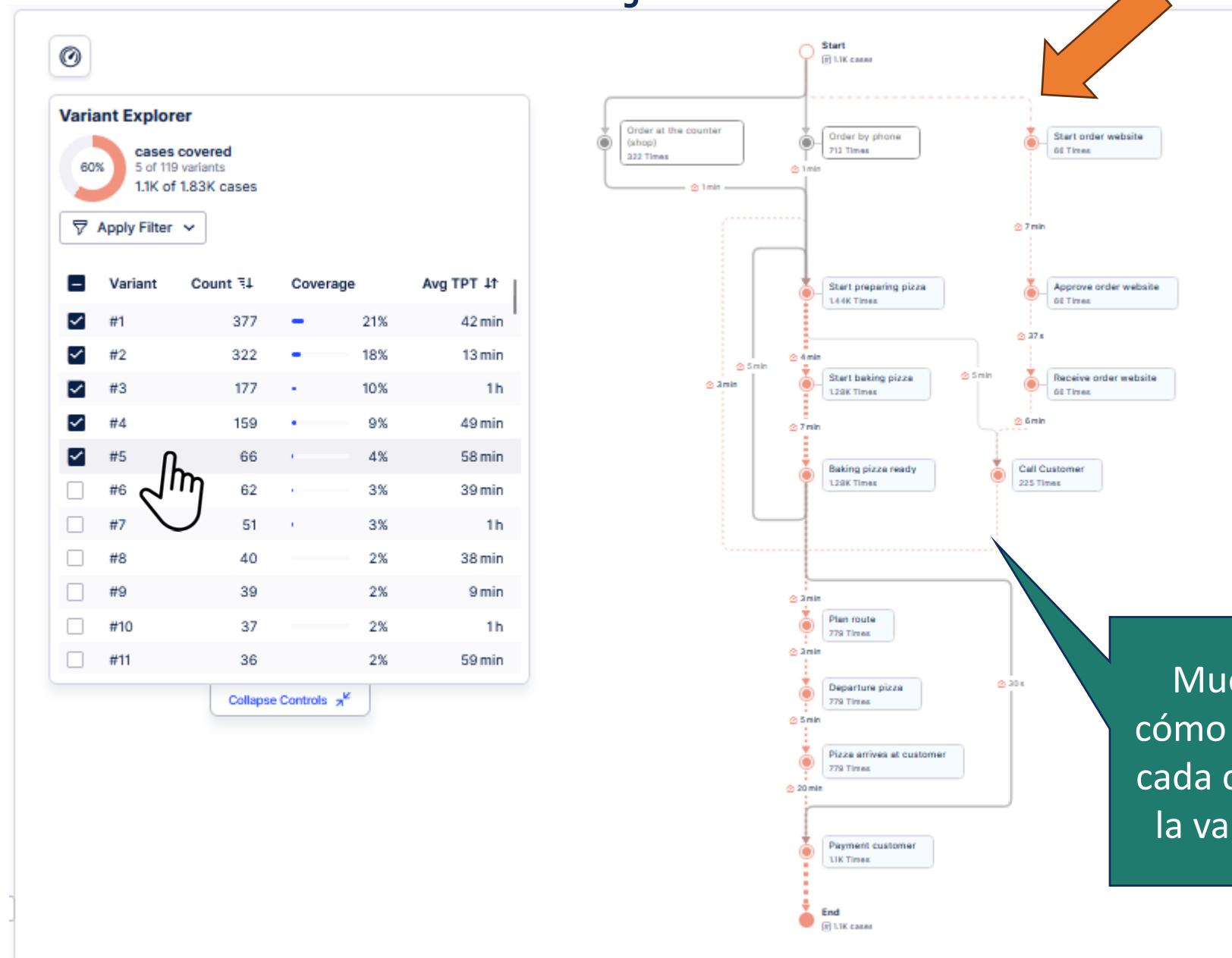
## VARIAN EXPLORER - Throughput Time (Average)



# Case Centric Process Analytics

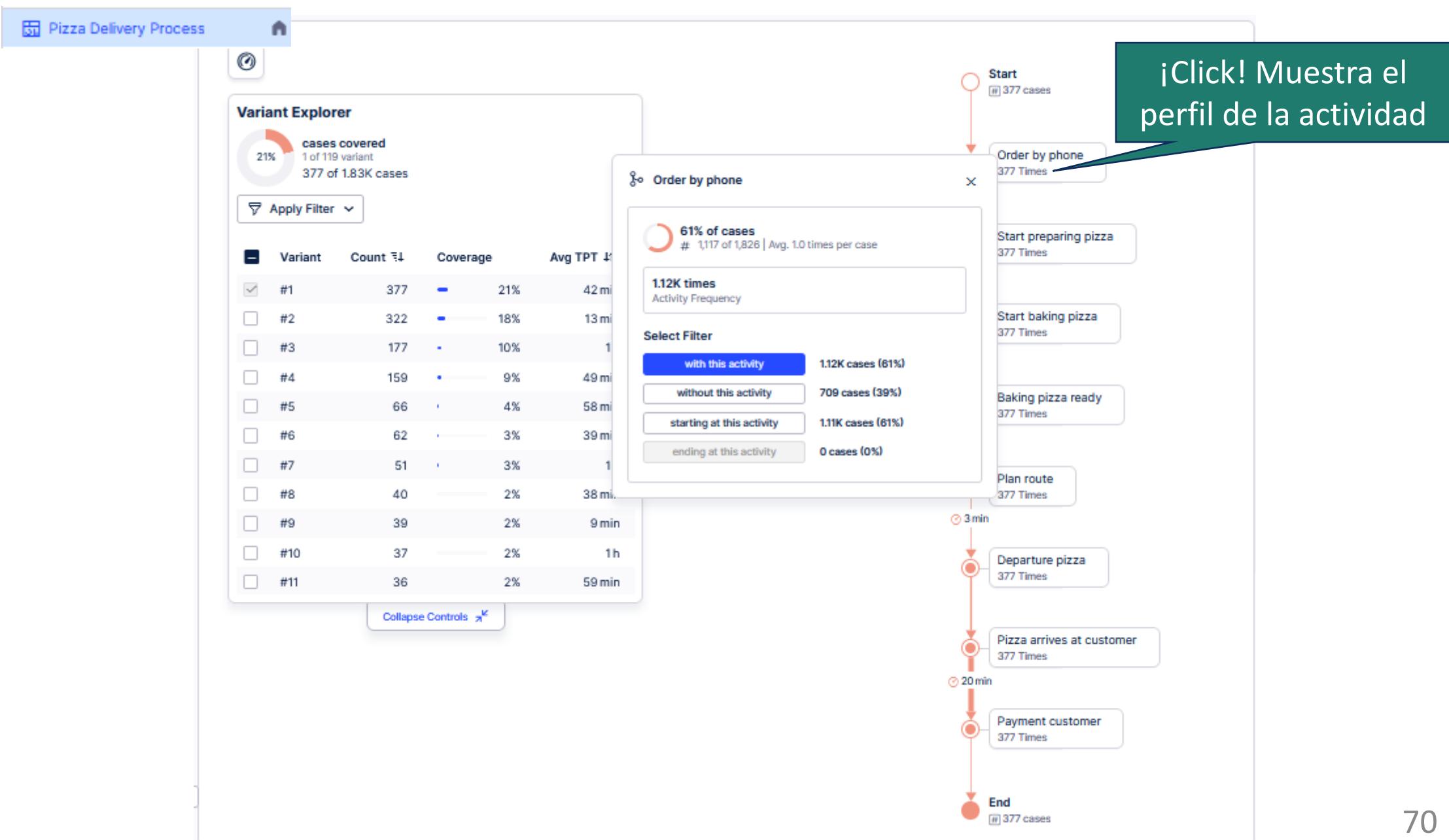
## VARIAN EXPLORER

Verificación del flujo de una variante



# Case Centric Process Analytics

## VARIAN EXPLORER



# Case Centric Process Analytics

# VARIAN EXPLORER – FILTROS - ACTIVIDAD

Pizza Delivery Process

Todas las variantes

Variant Explorer

cases covered  
118 of 119 variants  
1.83K of 1.83K cases

Apply Filter

| Variant | Count | Coverage | Avg TPT |
|---------|-------|----------|---------|
| #108    | 1     | 0%       | 27 min  |
| #109    | 1     | 0%       | 60 min  |
| #110    | 1     | 0%       | 40 min  |
| #111    | 1     | 0%       | 1h      |
| #112    | 1     | 0%       | 24 min  |
| #113    | 1     | 0%       | 56 min  |
| #114    | 1     | 0%       | 53 min  |
| #115    | 1     | 0%       | 40 min  |
| #116    | 1     | 0%       | 35 min  |
| #117    | 1     | 0%       | 46 min  |
| #118    | 1     | 0%       | 1h      |

Collapse Controls

```
graph TD; Start((Start (Order case))) -->|118| OrderPhone[Order by phone (118 Times)]; Start -->|307| OrderShop[Order at the counter (shop) (307 Times)]; OrderPhone -->|118| CallCustomer[Call Customer (420 Times)]; OrderPhone -->|107| PaymentCard[Payment via credit card (107 Times)]; CallCustomer -->|322| ReceiveWebsite1[Receive order website (322 Times)]; PaymentCard -->|322| StartOrderWebsite1[Start order website (322 Times)]; StartOrderWebsite1 -->|322| ApproveWebsite1[Approve order website (322 Times)]; StartOrderWebsite1 -->|322| ReceiveWebsite2[Receive order website (322 Times)];
```

# Case Centric Process Analytics

## VARIAN EXPLORER – FILTROS - ACTIVIDAD

**Pizza Delivery Process**

**Variant Explorer**

100% cases covered  
118 of 119 variants  
1.83K of 1.83K cases

Apply Filter

| Variant | Count ↴ | Coverage | Avg TPT ↓↑ |
|---------|---------|----------|------------|
| #108    | 1       | 0%       | 27 min     |
| #109    | 1       | 0%       | 60 min     |
| #110    | 1       | 0%       | 40 min     |
| #111    | 1       | 0%       | 1h         |
| #112    | 1       | 0%       | 24 min     |
| #113    | 1       | 0%       | 56 min     |
| #114    | 1       | 0%       | 53 min     |
| #115    |         |          |            |
| #116    |         |          |            |
| #117    |         |          |            |
| #118    |         |          |            |

Incluir variantes que **inicien**,  
**contengan**, **no contengan** o  
**terminen** con una actividad concreta

**Call Customer**

24% of cases  
# 430 of 1,826 | Avg. 1.0 times per case

430 times  
Activity Frequency

- with this activity** 430 cases (24%)
- starting at this activity** 6 cases (<1%)
- ending at this activity** 0 cases (0%)

# Case Centric Process Analytics

## VARIAN EXPLORER – FILTROS - ACTIVIDAD

**Pizza Delivery Process**

**Variant Explorer**

**cases covered**  
100%  
50 of 50 variants  
430 of 430 cases

**Variant Explorer**

| Variant | Count | Coverage | Avg TPT |
|---------|-------|----------|---------|
| #40     | 1     | 0%       | 1 h     |
| #41     | 1     | 0%       | 28 min  |
| #42     | 1     | 0%       | 9 min   |
| #43     | 1     | 0%       | 28 min  |
| #44     | 1     | 0%       | 10 min  |
| #45     | 1     | 0%       | 27 min  |
| #46     | 1     | 0%       | 60 min  |
| #47     | 1     | 0%       | 40 min  |
| #48     | 1     | 0%       | 1 h     |
| #49     | 1     | 0%       | 24 min  |
| #50     | 1     | 0%       | 56 min  |

**Start** 430 cases

Approve order website 172 Times

Start order website 172 Times

Call Customer 430 Times

Order by phone 258 Times

Receive order website 172 Times

**Variant Explorer – FILTROS - ACTIVIDAD**

**Variantes que contengan “Call Customer”**

73

# Case Centric Process Analytics

## VARIAN EXPLORER – FILTROS – ACTIVIDAD

Comparar variantes – Incluyendo “Start order website”

Variant Explorer

cases covered  
100%  
50 of 50 variants  
430 of 430 cases

| Variant | Count | Coverage | Avg TPT |
|---------|-------|----------|---------|
| #40     | 1     | 0%       | 1h      |
| #41     | 1     | 0%       | 28 min  |
| #42     | 1     | 0%       | 9 min   |
| #43     | 1     | 0%       | 28 min  |
| #44     | 1     | 0%       | 10 min  |
| #45     | 1     | 0%       | 27 min  |
| #46     | 1     | 0%       | 60 min  |
| #47     | 1     | 0%       | 40 min  |
| #48     | 1     | 0%       | 1h      |
| #49     | 1     | 0%       |         |
| #50     | 1     | 0%       |         |

Start (430 cases)

Approve order website (172 Times, 0 ms)

Start order website (172 Times, 6 min)

Order by phone (258 Times, 3 min)

Receive order website (172 Times, 60 s)

Activity Frequency: 40% of cases (# 172 of 430 | Avg. 1.0 times per case)

Select Filter:

- with this activity: 172 cases (40%)
- without this activity: 258 cases (60%)
- starting at this activity: 155 cases (36%)
- ending at this activity: 0 cases (0%)

De los 430 casos que incluyen “Call customers”, 172 casos, el 40% son de pedidos hecho por la web.

# Case Centric Process Analytics

## VARIANT EXPLORER – FILTROS – ACTIVIDAD

Comparar variantes – Incluyendo “Order by phone”

Mientras que 258 (60%) son casos de pedidos realizados por teléfono.

| Variant | Count | Coverage | Avg TPT |
|---------|-------|----------|---------|
| #40     | 1     | 0%       | 1 h     |
| #41     | 1     | 0%       | 28 min  |
| #42     | 1     | 0%       | 9 min   |
| #43     | 1     | 0%       | 28 min  |
| #44     | 1     | 0%       | 10 min  |
| #45     | 1     | 0%       | 27 min  |
| #46     | 1     | 0%       | 60 min  |
| #47     | 1     | 0%       | 40 min  |
| #48     | 1     | 0%       | 1 h     |
| #49     | 1     | 0%       | 24 min  |
| #50     | 1     | 0%       | 56 min  |

Start #430 cases

Approve order website 172 Times

Start order website 172 Times

Call Customer 430 Times

Order by phone

60% of cases # 258 of 430 | Avg. 1.0 times per case

258 times Activity Frequency

Select Filter

- with this activity 258 cases (60%)
- without this activity 172 cases (40%)
- starting at this activity 252 cases (59%)
- ending at this activity 0 cases (0%)

22% ● Include any activity Call Customer

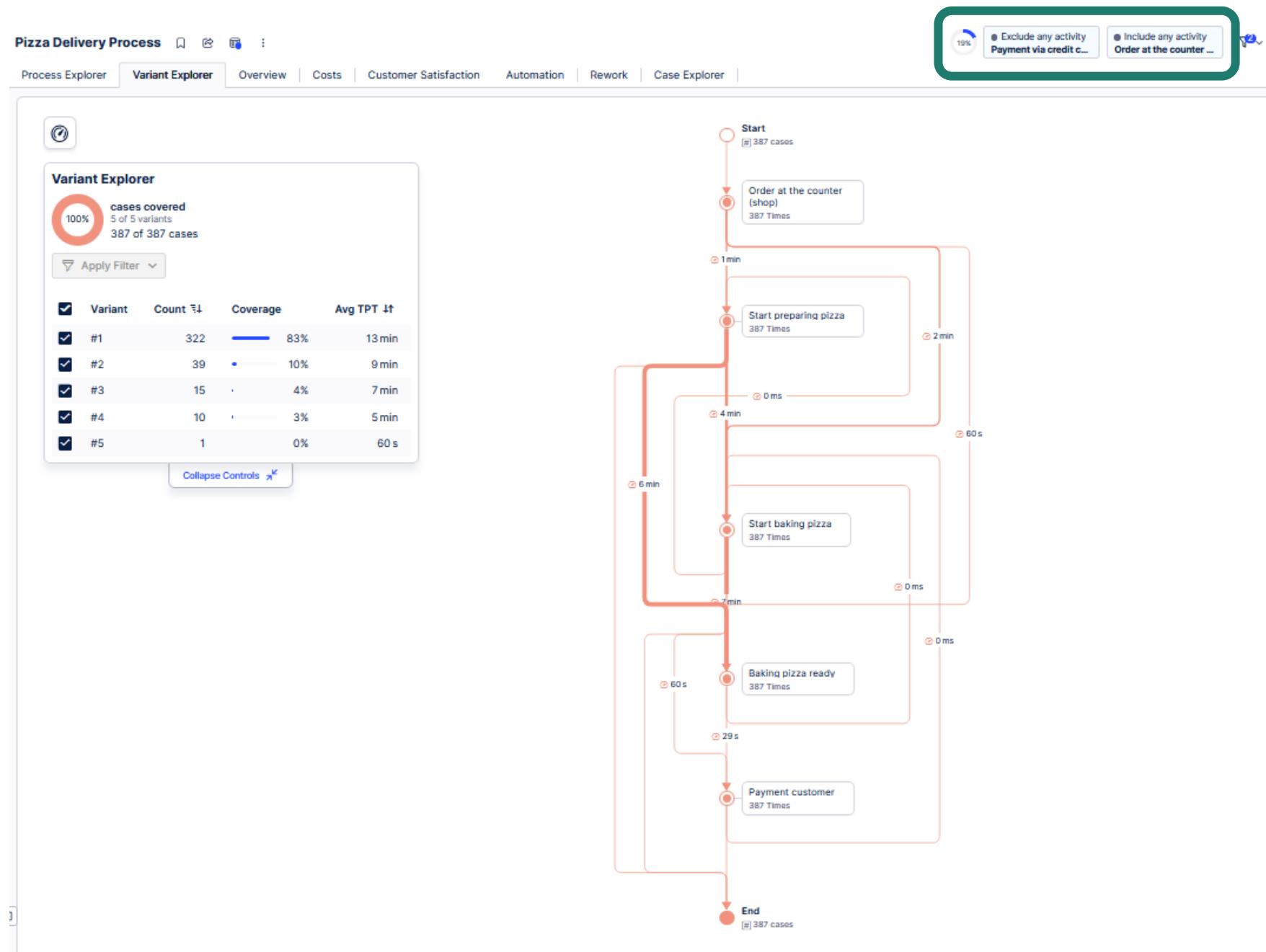
# Case Centric Process Analytics

## VARIAN EXPLORER – EJERCICIO

De todas las variantes posibles, analice la variante completa que se realiza en menos tiempo teniendo en cuenta solo los pedidos que no se hayan pagado con tarjeta de crédito y de pedidos hechos en el mostrador.

# Case Centric Process Analytics

## VARIAN EXPLORER – EJERCICIO



# Case Centric Process Analytics

## VARIAN EXPLORER – EJERCICIO

Pizza Delivery Process

Process Explorer Variant Explorer Overview Costs Customer Satisfaction Automation Rework Case Explorer

19% Exclude any activity Payment via credit c... Include any activity Order at the counter ...

**Variant Explorer**

cases covered 1 of 5 variant 322 of 387 cases

Apply Filter

| Variant | Count | Coverage | Avg TPT It |
|---------|-------|----------|------------|
| #1      | 322   | 83%      | 13 min     |
| #2      | 39    | 10%      | 9 min      |
| #3      | 15    | 4%       | 7 min      |
| #4      | 10    | 3%       | 5 min      |
| #5      | 1     | 0%       | 60 s       |

**Start** # 322 cases

Order at the counter (shop) 322 Times  
1 min

Start preparing pizza 322 Times  
4 min

Start baking pizza 322 Times  
7 min

Baking pizza ready 322 Times  
30 s

Payment customer 322 Times

**End** # 322 cases

```
graph TD; Start((Start)) --> Order[Order at the counter (shop)  
322 Times]; Order -- 1 min --> Prep[Start preparing pizza  
322 Times]; Prep -- 4 min --> Bake[Start baking pizza  
322 Times]; Bake -- 7 min --> Ready[Baking pizza ready  
322 Times]; Ready -- 30 s --> Payment[Payment customer  
322 Times]; Payment --> End((End));
```

# Case Centric Process Analytics

## VARIAN EXPLORER – EJERCICIO

Pizza Delivery Process

Process Explorer Variant Explorer Overview Costs Customer Satisfaction Automation Rework Case Explorer

19% Exclude any activity Payment via credit c... Include any activity Order at the counter ...

**Variant Explorer**

cases covered  
0% 1 of 5 variant  
1 of 387 cases

Apply Filter

| Variant   | Count    | Coverage  | Avg TPT     |
|-----------|----------|-----------|-------------|
| #1        | 322      | 83%       | 13 min      |
| #2        | 39       | 10%       | 9 min       |
| #3        | 15       | 4%        | 7 min       |
| #4        | 10       | 2%        | 5 min       |
| <b>#5</b> | <b>1</b> | <b>0%</b> | <b>60 s</b> |

**Start** #1 cases

Order at the counter (shop) 1 Times  
60 s

Baking pizza ready 1 Times  
0 ms

Payment customer 1 Times  
0 ms

Start baking pizza 1 Times  
0 ms

Start preparing pizza 1 Times  
0 ms

**End** #1 cases



79

# Case Centric Process Analytics

## VARIAN EXPLORER – EJERCICIO

Pizza Delivery Process

Process Explorer Variant Explorer Overview Costs Customer Satisfaction Automation Rework Case Explorer

19% Exclude any activity Payment via credit c... Include any activity Order at the counter ...

**Variant Explorer**

cases covered 1 of 5 variant 15 of 387 cases

Variant Count Coverage Avg TPT

| Variant   | Count     | Coverage  | Avg TPT      |
|-----------|-----------|-----------|--------------|
| #1        | 322       | 83%       | 13 min       |
| #2        | 20        | 10%       | 0 min        |
| <b>#3</b> | <b>15</b> | <b>4%</b> | <b>7 min</b> |
| #4        | 10        | 3%        | 5 min        |
| #5        | 1         | 0%        | 60 s         |

**Start** #15 cases

Order at the counter (shop) 15 Times  
⌚ 2 min

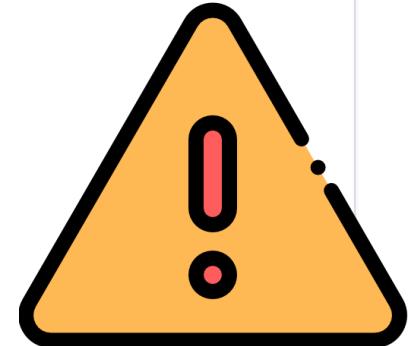
Start preparing pizza 15 Times  
⌚ 4 min

Baking pizza ready 15 Times  
⌚ 0 ms

Start baking pizza 15 Times  
⌚ 60 s

Payment customer 15 Times

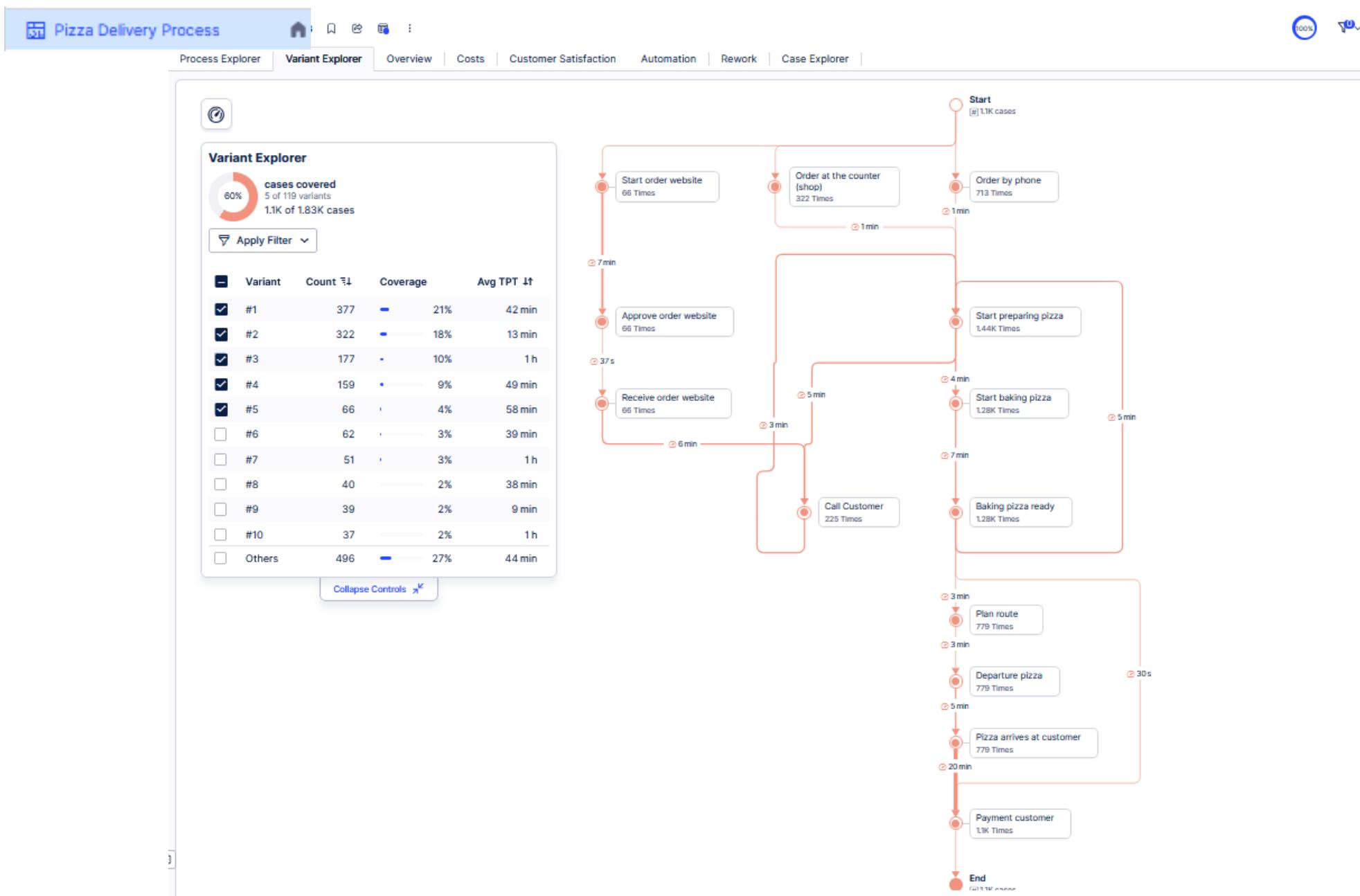
**End** #15 cases



80

# Case Centric Process Analytics

## VARIAN EXPLORER – FILTROS – FLUJOS



# Case Centric Process Analytics

## VARIAN EXPLORER – FILTROS - FLUJOS

**Pizza Delivery Process**

Variant Explorer

Overview | Costs | Customer Satisfaction | Automation | Rework | Case Explorer

Start [1.1K cases]

Start order website (66 Times)

Order at the counter (shop) (322 Times)

Order by phone (713 Times)

Approve order website (66 Times)

Receive order website (66 Times)

Start preparing pizza (1.44K Times)

Start baking pizza (1.28K Times)

Baking pizza ready (128K Times)

Plan route (779 Times)

Departure pizza (779 Times)

Pizza arrives at customer (779 Times)

Payment customer (1.1K Times)

End (1.1K cases)

Start [1.1K cases]

Start order website (66 Times)

Order at the counter (shop) (322 Times)

Order by phone (713 Times)

Approve order website (66 Times)

Receive order website (66 Times)

Start preparing pizza (1.44K Times)

Start baking pizza (1.28K Times)

Baking pizza ready (128K Times)

Plan route (779 Times)

Departure pizza (779 Times)

Pizza arrives at customer (779 Times)

Payment customer (1.1K Times)

End (1.1K cases)

**Variant Explorer**

cases covered 60%  
5 of 119 variants  
1.1K of 1.83K cases

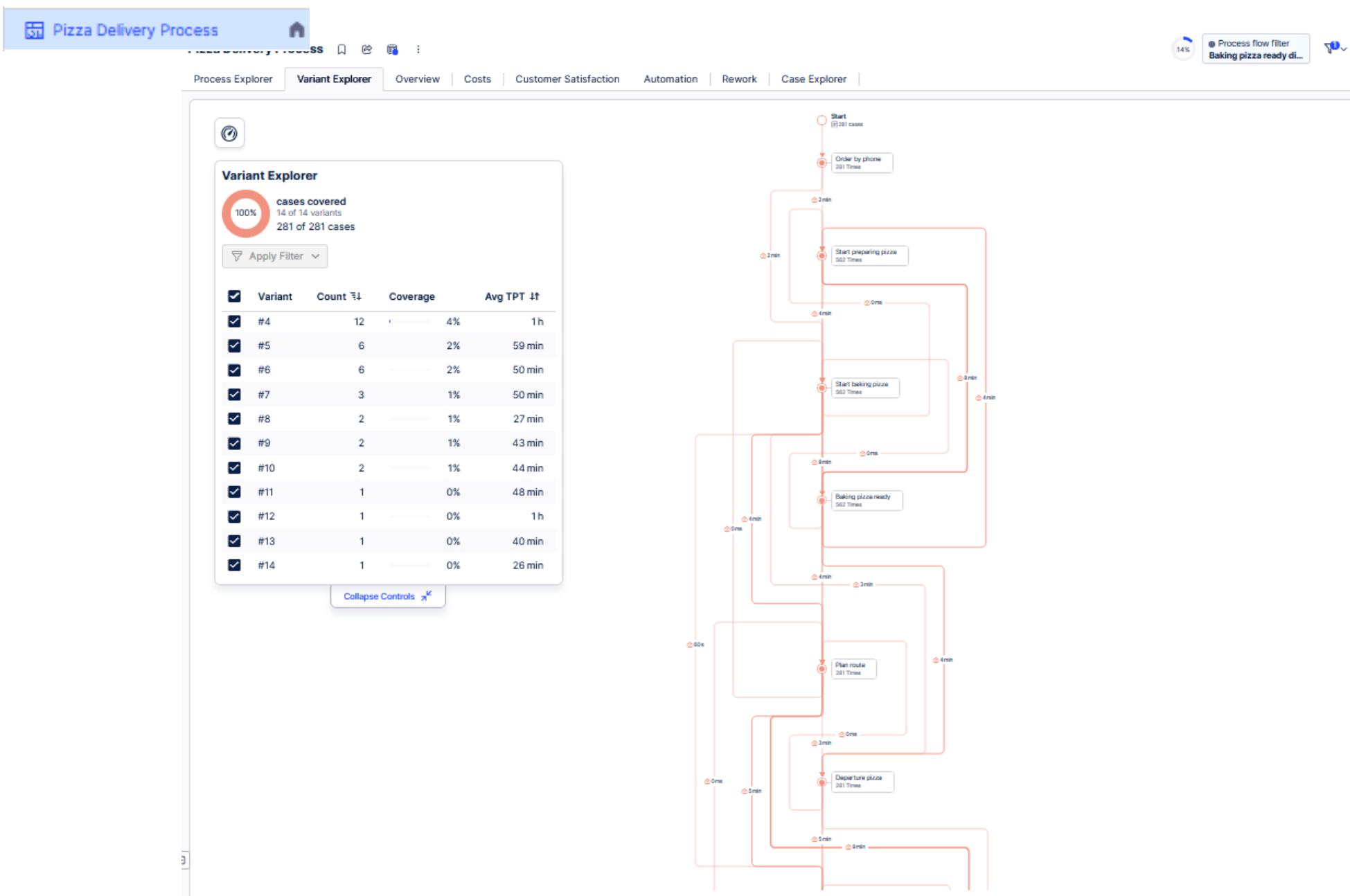
Apply Filter

| Variant | Count | Coverage | Avg TPT |
|---------|-------|----------|---------|
| #1      | 377   | 21%      | 42 min  |
| #2      | 322   | 18%      | 13 min  |
| #3      | 177   | 10%      | 1 h     |
| #4      | 159   | 9%       | 49 min  |
| #5      | 66    | 4%       | 58 min  |
| #6      | 62    | 3%       | 39 min  |
| #7      | 51    | 3%       | 1 h     |
| #8      | 40    | 2%       | 38 min  |
| #9      | 39    | 2%       | 9 min   |
| #10     | 37    | 2%       | 1 h     |
| Others  | 496   | 27%      | 44 min  |

**Comportamiento inusual**

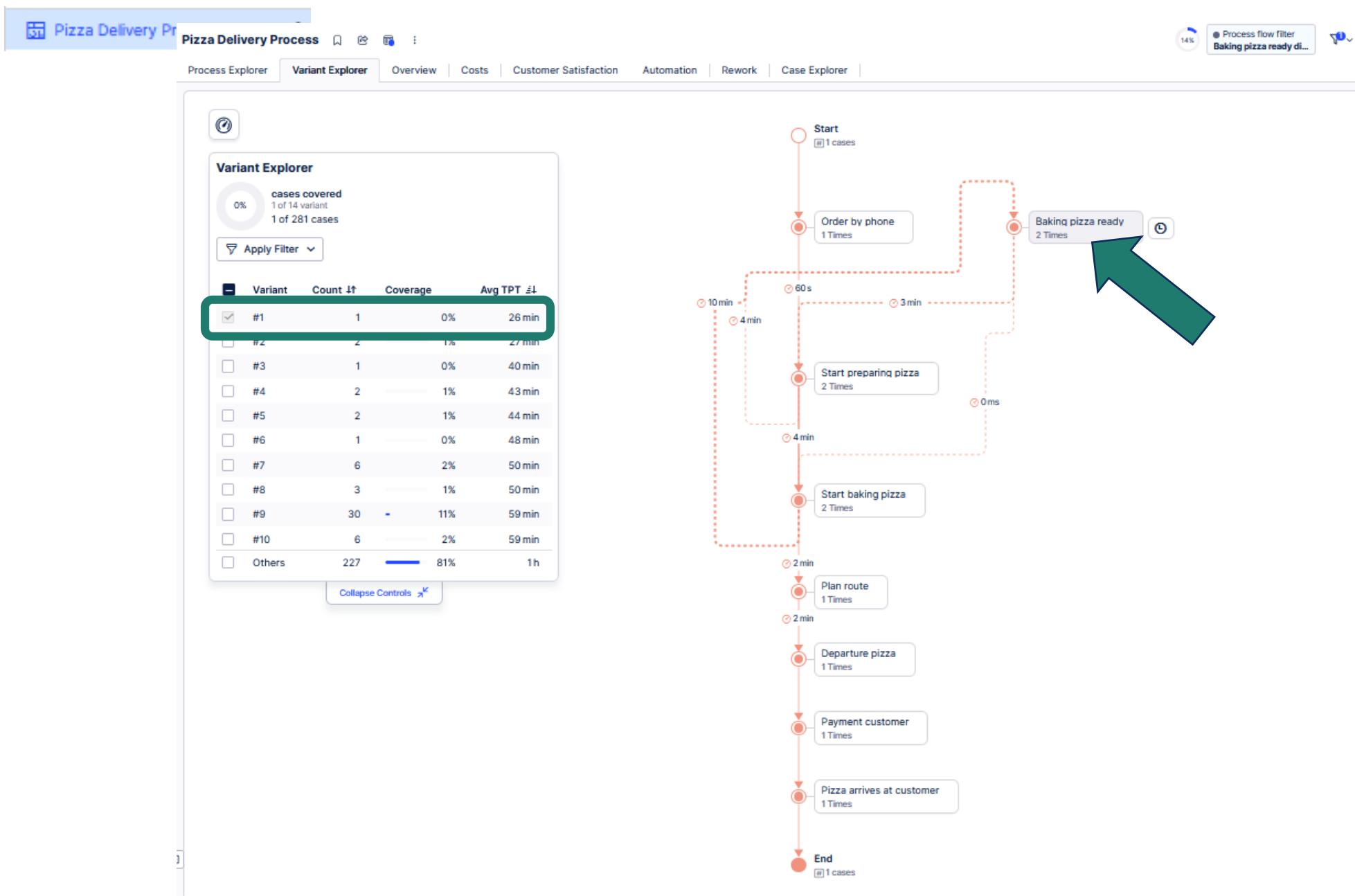
# Case Centric Process Analytics

## VARIAN EXPLORER – FILTROS - FLUJOS



# Case Centric Process Analytics

## VARIAN EXPLORER – FILTROS - FLUJOS



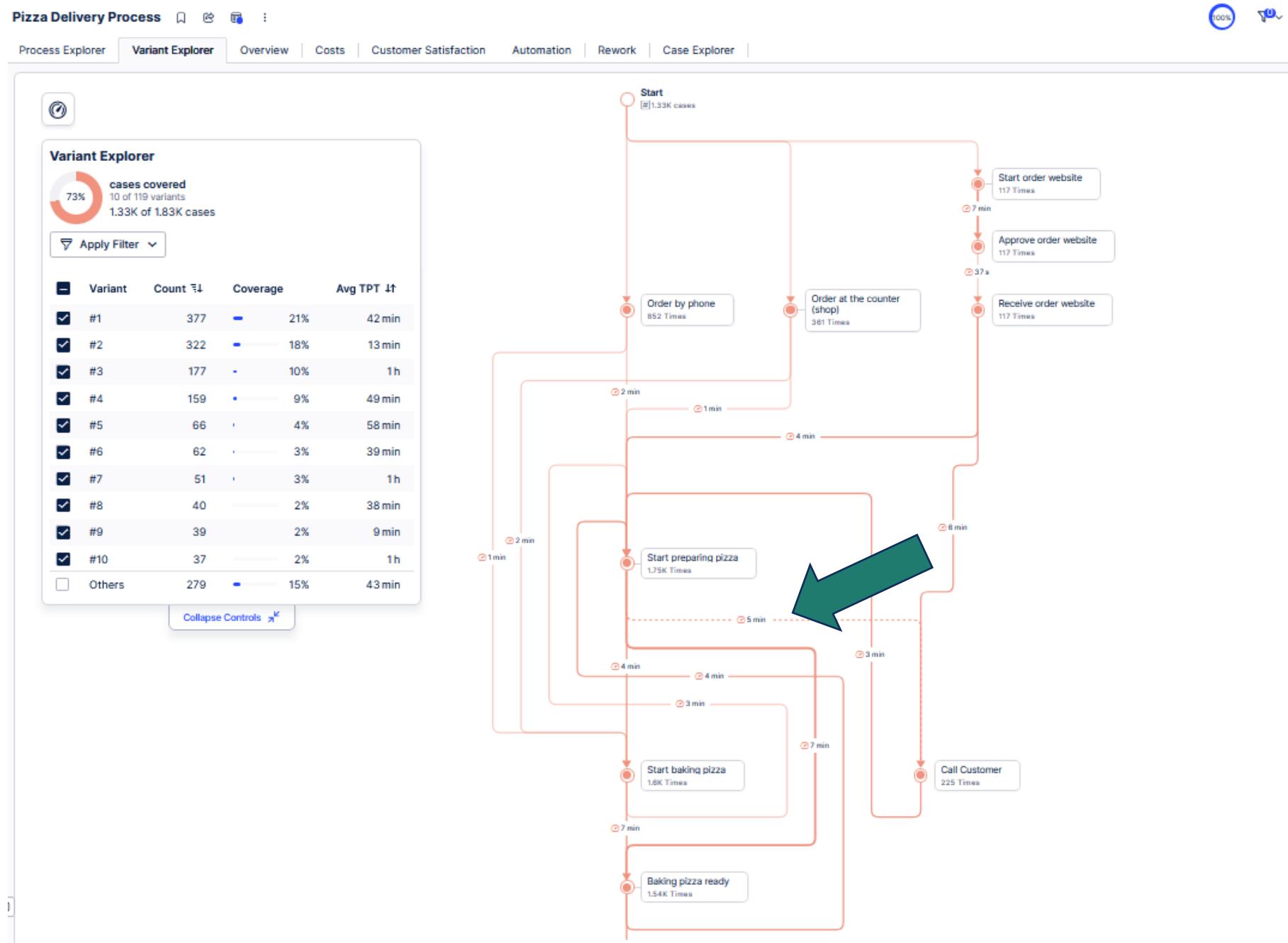
# Case Centric Process Analytics

## VARIAN EXPLORER – EJERCICIO

Partiendo de las 10 variantes con más cobertura, identifique los casos en los que sea necesario llamar al cliente cuando ya se ha iniciado la preparación de la pizza – Analice el proceso.

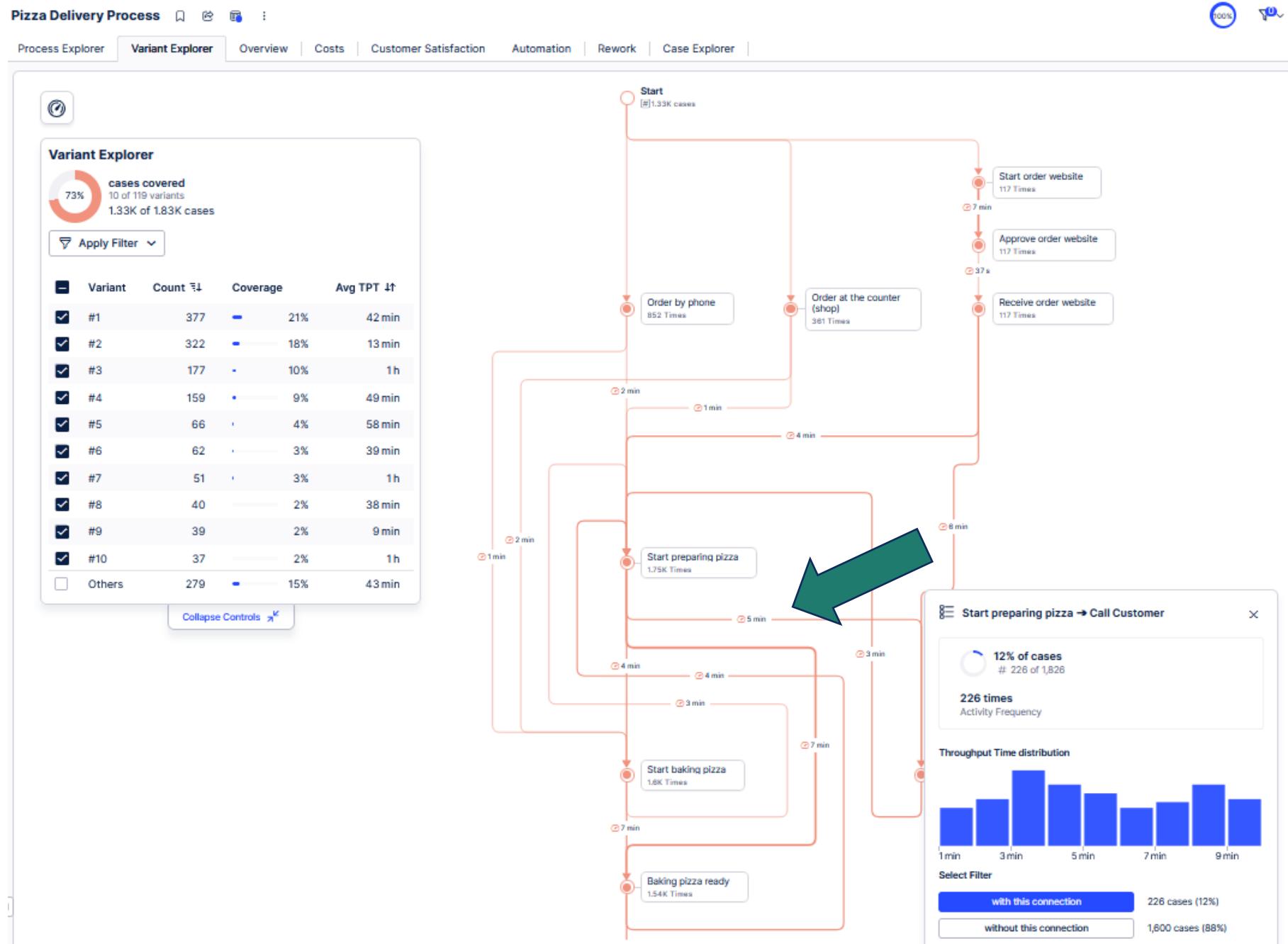
# Case Centric Process Analytics

## VARIAN EXPLORER – EJERCICIO



# Case Centric Process Analytics

## VARIAN EXPLORER – EJERCICIO



# Case Centric Process Analytics

## OTRAS VISTAS PERSONALIZADAS

**Pizza Delivery Process**

Process Explorer | Variant Explorer | Overview | Costs | Customer Satisfaction | Automation | Rework | Case Explorer |

11% Process flow filter Start preparing pizza...

# of Orders: 226 (-1.36) | Average Time to Delivery: 47.93 mins (30.00 mins) | Average Customer Satisfaction: 1.06 out of 5 (3.50 out of 5) | Total Profit: 1,884 € (-0.13)

**Variant Explorer**: cases covered 70% (1 of 11 variant, 159 of 226 cases). Expand Controls ↴

**Pizza Size** Drill Down by Pizza Size:

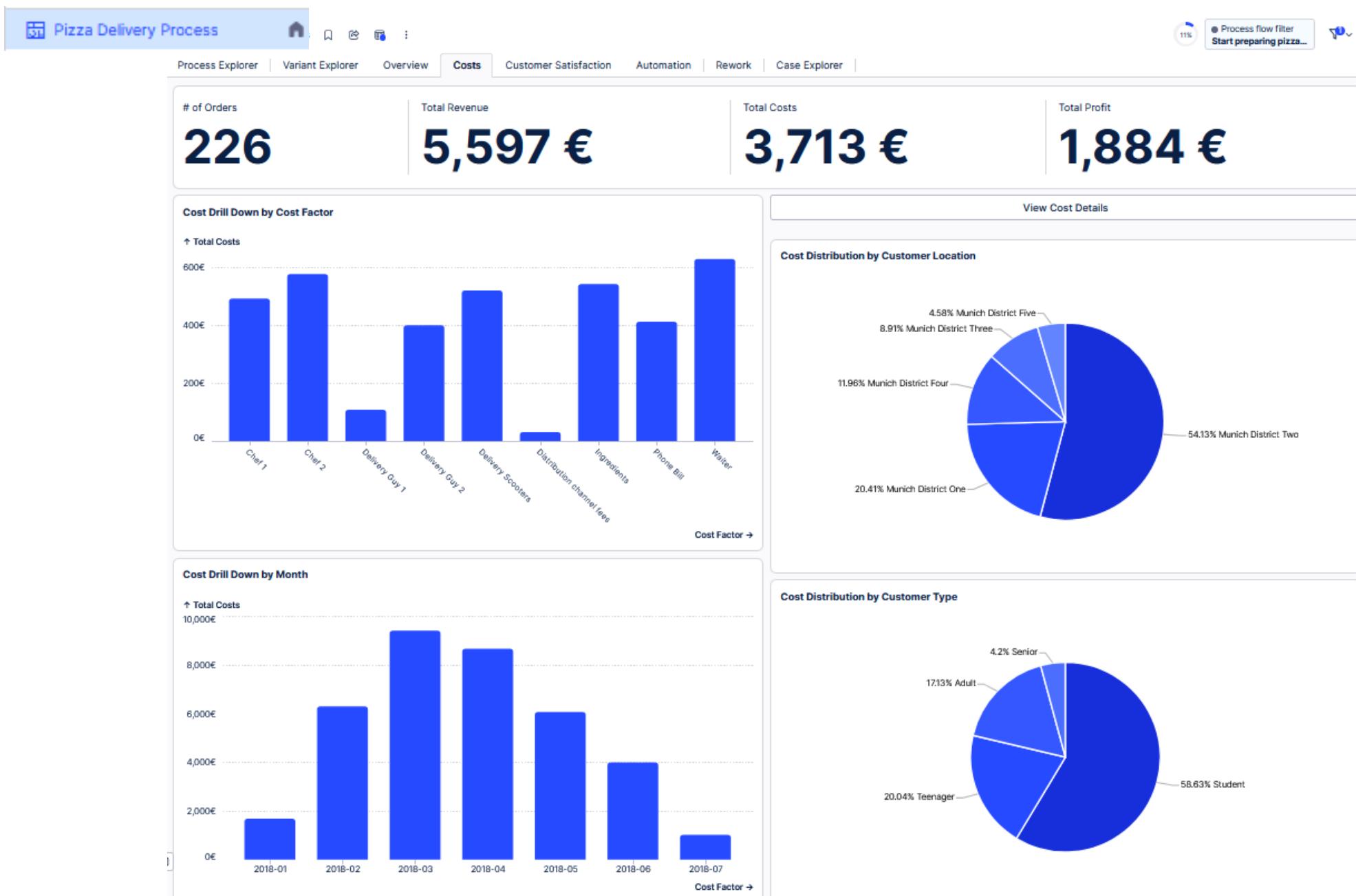
| Pizza Size | Percentage |
|------------|------------|
| Medium     | 21.68%     |
| Large      | 35.4%      |
| Small      | 42.92%     |

**Orders Received by Weekday**:

| Weekday       | # of Orders |
|---------------|-------------|
| 1 - Monday    | ~5          |
| 2 - Tuesday   | ~8          |
| 3 - Wednesday | ~25         |
| 4 - Thursday  | ~10         |
| 5 - Friday    | ~65         |
| 6 - Saturday  | ~55         |
| 7 - Sunday    | ~55         |

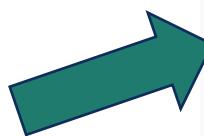
# Case Centric Process Analytics

## OTRAS VISTAS PERSONALIZADAS



# Case Centric Process Analytics

## OTRAS VISTAS PERSONALIZADAS



**Pizza Delivery Process**

Process Explorer | Variant Explorer | Overview | Costs | Customer Satisfaction | Automation | Rework | **Case Explorer**

11% ● Process flow filter Start preparing pizza... 

| Case Id | # of Activities | Throughput Time | First Activity | First Activity Timestamp | Last Activity    | Last Activity Timestamp | ⋮ |
|---------|-----------------|-----------------|----------------|--------------------------|------------------|-------------------------|---|
| 1995    | 10              | 45 min          | Order by phone | 2018-05-19 14:52:11      | Payment customer | 2018-05-19 15:37:11     |   |
| 1990    | 10              | 1 h             | Order by phone | 2018-03-25 06:44:43      | Payment customer | 2018-03-25 07:46:21     |   |
| 1979    | 10              | 1 h             | Order by phone | 2018-04-30 00:40:21      | Payment customer | 2018-04-30 01:46:21     |   |
| 1978    | 10              | 1 h             | Order by phone | 2018-06-17 15:07:34      | Payment customer | 2018-06-17 16:18:34     |   |
| 1974    | 10              | 60 min          | Order by phone | 2018-05-19 14:52:11      | Payment customer | 2018-05-19 15:41:53     |   |
| 1972    | 10              | 31 min          | Order by phone | 2018-05-19 14:52:11      | Payment customer | 2018-05-19 15:19:51     |   |
| 1948    | 10              | 46 min          | Order by phone | 2018-05-19 14:52:11      | Payment customer | 2018-05-19 15:31:00     |   |
| 1943    | 10              | 53 min          | Order by phone | 2018-05-19 14:52:11      | Payment customer | 2018-05-19 15:11:02     |   |
| 1932    | 10              | 42 min          | Order by phone | 2018-02-28 00:10:06      | Payment customer | 2018-02-28 00:52:06     |   |
| 1931    | 10              | 48 min          | Order by phone | 2018-01-27 22:54:17      | Payment customer | 2018-01-27 23:42:17     |   |
| 1929    | 10              | 36 min          | Order by phone | 2018-05-19 01:53:30      | Payment customer | 2018-05-19 02:29:30     |   |
| 1921    | 10              | 1 h             | Order by phone | 2018-03-14 23:11:35      | Payment customer | 2018-03-15 00:16:35     |   |
| 1917    | 10              | 1 h             | Order by phone | 2018-05-30 14:08:19      | Payment customer | 2018-05-30 15:19:19     |   |
| 1912    | 10              | 55 min          | Order by phone | 2018-05-02 22:15:03      | Payment customer | 2018-05-02 23:10:03     |   |
| 1898    | 10              | 48 min          | Order by phone | 2018-07-09 19:29:07      | Payment customer | 2018-07-09 20:17:07     |   |
| 1895    | 10              | 49 min          | Order by phone | 2018-05-14 21:00:41      | Payment customer | 2018-05-14 21:49:41     |   |
| 1889    | 10              | 18 min          | Order by phone | 2018-04-01 23:15:13      | Payment customer | 2018-04-01 23:33:13     |   |
| 1887    | 10              | 57 min          | Order by phone | 2018-03-05 18:56:03      | Payment customer | 2018-03-05 19:53:03     |   |
| 1874    | 10              | 1 h             | Order by phone | 2018-07-23 06:47:53      | Payment customer | 2018-07-23 07:57:53     |   |
| 1872    | 10              | 41 min          | Order by phone | 2018-06-25 18:26:51      | Payment customer | 2018-06-25 19:07:51     |   |
| 1867    | 10              | 53 min          | Order by phone | 2018-04-01 07:44:55      | Payment customer | 2018-04-01 08:37:55     |   |
| 1848    | 10              | 45 min          | Order by phone | 2018-03-28 15:45:49      | Payment customer | 2018-03-28 16:30:49     |   |
| 1846    | 10              | 1 h             | Order by phone | 2018-03-24 07:45:36      | Payment customer | 2018-03-24 08:53:36     |   |
| 1840    | 10              | 57 min          | Order by phone | 2018-03-12 01:43:18      | Payment customer | 2018-03-12 02:40:18     |   |
| 1834    | 10              | 58 min          | Order by phone | 2018-03-25 22:41:43      | Payment customer | 2018-03-25 23:39:43     |   |
| 1824    | 10              | 35 min          | Order by phone | 2018-04-23 08:38:35      | Payment customer | 2018-04-23 09:13:35     |   |
| 1811    | 10              | 33 min          | Order by phone | 2018-06-03 01:50:42      | Payment customer | 2018-06-03 02:23:42     |   |
| 1795    | 10              | 52 min          | Order by phone | 2018-05-01 06:46:26      | Payment customer | 2018-05-01 07:38:26     |   |
| 1790    | 10              | 1 h             | Order by phone | 2018-04-03 18:37:36      | Payment customer | 2018-04-03 19:46:36     |   |
| 1785    | 10              | 26 min          | Order by phone | 2018-03-02 16:11:29      | Payment customer | 2018-03-02 16:37:29     |   |
| 1782    | 10              | 39 min          | Order by phone | 2018-04-12 07:30:12      | Payment customer | 2018-04-12 08:09:12     |   |

Detalle de un caso seleccionado

Case details: 1995

Search

**Activities** 10 items

- Order by phone 2018-05-19 14:52:11 -11m
- Start preparing pizza 2018-05-19 14:55:11 -8m
- Call Customer 2018-05-19 15:03:11 0

Activity En Call Customer

Automation A

Case Key 1,995

Celonis Change Date 2022-07-21

Eventtime 2018-05-19

Start preparing pizza 2018-05-19 15:10:11 +7m

Start baking pizza 2018-05-19 15:11:11 +8m

Baking pizza ready 2018-05-19 15:15:11 +12m

Plan route 2018-05-19 15:20:11 +17m

Departure pizza 2018-05-19 15:22:11 +19m

Pizza arrives at customer 2018-05-19 15:28:11 +23m

Payment customer 2018-05-19 15:37:11 +34m

# Case Centric Process Analytics

## OTROS FILTROS PERSONALIZADOS

**Attribute filter**

**Process flow filter**

**Activity filter**

**Attribute filter**

The screenshot shows the 'Variant Explorer' section of the 'Pizza Delivery Process' dashboard. It displays a summary: 119 variant of 1.83K cases. Below this, four modal windows are overlaid on the dashboard:

- Attribute filter**: Shows a search bar and dropdowns for Case Key, Variant, Customer Id, Revenue, Costs, Pizza Type, and Pizza Size.
- Process flow filter**: Shows an event log for '8c Pizza Event Xlsx Pizzeria ...' and a connection diagram between 'Start baking pizza' and 'Directly followed by'. It also shows a dropdown for '2K cases'.
- Activity filter**: Shows an event log for '8c Pizza Event Xlsx Pizzeria ...' and a search interface. It includes a checkbox for 'Approve order website' and other activity options like 'Baking pizza ready', 'Call Customer', and 'Departure pizza'. It also shows '2K cases | 100% are selected' and '377 cases'.
- Attribute filter**: Shows an event log for '8c Pizza Event Xlsx Pizzeria E...' and a connection diagram between 'Approve order website' and 'To event'. It includes dropdowns for 'First' and 'Last'.

Introducción

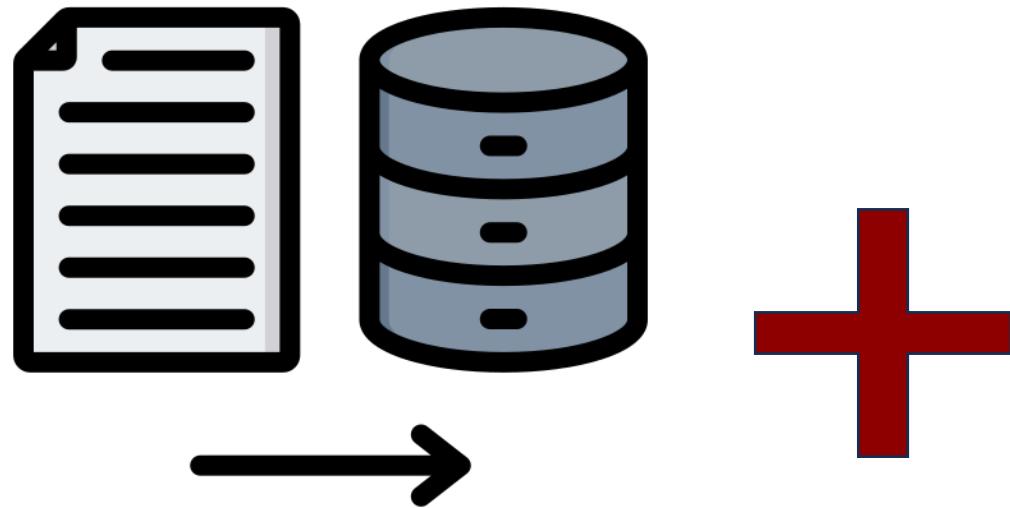
Herramientas de Minería de Procesos

# Minería de Procesos con Celonis

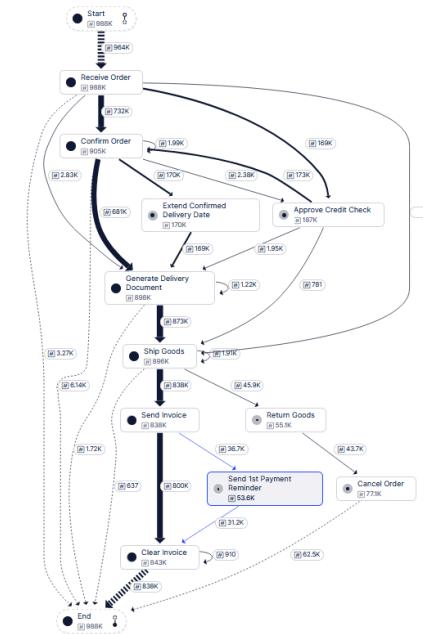
- Acceso y Entorno
- Análisis - Spaces
- Descubrimiento - Carga de datos**
- Descubrimiento y Vistas personalizadas
- Análisis - Conformidad
- Ejercicios



Cargar nuestros propios datos para analizarlos luego



Data Integration



Space – View  
Vista personalizada

Descubrimiento en Celonis

# Data Integration

The screenshot shows the Celonis Data Integration interface. On the left, there's a sidebar with navigation links: Quickstarts (selected), Apps, Business Miner, Celonis Gallery, and More. Below that is a section for 'Data Sources' with options like 'File', 'Cloud', and 'Database'. The main area displays several integration scenarios:

- Process**: Business processes for common source systems.
  - Order Management (ORACLE)
  - Procurement (ORACLE)
  - Accounts Payable (SAP)
  - Accounts Receivable (SAP)
  - Order Management (SAP)
- Log**: Log is formatted as an event log.
  - Case Management (SAP)
  - Opportunity Management (salesforce)
  - Incident Management (servicenow)
- Objects and Events**:
  - Google Sheets
  - XES File

The screenshot shows the Celonis Studio interface. On the left, there's a sidebar with navigation links: Data (selected), Studio, Marketplace, Admin & Settings, Search, Help Center, and Bedilia Estrada Admin. The main area shows a hierarchical menu under 'Data':

- Objects and Events
  - Data Integration (selected)
  - Machine Learning
  - Task Mining
  - Data Generator

# Data Integration

## CARGA DE DATOS

The screenshot shows a user interface for creating a Data Pool. On the left, there's a section titled "No Data Pools" with a magnifying glass icon. The main area has two main options: "Start with a Process Connector template" (using a cloud icon) and "Create from Scratch" (using a document icon). The "Create from Scratch" option is highlighted with a red box.

**No Data Pools**

Data Pools are the main structural element in Data Integration. They cluster the components you need to set up a data pipeline: Data Connections, Data Jobs, Schedules and Process Data Models. You can use Data Pools to manage permissions in Data Integration.

**Start with a Process Connector template**

Create a Data Pool using a pre-configured Process Connector from the Marketplace. [Click here to learn more.](#)

**Create from Scratch**

Set up your Data Pool from scratch to create a data pipeline that fits your needs best.



# Data Integration

## CARGA DE DATOS

The screenshot shows the Data Integration interface for a Data Pool named "DATCOM\_2025". The main interface is divided into three main sections: Input, Data Processing, and Output. The Input section contains a "Connect to Data Source" button. A blue arrow points from this button to a modal dialog titled "Add Data Connection". The dialog provides three options: "Connect to Data Source", "Upload Files", and "Import Data from another Data Pool". Each option has a brief description and a corresponding icon.

**Add Data Connection**

You can add your data by selecting one of the available options.

**Connect to Data Source**

Connect to your source system by using pre-built extractors or building a custom extractor.

**Upload Files**

Upload tabular files from your computer.

**Import Data from another Data Pool**

Import and reuse data that has been extracted and stored in another Data Pool.

Not exactly what you are looking for? > Use the Data Push API ⓘ

# Data Integration

## CARGA DE DATOS

**File Uploads**



Drop files here or [Select Files](#)

File upload limit: 1GB

**Files**

[Filters:](#) [Status](#)

| Table Name | Type | Data Connection | Date | File Count | Status | Errors | Action |
|------------|------|-----------------|------|------------|--------|--------|--------|
|------------|------|-----------------|------|------------|--------|--------|--------|

En nuestro caso  
“PurchasingExample.xes”

# Data Integration

## CARGA DE DATOS

### File Uploads

Drop files here or [Select Files](#)

File upload limit: 1GB

### Files

| Table Name        | Type      | Data Connection | Date             | File Count | Status | Errors | Action                 |
|-------------------|-----------|-----------------|------------------|------------|--------|--------|------------------------|
| PurchasingExample | Flat File | [Global]        | 05-04-2025 14:28 | 1          |        |        | <a href="#">Import</a> |

**Listo para importar y configurar**

# Data Integration

## CARGA DE DATOS

File Uploads

Drop files here or Select Files

Upload limit: 1GB

Filtrar por estados

Filters: Status

Table Name Connection Date File Count Status Errors Action

| Table Name     | Connection | Date             | File Count | Status                               | Errors | Action                                |
|----------------|------------|------------------|------------|--------------------------------------|--------|---------------------------------------|
| PurchasingE... | [REDACTED] | 05-04-2025 14:28 | 1          | <span style="color: green;">✓</span> |        | <span style="color: blue;">...</span> |

Listo

The screenshot shows a user interface for data loading. At the top, there's a 'File Uploads' section with a dashed box for dropping files, a 'Select Files' button, and a note about the upload limit. Below it is a 'Files' section with a 'Filters' dropdown set to 'Status'. A callout box labeled 'Filtrar por estados' points to this dropdown. The main area displays a table of uploaded files. One row is shown in detail: 'PurchasingE...' with a connection icon, date '05-04-2025 14:28', file count '1', status '✓' (green checkmark), and errors '0'. An action button with three dots is also visible. A callout box labeled 'Listo' points to the status column of the table row.

# Data Integration

## CARGA DE DATOS - Modelo

The screenshot shows the Data Integration interface for the DATCOM\_2025 pool. On the left, there's a sidebar with various icons and a 'Data Sources' section. The main area is titled 'DATCOM\_2025' and contains sections for 'Input', 'Data Processing', 'Data Storage', and 'Data Consumers'. A green callout box points to the 'Data Jobs' section in the 'Data Processing' area, which displays 0 Extractions, 0 Transformations, and 0 Data Model Loads. Another green callout box points to the 'Add Data Job' button in the bottom right of the same section. A modal dialog box titled 'New Data Job' is open in the foreground, asking for a 'Name' (DATCOM\_Connection) and a 'Data Connection' (Global Data Connection). A 'Save' button is at the bottom of the dialog.

Seleccione “Data Jobs”

Agregar uno nuevo

New Data Job

Name: DATCOM\_Connection

Data Connection

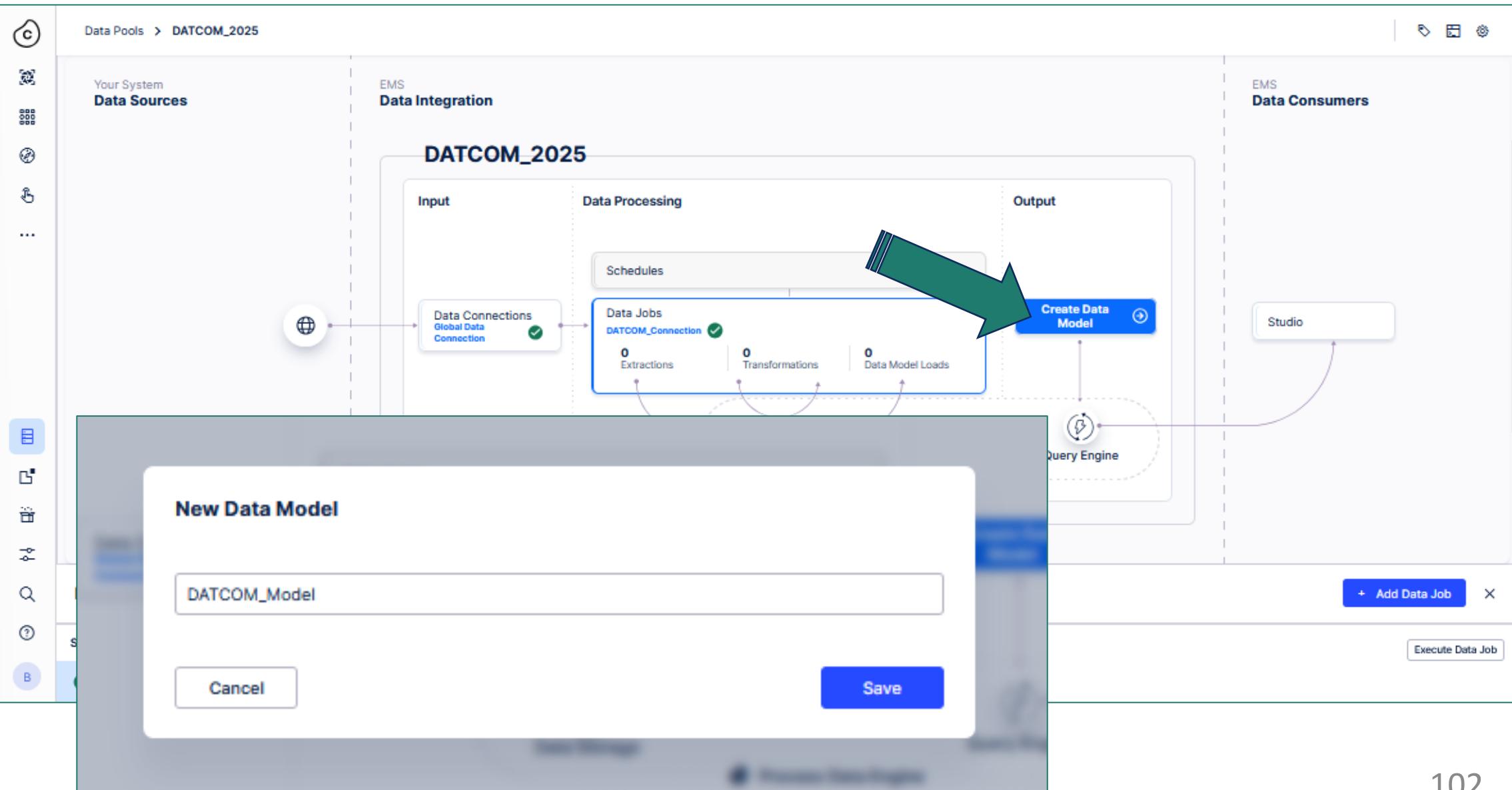
Specify on which data connection this data job should operate on. Jobs without a data connection are global and cannot contain any extractions.

Global Data Connection

Cancel Save

# Data Integration

## CARGA DE DATOS - Modelo



# Data Integration

## CARGA DE DATOS - Modelo

Tables      Activity Table      Process

Available items (1)      Selected items (0)

PurchasingExample

Cancel      Next

The screenshot shows the SAP Data Integration interface for loading data into a model. The top navigation bar indicates the path: Data Pools > DATCOM\_2025 > Data Models. The main process flow is shown as a sequence of three steps: Tables (selected), Activity Table, and Process. The 'Tables' step is currently active, displaying a list of available items. One item, 'PurchasingExample', is listed in the 'Available items' section. A large green arrow points from this item towards the '+' button, which is used to select items for the next step. The 'Selected items' section is currently empty, showing a message: 'There are no selected items. Add some from the list of available items.' Navigation buttons 'Cancel' and 'Next' are at the bottom.

# Data Integration

## CARGA DE DATOS - Modelo

Diagram illustrating the Data Integration process flow:

```
graph LR; A[Tables] --> B[Activity Table]; B --> C[Process]
```

The process consists of three main steps:

- Tables (Step 1)
- Activity Table (Step 2)
- Process (Step 3)

The current step is "Tables".

**Tables**

**Available items (0)** **Select all**

Search

There are no more available items.

**Selected items (1)** **Clear all**

Search

PurchasingExample

**B** Cancel Next

# Data Integration

## CARGA DE DATOS - Modelo

Data Pools > DATCOM\_2025 > Data Models

```
graph LR; A([Tables]) --> B([Activity Table]); B --> C([Process])
```

The diagram shows a flow from 'Tables' to 'Activity Table' to 'Process'. The 'Tables' node is highlighted with a green circle and a checkmark. The 'Activity Table' node is highlighted with a black circle and the number '2'. The 'Process' node is highlighted with a grey circle and the number '3'.

**Activity Table**

This table contains all information about the activities of your event log (activity name column, case ID column, timestamp column and optionally a sorting and end timestamp column).

TABLE NAME

PurchasingExample

Search

Previous Skip configuration

A large red arrow points from the 'Activity Table' section down towards the 'TABLE NAME' input field.

# Data Integration

## CARGA DE DATOS - Modelo

Process

**Step 1/4: Select Case ID column**

Click on the column that contains your case IDs. The case ID usually is a numeric value that is unique and identifies each case in your process.

| ABC CASE ID           | ABC ROLE          | ABC ORG-RESOURCE          | ABC CONCEPT:NAME           | ABC RESOURCE        | ABC ACTIVITY               | ABC LIFECYCLE:TRAN... | DATE TIME:TIMESTAMP | DATE _CELONIS_CHA |
|-----------------------|-------------------|---------------------------|----------------------------|---------------------|----------------------------|-----------------------|---------------------|-------------------|
| 00045b97-2dad-4104... | Purchasing Agent  | Francois de Perrier-Pu... | Analyze Request for Q...   | Francois de Perrier | Analyze Request for Q...   | complete              | 2011-05-31 20:02:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104... | Purchasing Agent  | Francois de Perrier-Pu... | Analyze Request for Q...   | Francois de Perrier | Analyze Request for Q...   | start                 | 2011-05-31 19:37:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104... | Requester         | Anna Kaufmann-Requ...     | Create Request for Qu...   | Anna Kaufmann       | Create Request for Qu...   | complete              | 2011-05-28 17:51:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104... | Requester         | Anna Kaufmann-Requ...     | Create Request for Qu...   | Anna Kaufmann       | Create Request for Qu...   | start                 | 2011-05-28 17:42:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104... | Requester         | Esmara Liubiata-Requ...   | Create Purchase Requ...    | Esmara Liubiata     | Create Purchase Requ...    | complete              | 2011-05-28 17:34:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104... | Requester         | Esmara Liubiata-Requ...   | Create Purchase Requ...    | Esmara Liubiata     | Create Purchase Requ...    | start                 | 2011-05-28 17:06:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Authorize Supplier's In... | Karalda Nimwada     | Authorize Supplier's In... | complete              | 2011-01-31 02:31:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Authorize Supplier's In... | Karalda Nimwada     | Authorize Supplier's In... | start                 | 2011-01-31 02:31:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Pay invoice                | Karalda Nimwada     | Pay invoice                | complete              | 2011-01-31 03:01:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Pay invoice                | Karalda Nimwada     | Pay invoice                | start                 | 2011-01-31 02:49:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Release Supplier's Inv...  | Karalda Nimwada     | Release Supplier's Inv...  | complete              | 2011-01-31 02:31:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Release Supplier's Inv...  | Karalda Nimwada     | Release Supplier's Inv...  | start                 | 2011-01-31 02:28:00 | 2025-04-05 14:32: |

Back Finish

# Data Integration

## CARGA DE DATOS - Modelo

Seleccionar los datos del log representativos para el modelo

The screenshot shows a data integration interface with a green header bar. Below it, a process flow diagram indicates the current step is 'Activity Table' (step 2 of 3). The main area displays a table with columns for CASE ID, ROLE, ORG-RESOURCE, CONCEPT-NAME, RESOURCE, ACTIVITY, LIFECYCLE-TRAN..., TIME-TIMESTAMP, and \_CELONIS\_CHA. A callout box points to the 'CASE ID' column with the instruction: "Seleccione la columna CASE ID, como ‘Case ID’". The interface includes a sidebar with various icons and a bottom navigation bar with 'Back' and 'Finish' buttons.

| CASE ID               | ROLE              | ORG-RESOURCE              | CONCEPT-NAME               | RESOURCE            | ACTIVITY                   | LIFECYCLE:TRAN... | TIME:TIMESTAMP      | _CELONIS_CHA      |
|-----------------------|-------------------|---------------------------|----------------------------|---------------------|----------------------------|-------------------|---------------------|-------------------|
| 00045b97-2dad-4104... | Purchasing Agent  | Francois de Perrier-Pu... | Analyze Request for Q...   | Francois de Perrier | Analyze Request for Q...   | complete          | 2011-05-31 20:02:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104... | Purchasing Agent  | Francois de Perrier-Pu... | Analyze Request for Q...   | Francois de Perrier | Analyze Request for Q...   | start             | 2011-05-31 19:37:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104... | Requester         | Anna Kaufmann-Requ...     | Create Request for Qu...   | Anna Kaufmann       | Create Request for Qu...   | complete          | 2011-05-28 17:51:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104... | Requester         | Anna Kaufmann-Requ...     | Create Request for Qu...   | Anna Kaufmann       | Create Request for Qu...   | start             | 2011-05-28 17:42:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104... | Requester         | Esmena Liubiata-Requ...   | Create Purchase Requ...    | Esmena Liubiata     | Create Purchase Requ...    | complete          | 2011-05-28 17:34:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104... | Requester         | Esmena Liubiata-Requ...   | Create Purchase Requ...    | Esmena Liubiata     | Create Purchase Requ...    | start             | 2011-05-28 17:06:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Authorize Supplier's In... | Karalda Nimwada     | Authorize Supplier's In... | complete          | 2011-01-31 02:31:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Authorize Supplier's In... | Karalda Nimwada     | Authorize Supplier's In... | start             | 2011-01-31 02:31:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Pay invoice                | Karalda Nimwada     | Pay invoice                | complete          | 2011-01-31 03:01:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Pay invoice                | Karalda Nimwada     | Pay invoice                | start             | 2011-01-31 02:49:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Release Supplier's Inv...  | Karalda Nimwada     | Release Supplier's Inv...  | complete          | 2011-01-31 02:31:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Release Supplier's Inv...  | Karalda Nimwada     | Release Supplier's Inv...  | start             | 2011-01-31 02:28:00 | 2025-04-05 14:32: |

Seleccione la columna *CASE ID*,  
como “Case ID”

# Data Integration

## CARGA DE DATOS - Modelo

Data Pools > DATCOM\_2025 > Data Models

Process

**Step 3/4: Select timestamp column**

Click on the column that contains the timestamp for each activity. Timestamps usually look something like "2016-02-01 14:24:30" although the exact format of the timestamp may differ.

| CASE ID                | ROLE              | ORG-RESOURCE              | CONCEPT-NAME               | RESOURCE            | ACTIVITY                   | LIFECYCLE-TRAN... | TIME-TIMESTAMP      | _CELONIS-CHA      |
|------------------------|-------------------|---------------------------|----------------------------|---------------------|----------------------------|-------------------|---------------------|-------------------|
| 00045b97-2dad-4104...  | Purchasing Agent  | Francois de Perrier-Pu... | Analyze Request for Q...   | Francois de Perrier | Analyze Request for Q...   | complete          | 2011-05-31 20:02:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104...  | Purchasing Agent  | Francois de Perrier-Pu... | Analyze Request for Q...   | Francois de Perrier | Analyze Request for Q...   | start             | 2011-05-31 19:37:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104...  | Requester         | Anna Kaufmann-Requ...     | Create Request for Qu...   | Anna Kaufmann       | Create Request for Qu...   | complete          | 2011-05-28 17:51:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104...  | Requester         | Anna Kaufmann-Requ...     | Create Request for Qu...   | Anna Kaufmann       | Activity name              | start             | 2011-05-28 17:51:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104...  | Requester         | Esmana Liubiata-Requ...   | Create Purchase Requ...    | Esmana Liubiata     | Activity name              | complete          | 2011-05-28 17:34:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104...  | Requester         | Esmana Liubiata-Requ...   | Create Purchase Requ...    | Esmana Liubiata     | Create Purchase Requ...    | start             | 2011-05-28 17:06:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667-... | Financial Manager | Karalda Nimwada-Fina...   | Authorize Supplier's In... | Karalda Nimwada     | Authorize Supplier's In... | complete          | 2011-01-31 02:31:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667-... | Financial Manager | Karalda Nimwada-Fina...   | Authorize Supplier's In... | Karalda Nimwada     | Authorize Supplier's In... | start             | 2011-01-31 02:31:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667-... | Financial Manager | Karalda Nimwada-Fina...   | Pay invoice                | Karalda Nimwada     | Pay invoice                | complete          | 2011-01-31 03:01:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667-... | Financial Manager | Karalda Nimwada-Fina...   | Pay invoice                | Karalda Nimwada     | Pay invoice                | start             | 2011-01-31 02:49:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667-... | Finan...          |                           |                            |                     | Release Supplier's Inv...  | complete          | 2011-01-31 02:31:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667-... | Finan...          |                           |                            |                     | Release Supplier's Inv...  | start             | 2011-01-31 02:28:00 | 2025-04-05 14:32: |

Seleccione la columna ACTIVITY, como  
 “Activity name”

Back Finish

# Data Integration

## CARGA DE DATOS - Modelo

Process

**Step 4/4: Select sorting column (optional) | Skip step**

Click on the column that contains the sorting information for each activity. Sorting information is used to determine the order of activities which have the exact same timestamp. Not all source systems provide sorting information.

| CASE ID               | ROLE              | ORG-RESOURCE              | CONCEPT-NAME               | RESOURCE            | ACTIVITY                   | LIFECYCLE:TRAN... | TIME:TIMESTAMP      | _CELONIS_CHA...     |
|-----------------------|-------------------|---------------------------|----------------------------|---------------------|----------------------------|-------------------|---------------------|---------------------|
| 00045b97-2dad-4104... | Purchasing Agent  | Francois de Perrier-Pu... | Analyze Request for Q...   | Francois de Perrier | Analyze Request for Q...   | complete          | 2011-05-31 20:02:00 | 2025-04-05 14:32:00 |
| 00045b97-2dad-4104... | Purchasing Agent  | Francois de Perrier-Pu... | Analyze Request for Q...   | Francois de Perrier | Analyze Request for Q...   | start             | 2011-05-31 19:37:00 | 2025-04-05 14:32:00 |
| 00045b97-2dad-4104... | Requester         | Anna Kaufmann-Requ...     | Create Request for Qu...   | Anna Kaufmann       | Create Request for Qu...   | complete          | 2011-05-28 17:51:00 | 2025-04-05 14:32:00 |
| 00045b97-2dad-4104... | Requester         | Anna Kaufmann-Requ...     | Create Request for Qu...   | Anna Kaufmann       | Create Request for Qu...   | start             | 2011-05-28 17:51:00 | 2025-04-05 14:32:00 |
| 00045b97-2dad-4104... | Requester         | Esmara Liubiata-Requ...   | Create Purchase Requ...    | Esmara Liubiata     | Esmara Liubiata            | complete          | 2011-05-28 17:51:00 | 2025-04-05 14:32:00 |
| 00045b97-2dad-4104... | Requester         | Esmara Liubiata-Requ...   | Create Purchase Requ...    | Esmara Liubiata     | Create Purchase Requ...    | start             | 2011-05-28 17:06:00 | 2025-04-05 14:32:00 |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Authorize Supplier's In... | Karalda Nimwada     | Authorize Supplier's In... | complete          | 2011-01-31 02:31:00 | 2025-04-05 14:32:00 |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Authorize Supplier's In... | Karalda Nimwada     | Authorize Supplier's In... | start             | 2011-01-31 02:31:00 | 2025-04-05 14:32:00 |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Pay invoice                | Karalda Nimwada     | Pay invoice                | complete          | 2011-01-31 03:01:00 | 2025-04-05 14:32:00 |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Pay invoice                | Karalda Nimwada     | Pay invoice                | start             | 2011-01-31 02:49:00 | 2025-04-05 14:32:00 |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Release Supplier's Inv...  | Karalda Nimwada     | Release Supplier's Inv...  | complete          | 2011-01-31 02:31:00 | 2025-04-05 14:32:00 |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Release Supplier's Inv...  | Karalda Nimwada     | Release Supplier's Inv...  | start             | 2011-01-31 02:28:00 | 2025-04-05 14:32:00 |

Seleccione la columna **TIME:TIMESTAMP**,  
 como “Timestamp”

Back

Finish

# Data Integration

## CARGA DE DATOS - Modelo

Process

**Step 4/4: Select sorting column (optional) | Skip step**

Click on the column that contains the sorting information for each activity. Sorting information is used to determine the order of activities which have the exact same timestamp. Not all source systems provide sorting information.

| CASE ID               | ROLE              | ORG-RESOURCE              | CONCEPT-NAME               | RESOURCE            | ACTIVITY                 | LIFECYCLE:TRAN... | TIME:TIMESTAMP      | _CELONIS_CHA...     |
|-----------------------|-------------------|---------------------------|----------------------------|---------------------|--------------------------|-------------------|---------------------|---------------------|
| 00045b97-2dad-4104... | Purchasing Agent  | Francois de Perrier-Pu... | Analyze Request for Q...   | Francois de Perrier | Analyze Request for Q... | complete          | 2011-05-31 20:02:00 | 2025-04-05 14:32:00 |
| 00045b97-2dad-4104... | Purchasing Agent  | Francois de Perrier-Pu... | Analyze Request for Q...   | Francois de Perrier | Analyze Request for Q... | start             | 2011-05-31 19:37:00 | 2025-04-05 14:32:00 |
| 00045b97-2dad-4104... | Requester         | Anna Kaufmann-Requ...     | Create Request for Qu...   | Anna Kaufmann       | Create Request for Qu... | complete          | 2011-05-28 17:51:00 | 2025-04-05 14:32:00 |
| 00045b97-2dad-4104... | Requester         | Anna Kaufmann-Requ...     | Create Request for Qu...   | Anna Kaufmann       | Activity name            | start             | 2011-05-28 17:51:00 | 2025-04-05 14:32:00 |
| 00045b97-2dad-4104... | Requester         | Esmara Liubiata-Requ...   | Create Purchase Requ...    | Esmara Liubiata     | Sorting                  | Sorting           | 2011-05-28 17:51:00 | 2025-04-05 14:32:00 |
| 00045b97-2dad-4104... | Requester         | Esmara Liubiata-Requ...   | Create Purchase Requ...    | Esmara Liubiata     | Activity name            | complete          | 2011-05-28 17:51:00 | 2025-04-05 14:32:00 |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Authorize Supplier's In... | Karalda Nimwada     | Activity name            | start             | 2011-01-31 02:31:00 | 2025-04-05 14:32:00 |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Authorize Supplier's In... | Karalda Nimwada     | Sorting                  | Sorting           | 2011-01-31 02:31:00 | 2025-04-05 14:32:00 |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Pay invoice                | Karalda Nimwada     | Sorting                  | complete          | 2011-01-31 03:01:00 | 2025-04-05 14:32:00 |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Pay invoice                | Karalda Nimwada     | Activity name            | start             | 2011-01-31 02:49:00 | 2025-04-05 14:32:00 |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Release Supplier's Inv...  | Karalda Nimwada     | Sorting                  | complete          | 2011-01-31 02:31:00 | 2025-04-05 14:32:00 |
| 00073aaa-6c11-4667... | Financial Manager | Karalda Nimwada-Fina...   | Release Supplier's Inv...  | Karalda Nimwada     | Activity name            | start             | 2011-01-31 02:28:00 | 2025-04-05 14:32:00 |

**Back** **Finish**

De forma opcional, seleccione alguna columna para ordenar

# Data Integration

## CARGA DE DATOS - Modelo

Diagram showing the flow from Tables to Activity Table to Process:

```

    graph LR
        A([Tables]) --> B([Activity Table])
        B --> C((3))
        C --> D([Process])
    
```

**Process**  
Done  
Review your selections and proceed further

| CASE ID                | ROLE              | ORG-RESOURCE              | CONCEPT:NAME               | RESOURCE            | ACTIVITY                   | LIFECYCLE:TRAN... | TIME:TIMESTAMP      | _CELONIS_CHA      |
|------------------------|-------------------|---------------------------|----------------------------|---------------------|----------------------------|-------------------|---------------------|-------------------|
| 00045b97-2dad-4104...  | Purchasing Agent  | Francois de Perrier-Pu... | Analyze Request for Q...   | Francois de Perrier | Analyze Request for Q...   | complete          | 2011-05-31 20:02:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104...  | Purchasing Agent  | Francois de Perrier-Pu... | Analyze Request for Q...   | Francois de Perrier | Analyze Request for Q...   | start             | 2011-05-31 19:37:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104...  | Requester         | Anna Kaufmann-Requ...     | Create Request for Qu...   | Anna Kaufmann       | Create Request for Qu...   | complete          | 2011-05-28 17:51:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104...  | Requester         | Anna Kaufmann-Requ...     | Create Request for Qu...   | Anna Kaufmann       | Create Request for Qu...   | start             | 2011-05-28 17:51:00 | 2025-04-05 14:32: |
| 00045b97-2dad-4104...  | Requester         | Esmana Liubiata-Requ...   | Create Purchase Requ...    | Esmana Liubiata     | Create Purchase Requ...    | complete          | 2011-05-28 17:06:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667-... | Financial Manager | Karalda Nimwada-Fina...   | Authorize Supplier's In... | Karalda Nimwada     | Authorize Supplier's In... | complete          | 2011-01-31 02:31:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667-... | Financial Manager | Karalda Nimwada-Fina...   | Authorize Supplier's In... | Karalda Nimwada     | Authorize Supplier's In... | start             | 2011-01-31 02:31:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667-... | Financial Manager | Karalda Nimwada-Fina...   | Pay invoice                | Karalda Nimwada     | Pay invoice                | complete          | 2011-01-31 03:01:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667-... | Financial Manager | Karalda Nimwada-Fina...   | Pay invoice                | Karalda Nimwada     | Pay invoice                | start             | 2011-01-31 02:49:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667-... | Financial Manager | Karalda Nimwada-Fina...   | Release Supplier's Inv...  | Karalda Nimwada     | Release Supplier's Inv...  | complete          | 2011-01-31 02:31:00 | 2025-04-05 14:32: |
| 00073aaa-6c11-4667-... | Financial Manager | Karalda Nimwada-Fina...   | Release Supplier's Inv...  | Karalda Nimwada     | Release Supplier's Inv...  | start             | 2011-01-31 02:28:00 | 2025-04-05 14:32: |

Por ejemplo, “CONCEPT:NAME”

Finish

# Data Integration

## CARGA DE DATOS - Modelo

The screenshot shows the SAP Data Integration Studio interface. The top navigation bar includes 'Data Pools > DATCOM\_2025 > Data Models'. On the left, there's a vertical toolbar with various icons. The main area displays the 'DATCOM\_Model' data model. A table named 'PurchasingExample' is selected, indicated by a dashed border. A tooltip for this table says: 'Missing Identifiers The Identifier has not been set for at least one of the tables. Identifiers are optional and only needed to enable Delta Data Model loads and other functionalities that require identifying unique rows when building apps in Studio.' Below the table, there are buttons for 'Set Identifier' and 'New foreign key'. A modal window titled 'Table settings' is open, showing fields for 'Schema' (set to 'Global'), 'Name' (set to 'PurchasingExample'), and 'Alias' (set to 'Optional'). A note explains that an alias can be used to give the table a distinct alternative name. Another section for 'Identifier' (set to 'Case ID') is also present with a note about enabling Delta Data Model loads. At the bottom of the modal are 'Cancel' and 'Save' buttons.

# Data Integration

## CARGA DE DATOS - Modelo

The screenshot displays a user interface for managing data models within a data pool. The top navigation bar shows the path: Data Pools > DATCOM\_2025 > Data Models. The main content area is titled 'DATCOM\_Model'. The interface includes tabs for Model, Data loads, Calendar, Name mapping, PQL Preamble, and Object Links. A prominent blue button labeled 'Load Data Model' is visible in the top right of each panel.

**Panel 1 (Top):** Shows a successful data model load. The status message indicates '1 tables successfully loaded'. Buttons for 'UNLOAD' and 'DETAILS' are present.

**Panel 2 (Middle):** Shows a pending data model load. The status message says 'No Data Model load in progress'.

**Panel 3 (Bottom):** Shows no active data model loads.

A large green arrow points from the 'Load Data Model' button in the middle panel towards the top right corner of the same panel, highlighting the action.

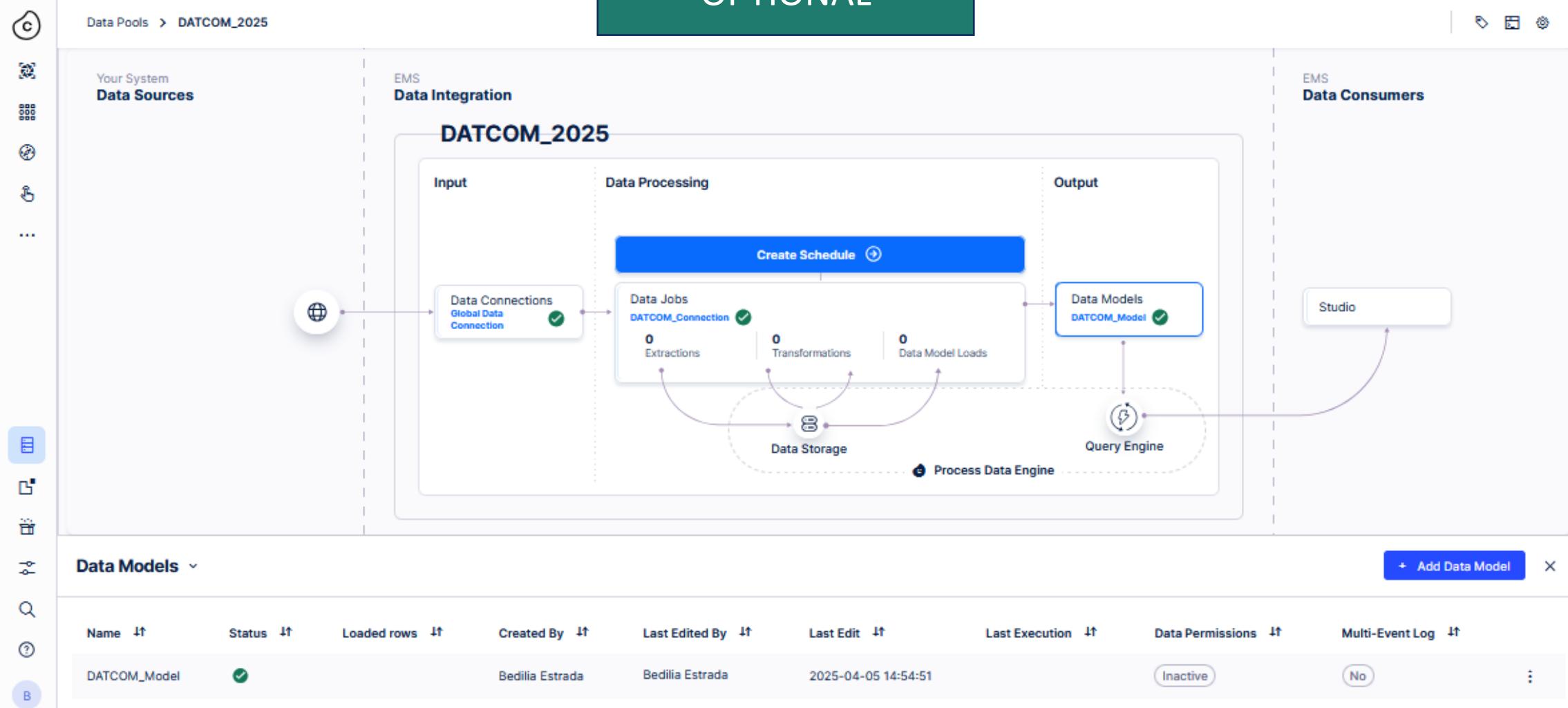
| Status | Start date          | End date            | Message | Version | Load Type |
|--------|---------------------|---------------------|---------|---------|-----------|
| ✓      | 2025-04-05 15:25:49 | 2025-04-05 15:25:55 | -       |         | COMPLETE  |

Visible ... 113

# Data Integration

## CARGA DE DATOS

OPTIONAL



# Data Integration

## CARGA DE DATOS

OPTIONAL

The screenshot shows the Data Integration interface with the following details:

- Path:** Data Pools > DATCOM\_2025 > Schedules
- Title:** DATCOM\_Schedule
- Status:** This schedule is currently disabled and will not be executed.
- Buttons:** Enable schedule, Enable monitoring, Execute
- Modal 1 (Add Jobs):** A modal window titled "Add Jobs" contains a search bar and a list of available jobs. One job, "DATCOM\_Connection", is selected with a checked checkbox.
- Modal 2 (DATCOM\_Schedule):** A modal window titled "DATCOM\_Schedule" asks "Do you want to execute the following Data Jobs?". It lists "DATCOM\_Connection" and has "Cancel" and "Execute" buttons.
- Bottom Buttons:** Save (blue button) and another Save button (gray button).

# Data Integration

## CARGA DE DATOS

The screenshot shows the Celonis Data Integration interface. On the left, there's a sidebar with various navigation options:

- Quickstarts**
- Apps** (highlighted)
- Business Miner
- Celonis Gallery
- More
- Data** (highlighted)
- Studio
- Marketplace
- Admin & Settings
- Search
- Help Center
- Bedilia Estrada Admin

In the main area, the title "Carga de Datos" is displayed above a search bar and a "CTRL + /" button. Below the search bar is an "Inbox" icon.

The main content area is titled "ack, Bedilia Estrada" and shows "The spaces available to you". It includes a "Package & Asset" navigation bar with "Starred" and "Last Viewed" tabs, and a "Recent" section with a "Last viewed" timestamp.

The "Data" section is expanded, showing sub-options: Object-Centric Process, Objects and Events, Data Integration (highlighted), Machine Learning, Task Mining, and Data Generator.

The "Data Integration" section contains several cards:

- 2: Pizzeria Mamma Mia in Views (Viewed 56 minutes ago)
- Pizza Delivery Carbon Footprint (Viewed an hour ago)
- Pizza Deliver Process Conformance (Viewed 5 hours ago)
- Order to Cash (Viewed 5 days ago)
- See all (7)

Below this, there are more cards:

- 1: Welcome to Celonis
- 2: Pizzeria Mamma Mia - small data set
- 3: Pizzeria Carbon Emissions
- 4: Purchase-to-Pay
- 5: Order-to-Cash
- 6: Object-Centric Order Management
- 7: Accounts Receivable Execution App

# Data Integration

## CARGA DE DATOS

**Data Pools**

Data Consumption: 0 B / 50 GB → % of APC Limit Reached

| Data Pool Name         | Status | Data Connections | Created By      | Last Execution |
|------------------------|--------|------------------|-----------------|----------------|
| DATCOM_2025<br>0 B APC | ✓      |                  | Bedilia Estrada | ...            |

First < 1 > Last

The screenshot shows a user interface for managing data pools. On the left, there's a vertical sidebar with various icons. The main area is titled 'Data Pools' and displays a summary of data consumption (0 B / 50 GB) and the percentage of APC limit reached. Below this is a table listing data pools. The first row in the table is highlighted with a green border. The columns in the table are: Data Pool Name, Status, Data Connections, Created By, and Last Execution. The 'Status' column for the highlighted row contains a green checkmark. The 'Created By' column shows 'Bedilia Estrada'. At the bottom of the table, there are navigation buttons for 'First', '<', '1', '>', and 'Last'.

Introducción

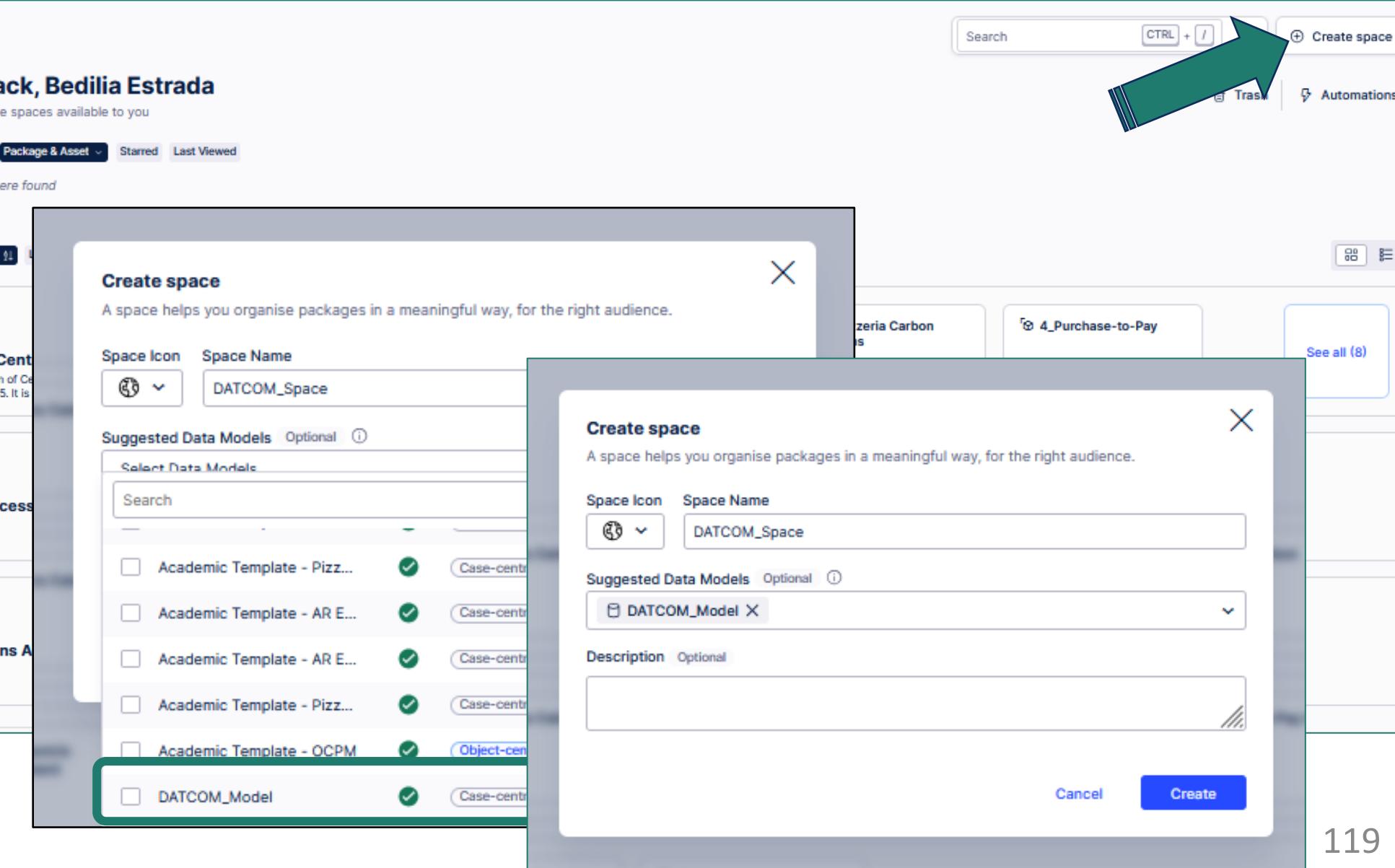
Herramientas de Minería de Procesos

# Minería de Procesos con Celonis

- Acceso y Entorno
- Análisis - Spaces
- Descubrimiento - Carga de datos
- Descubrimiento y Vistas personalizadas**
- Análisis - Conformidad
- Ejercicios

# Studio

## Crear nuevo “Space”



The screenshot shows the Celonis Studio interface with a sidebar on the left containing various navigation options like Quickstarts, Apps, Business Miner, Celonis Gallery, More, Data, Studio (which is highlighted with a green box), Marketplace, Admin & Settings, Search, Help Center, and Bedilia Estrada.

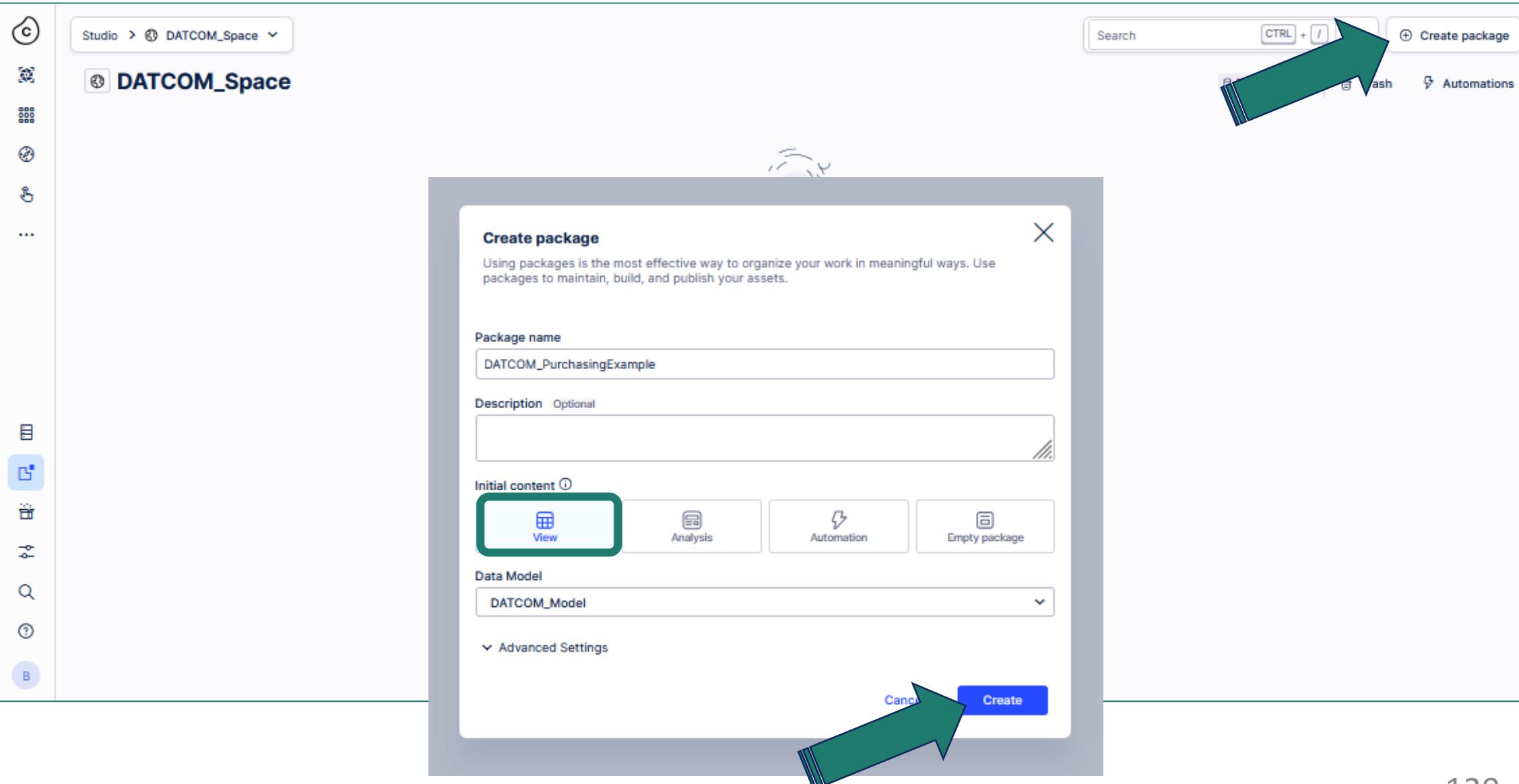
The main workspace displays a search results page for "ack, Bedilia Estrada". A modal window titled "Create space" is open, prompting the user to organize packages. The "Space Name" field contains "DATCOM\_Space".

A second modal window, also titled "Create space", is shown overlapping the first. It has the same fields: "Space Name" (DATCOM\_Space) and "Suggested Data Models" (DATCOM\_Model). The "DATCOM\_Model" option is selected, indicated by a checkmark.

At the top right of the interface, there is a "Create space" button, which is also highlighted with a green arrow.

# Space

## Crear nuevo “Package”



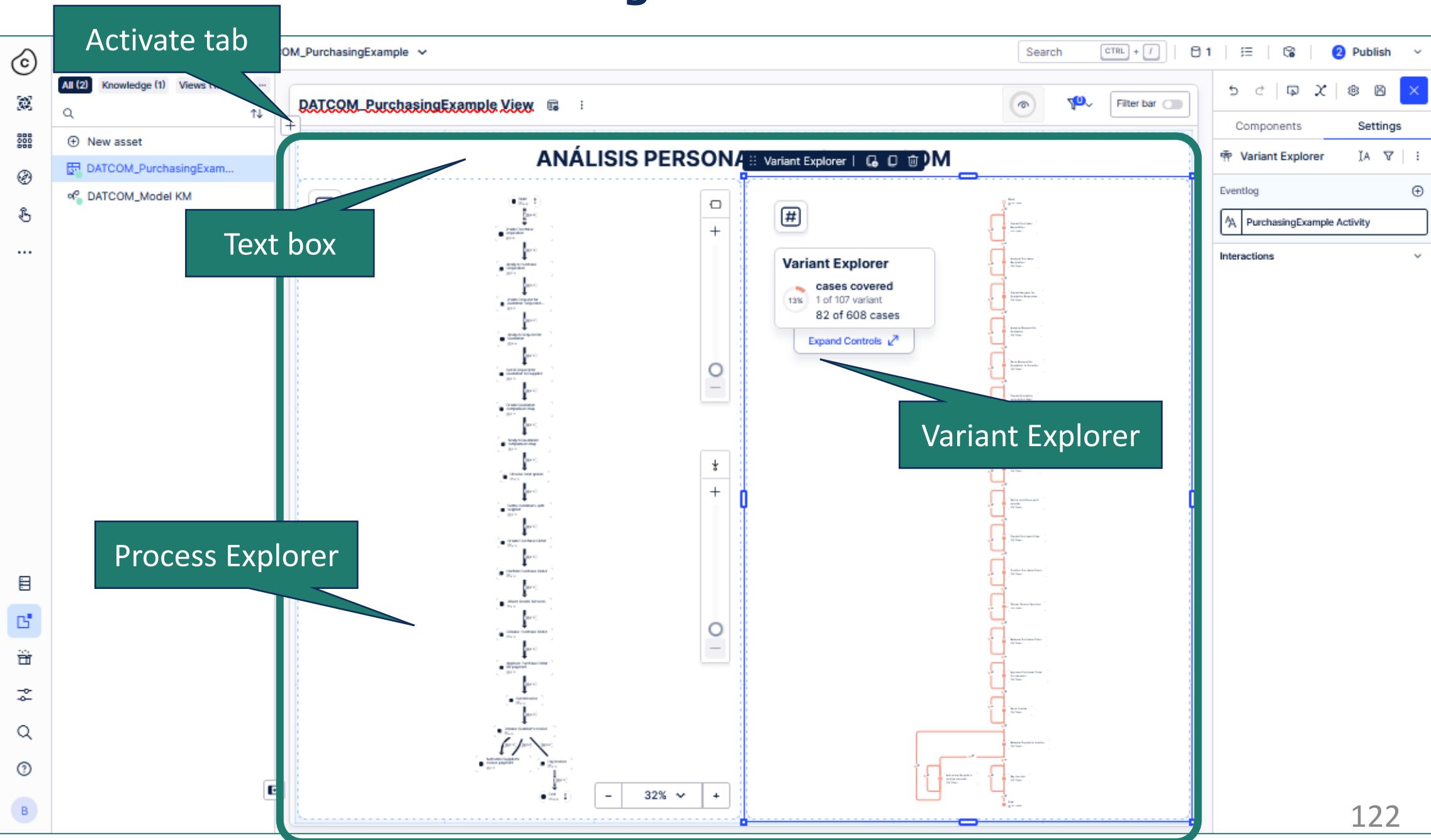
# Space - Views

## Configurar la vista

The screenshot shows the SAP Space interface for configuring a view. The top navigation bar includes 'Studio > DATCOM\_Space > DATCOM\_PurchasingExample'. The left sidebar has icons for 'New asset' and 'DATCOM\_PurchasingExam...'. The main area is titled 'DATCOM\_PurchasingExample View' and contains a large grid for configuration. The right sidebar lists various components and settings, such as 'Components' (Search, KPIs, Process visualizations, Tables, Category charts), 'Settings' (Variant Explorer, Process Explorer, Network Explorer, Case Explorer, Event Explorer, Throughput Time ...), 'Table' (Table, Condition list), and 'Category charts' (Bar, Pie, Stacked bar, Grouped bar).

# Space - Views

## Configurar la vista



# Space - Views

Otras vistas personalizadas

# Space - Views

## Configurar la vista – Gráficos

The screenshot shows the configuration interface for a 'Pie' chart component within a view editor. The main area is titled 'GRÁFICOS' and contains a placeholder for the pie chart with the text 'Configure component' and the instruction 'Use the right-side visual editor to add data and customize your component.' A green box highlights the 'Pie' icon in the top-left corner of the interface.

The right side of the interface features a visual editor with the following sections:

- Components**: Shows the selected 'Pie' component.
- Settings**: Includes tabs for 'Data', 'Dimensions', 'Metrics', 'Tooltips', 'Top categories' (set to 4), 'Alternative display options' (with icons for donut, table, and more), 'Interactions', and 'Style'.
- Data**: A section labeled 'Each slice is' with a red box around the 'Add data or drag it here' button.
- Dimensions**: A section labeled 'Size of slice shows' with a red box around the 'Add data or drag it here' button.
- Metrics**: A section labeled 'Top categories' (set to 4) with a red box around the 'Add data or drag it here' button.
- Tooltips**: A section with a red box around the 'Add data or drag it here' button.
- Top categories**: Set to 4.
- Alternative display options**: Icons for donut, table, and more.
- Interactions**: A dropdown menu.
- Style**: A dropdown menu.

# Space - Views

## Configurar la vista – Gráficos - Dimensiones

PQL Editor Data

Data  
PurchasingExample Event Log Role

Variables  
Missing legacy variables?

Views (0)

Knowledge Model (0)

Filter by attribute or saved filter

1 "PurchasingExample"."Role"

Metadata PQL Ref

Display Settings

Name

Unit

Format

Custom Format

View the [Custom Format Cheatsheet](#) for guidance.

CTRL+SPACE for inline suggestions CTRL+ENTER to execute query

| Role             |
|------------------|
| Requester        |
| Requester        |
| Requester        |
| Requester        |
| Purchasing Agent |

SHIFT + CLICK on left sidebar items to add them to a new column.

Common Table: PurchasingExample

Cancel Done

125

# Space - Views

## Configurar la vista – Gráficos - Dimensiones

PQL Editor Cancel Done

Search Filter by attribute or saved filter

**Data**

- PurchasingExample Event Log
- Case Id
- Role
- Orgresource
- Conceptname
- Resource
- Activity
- Lifecycletransition
- Timetimestamp
- Celonis Change Date

PurchasingExample Cases

Variables

Missing legacy variables?

View (0)

Knowledge Model (0)

✓ Data requirements for this component have been met

```
1 "PurchasingExample"."Role"
```

CTRL+SPACE for inline suggestions CTRL+ENTER to execute query

| Role             |
|------------------|
| Requester        |
| Requester        |
| Requester        |
| Requester        |
| Purchasing Agent |

+
on left sidebar items to add them to a new column.

Metadata PQL Ref

Display Settings  Save to

Name

Unit

Format

Custom Format

View the [Custom Format Cheatsheet](#) for guidance.



Common Table: PurchasingExample

# Space - Views

## Configurar la vista – Gráficos - Dimensiones

PQL Editor Cancel Done

Data Metadata PQL Ref

PurchasingExample Event Log Display Settings Save to

Case Id Name New Column

Role Unit

Orgresource Format Standard (no format)

Conceptname

Resource

Activity

Lifecycletransition

Timestamp

Celonis Change Date

PurchasingExample Cases

Variables Missing legacy variables?

View (0) + CLICK

Knowledge Model (0) + CLICK

CTRL+SPACE for inline suggestions CTRL+ENTER to execute query

Add without transformation

AGGREGATION FUNCTIONS

Count + CLICK 

Count Distinct

Min

Max

Press SHIFT + CLICK to add directly to a new column.

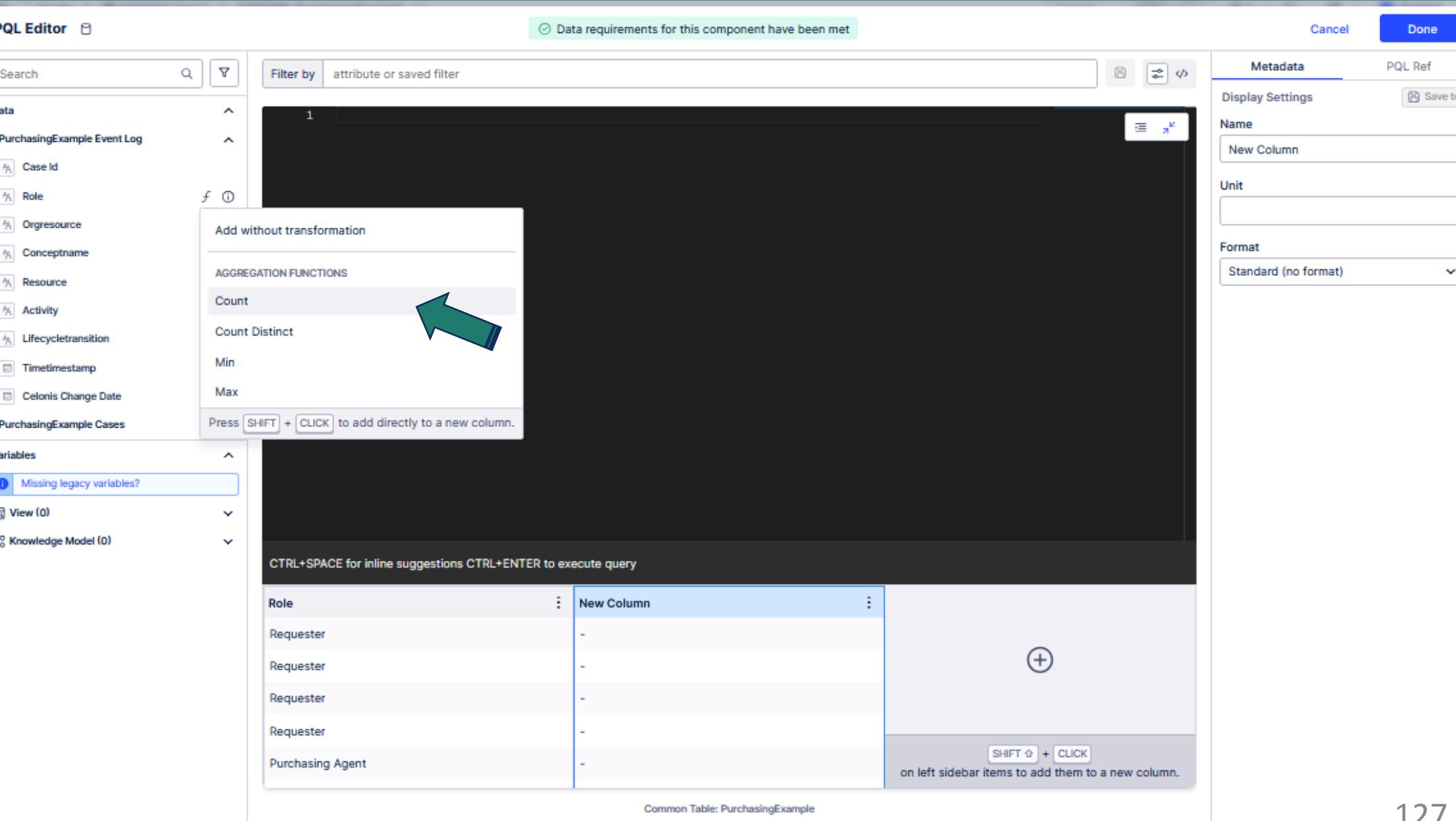
Common Table: PurchasingExample

Role : New Column

|                  |   |
|------------------|---|
| Requester        | - |
| Purchasing Agent | - |

+ SHIFT + CLICK

on left sidebar items to add them to a new column.



# Space - Views

## Configurar la vista – Gráficos - Dimensiones

PQL Editor  

Data requirements for this component have been met

Filter by attribute or saved filter

Metadata SQL Ref

Display Settings  Save to

Cancel Done

**Metadata**

Name: COUNT

Unit:

Format: Custom Formatting

Custom Format:

View the [Custom Format Cheatsheet](#) for guidance.

**PQL Editor**

Search  

Data

PurchasingExample Event Log

- Case Id
- Role
- Orgresource
- Conceptname
- Resource
- Activity
- Lifecycletransition
- Timetimestamp
- Celonis Change Date

PurchasingExample Cases

Variables

Missing legacy variables?

View (0)

Knowledge Model (0)

CTRL+SPACE for inline suggestions CTRL+ENTER to execute query

| Role              | COUNT | MET |
|-------------------|-------|-----|
| Financial Manager | 2618  |     |
| Purchasing Agent  | 6396  |     |
| Requester         | 4242  |     |
| Requester Manager | 2504  |     |
| Supplier          | 2478  |     |

on left sidebar items to add them to a new column.

Common Table: PurchasingExample

# Space - Views

## Configurar la vista – Gráficos - Dimensiones

The screenshot shows a configuration interface for a pie chart titled "GRÁFICOS". The chart displays four categories with their respective percentages and labels:

| Categoría      | Porcentaje |
|----------------|------------|
| Purchasing...  | 35.07%     |
| Requester      | 23.26%     |
| Financial M... | 14.35%     |
| Others (2)     | 27.32%     |

The interface includes a toolbar at the top with icons for "Pie", "New tab 1", "New tab 2", and "Filter bar". On the right side, there is a sidebar titled "Components" with "Pie" selected. The sidebar contains sections for "Data", "Dimensions", "Metrics", "Tooltips", and "Alternative display options". A green arrow points from the text "Configurar la vista" in the previous slide to the "Dimensions" section of the sidebar.

# Space - Views

## Configurar la vista – Gráficos

Número de recursos humanos en cada rol

Data Requirements for this component have been met

PQL Editor Cancel Done

Search Filter by attribute or saved filter

Data  
PurchasingExample Event Log  
PurchasingExample Cases

Variables  
Missing legacy variables?  
View (0)  
Knowledge Model (0)

Metadata  
Display Settings  
Name: Role  
Unit  
Format: Standard

PQL Ref Save to

1 "PurchasingExample"."Role"

"PurchasingExample"."Role"

COUNT(DISTINCT "PurchasingExample"."org:resource")

CTRL+SPACE for suggestions, F2 to edit column name, CTRL+ENTER to execute query

| Role              | COUNT |
|-------------------|-------|
| Financial Manager | 2     |
| Purchasing Agent  | 3     |
| Requester         | 14    |
| Requester Manager | 17    |
| Supplier          | 5     |

NET

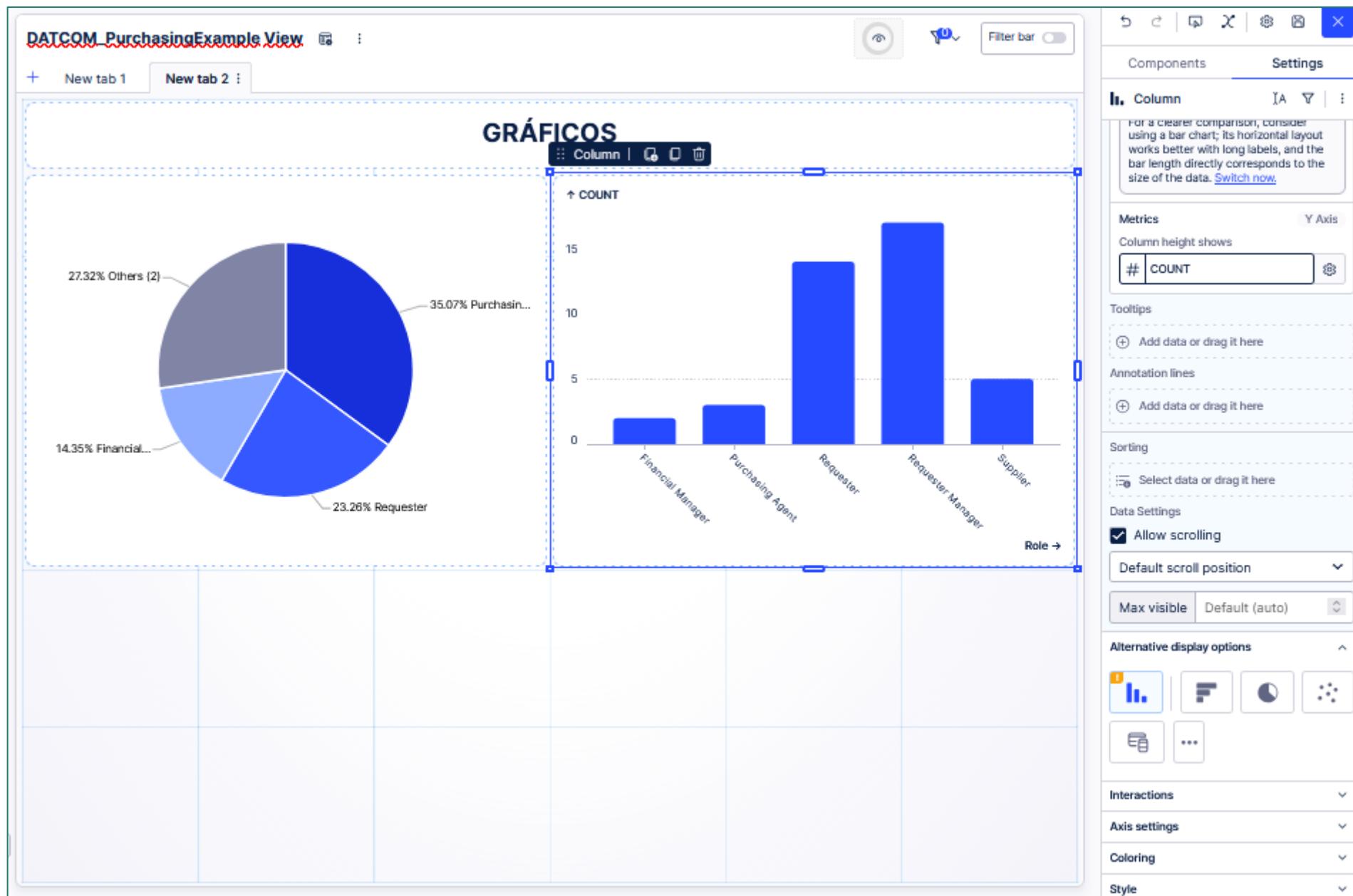
+

SHIFT + CLICK on left sidebar items to add them to a new column.

Common Table: PurchasingExample

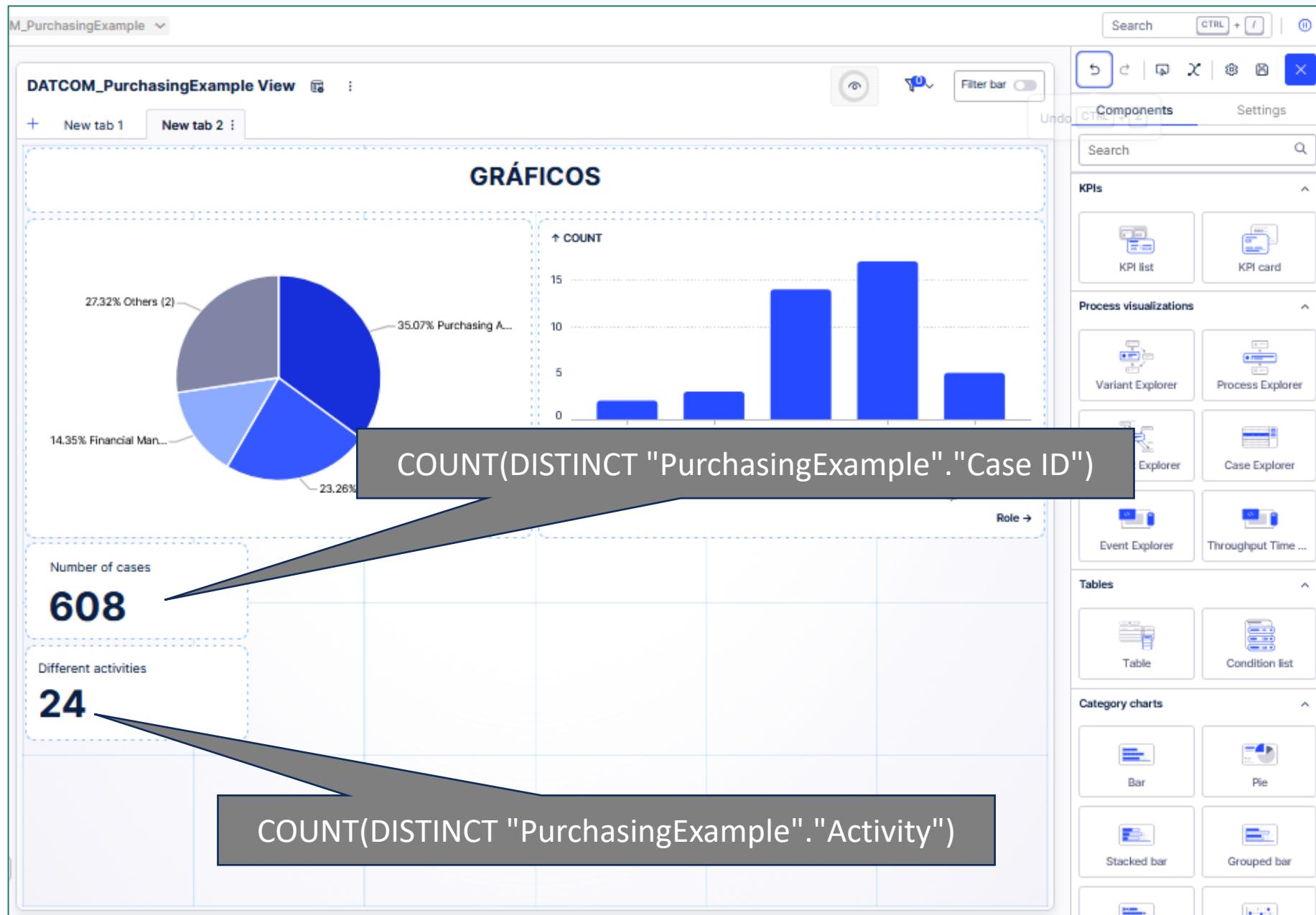
# Space - Views

## Configurar la vista – Gráficos - Dimensiones



# Space - Views

## Configurar la vista – Gráficos - Indicadores



# Space - Views

## Configurar la vista – Gráficos - Tablas

**DATCOM\_PurchasingExample View**

**GRÁFICOS**

The dashboard displays the following components:

- Pie Chart:** Labeled "PurchasingExample"."Role". It shows the distribution of roles: Requester (23.26%), Purchasing Agent (35.07%), Financial Manager (14.35%), Supplier (27.32%), and Others (2%).
- Bar Chart:** Labeled "COUNT("PurchasingExample"."Activity")". It shows the count of activities for different roles: Purchasing Agent (~10), Requester (~14), Requester Manager (~16), and Supplier (~4).
- Table:** Labeled "COUNT("PurchasingExample"."Case ID")". It lists the number of cases for each role.
- Table:** Labeled "COUNT(DISTINCT "PurchasingExample"."Activity")". It lists the distinct activity counts for each case ID.

**Configuration Sidebar (Settings tab):**

- Components:** Shows a breakdown by role.
- Table:** Configuration panel with the following settings:
  - Columns:** Role, Case ID, Activity, Activity-Distinct.
  - Sort column:** Select data or drag it here.
  - Data settings:** Show only distinct values (unchecked).
  - Limit:** Set to 100.
  - Alternative display options:** Includes icons for pie chart, bar chart, scatter plot, and grid.

# Space - Views

## Configurar la vista – Publicar

Studio > DATCOM\_Space > DATCOM\_PurchasingExample

Pendiente de publicar

Cerrar para ver la vista previa

**GRÁFICOS**

Number of cases: **608**

Different activities: **24**

| Role              | Case ID | Activity | Activity-Distinct |
|-------------------|---------|----------|-------------------|
| Financial Manager | 2618    | 2618     | 4                 |
| Purchasing Agent  | 6396    | 6396     | 7                 |
| Requester         | 4242    | 4242     | 6                 |
| Requester Manager | 2504    | 2504     | 4                 |
| Supplier          | 2478    | 2478     | 3                 |

Process visualizations:

- KPI list
- KPI card
- Variant Explorer
- Process Explorer
- Network Explorer
- Case Explorer
- Event Explorer
- Throughput Time ...

Tables:

- Table
- Condition list

Category charts:

- Bar
- Pie
- Stacked bar
- Grouped bar

Right side toolbar:

- Search
- Back
- Forward
- Print
- Copy
- Settings
- Publish (highlighted)

# Space - Views

# Configurar la vista – Vista previa

Studio > DATCOM\_Space > DATCOM\_PurchasingExample

All (2) Knowledge (1) Views (1) ...

Search CTRL + / Filter bar

New asset

DATCOM\_PurchasingExample Vi...

DATCOM\_Model KM

## DATCOM\_PurchasingExample View

# GRÁFICOS

| Role              | Count |
|-------------------|-------|
| Purchasing Agent  | 14    |
| Requester         | 15    |
| Requester Manager | 16    |
| Supplier          | 5     |
| Financial Manager | 2     |

Number of cases **608**

Different activities **24**

| Role              | Case ID | Activity | Activity-Distinct |
|-------------------|---------|----------|-------------------|
| Financial Manager | 2618    | 2618     | 4                 |
| Purchasing Agent  | 6396    | 6396     | 7                 |
| Requester         | 4242    | 4242     | 6                 |
| Requester Manager | 2504    | 2504     | 4                 |
| Supplier          | 2478    | 2478     | 3                 |

# Space - Views

## Configurar la vista – Vista previa

Studio > DATCOM\_Space > DATCOM\_PurchasingExample

All (2) Knowledge (1) Views (1)

New asset

DATCOM\_PurchasingExample Vi...

DATCOM\_Model KM

### DATCOM\_PurchasingExample View

#### GRÁFICOS

| Role              | Percentage |
|-------------------|------------|
| Purchasing Agent  | 35.07%     |
| Requester         | 23.26%     |
| Financial Manager | 14.35%     |
| Others            | 27.32%     |

| Role              | Count |
|-------------------|-------|
| Financial Manager | 1     |
| Purchasing Agent  | 3     |
| Requester         | 14    |
| Requester Manager | 16    |
| Supplier          | 5     |

Number of cases: **608**

Different activities: **24**

| Role              | Case ID | Activity | Activity-Distinct |
|-------------------|---------|----------|-------------------|
| Financial Manager | 2618    | 2618     | 4                 |
| Purchasing Agent  | 6396    | 6396     | 7                 |
| Requester         | 4242    | 4242     | 6                 |
| Requester Manager | 2504    | 2504     | 4                 |
| Supplier          | 2478    | 2478     | 3                 |

Components

Search

CTRL + F

Filter bar

Components

KPIs

Process visualizations

Tables

Category charts

Variant Explorer

Network Explorer

Event Explorer

Table

Bar

Stacked bar

KPI list

KPI card

Process Explorer

Case Explorer

Throughput Time ...

Condition list

Pie

Grouped bar

# Space - Views

## Lenguaje para la definición de filtros-métricas-KPIs

PQL - Process Query Language

- Cheat Sheets
- Data Model Design >
- Data Types >
- PQL Function Library >
- Examples and Use Cases >
- FAQ - Process Query Language
- Miscellaneous >
- Business Applications >
- Task Mining >
- Action Engine >

Celonis Product Documentation / PQL - Process Query Language

# PQL - Process Query Language

## Description

The Process Query Language (PQL) is a domain-specific language tailored towards a special process data model and designed for business users.

PQL enables the user to translate process-related business questions into queries, which are then executed by a custom-built query engine. PQL covers a broad set of operators, ranging from process-specific functions to aggregations and mathematical operators. Its syntax is inspired by SQL, but specialized for process-related queries.

PQL - Process Query Language

- Description

<https://docs.celonis.com/en/pql---process-query-language.html>

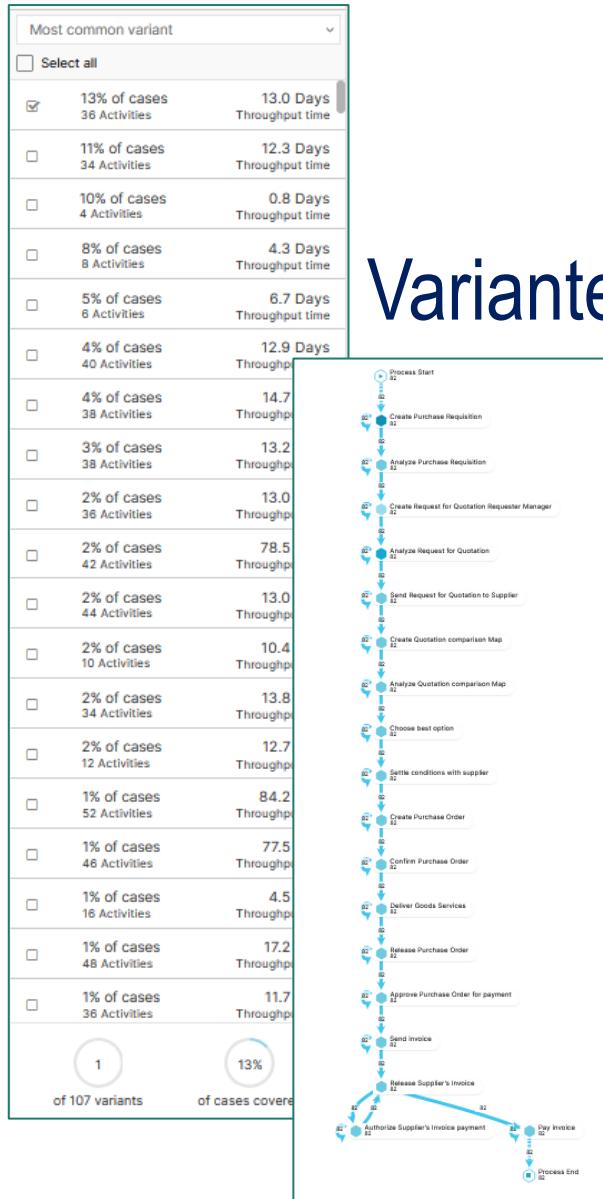
Introducción

Herramientas de Minería de Procesos

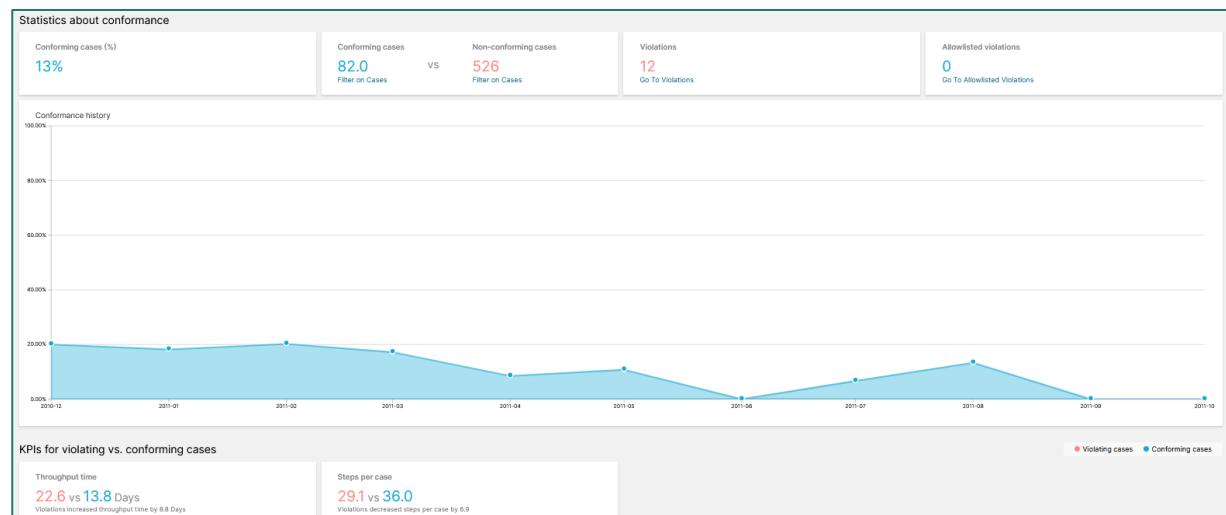
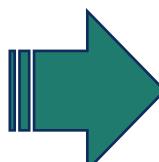
# Minería de Procesos con Celonis

- Acceso y Entorno
- Análisis - Spaces
- Descubrimiento - Carga de datos
- Descubrimiento y Vistas personalizadas
- Análisis - Conformidad**
- Ejercicios

# Conformidad



## Variantes



# Space - Análisis

## Análisis - Conformidad

Screenshot of the DATCOM Space interface showing the Analysis - Conformidad view.

The left sidebar shows navigation options: Studio > DATCOM\_Space > DATCOM\_PurchasingExample > All (2) Knowledge (1) Views (1). The main area displays the DATCOM\_PurchasingExample View titled "ANÁLISIS PERSONALIZADO - DATCOM".

A context menu is open over the "Analysis" option in the sidebar, listing: Vista 1, Vista 2, Vista 3, and Analysis. The "Analysis" option is highlighted with a red box.

The central area contains a complex diagram of an action flow or process model, which is partially obscured by a large watermark-like shape.

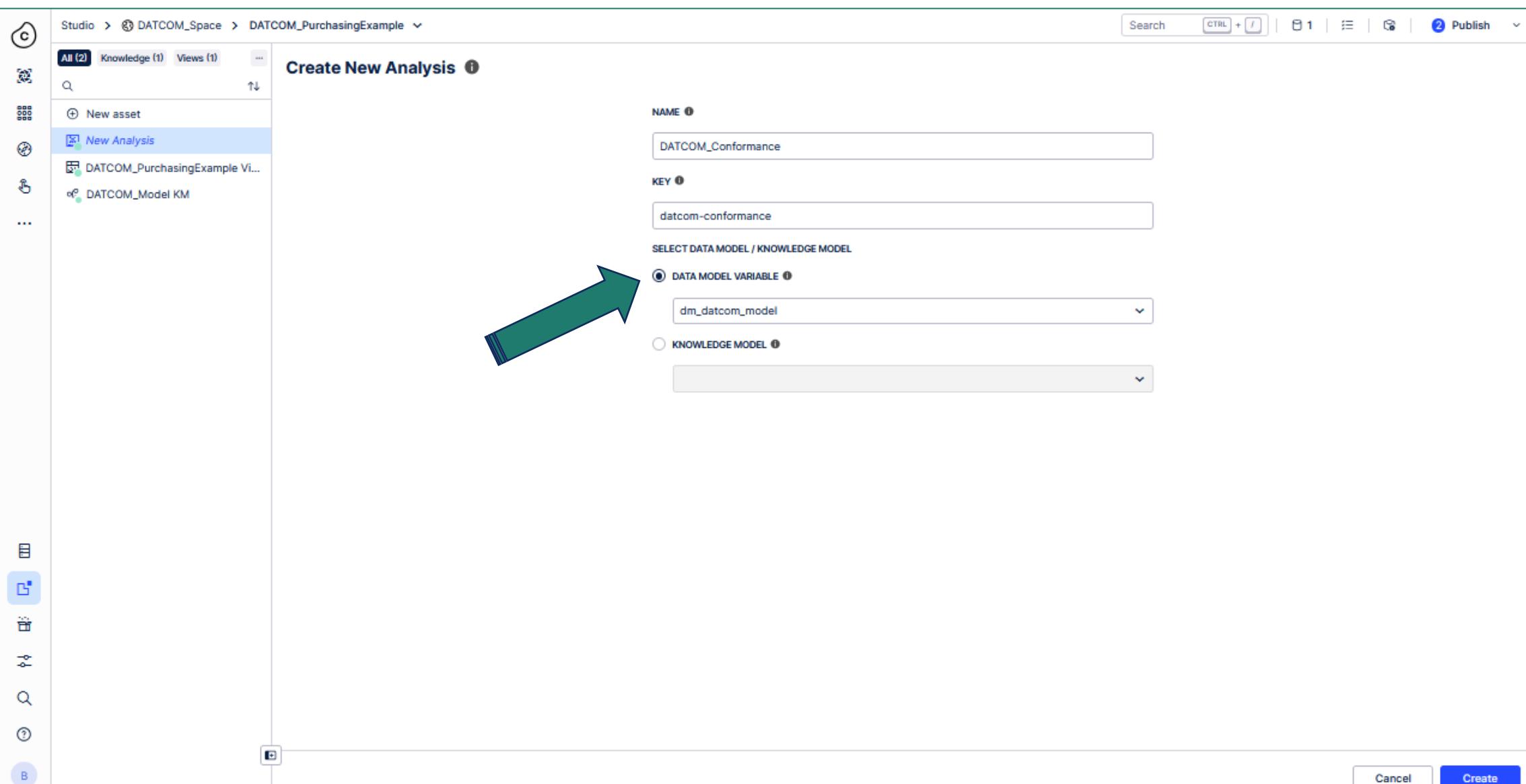
To the right, there is a "Variant Explorer" panel showing the following data:

| Variant | Count | Coverage | Avg TPT |
|---------|-------|----------|---------|
| #1      | 82    | 13%      | 14 d    |
| #2      | 66    | 11%      | 12 d    |
| #3      | 63    | 10%      | 18 h    |
| #4      | 48    | 8%       | 5 d     |
| #5      | 32    | 5%       | 9 d     |
| #6      | 26    | 4%       | 25 d    |
| #7      | 22    | 4%       | 16 d    |
| #8      | 18    | 3%       | 21 d    |
| #9      | 15    | 2%       | 12 d    |
| #10     | 14    | 2%       | 48 d    |
| Others  | 222   | 37%      | 37 d    |

At the bottom of the Variant Explorer panel is a "Collapse Controls" button.

# Space - Análisis

## Análisis - Conformidad



The screenshot shows the Space software interface for creating a new analysis. The left sidebar displays navigation paths: Studio > DATCOM\_Space > DATCOM\_PurchasingExample. The main area is titled "Create New Analysis". The form fields include:

- NAME**: DATCOM\_Conformance
- KEY**: datcom-conformance
- SELECT DATA MODEL / KNOWLEDGE MODEL**:
  - DATA MODEL VARIABLE: dm\_datcom\_model
  - KNOWLEDGE MODEL

A large green arrow points from the left towards the "DATA MODEL VARIABLE" dropdown.

# Space - Análisis

## Análisis - Conformidad

Studio > DATCOM\_Space > DATCOM\_PurchasingExample

All (3) Analysis (1) Knowledge (1) ... 608 of 608 cases selected 100% Search CTRL + / 1 Add new sheet Edit PREVIEW

New asset DATCOM\_Conformance DATCOM\_PurchasingExample Vi... DATCOM\_Model KM

Add new sheet

New Sheet A new sheet waiting to be built.

Process AI Detect and analyze deviations from the most common path.

Process Overview Get the main insights on your process.

Process Explorer Analyze and understand your process.

Conformance Compare the real process to your target process. PI

Social Understand how your team is working. PI

Case Explorer Inspect individual cases.

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# Space - Análisis

## Análisis - Conformidad

Screenshot of the SAP Space interface showing the 'Analysis - Conformidad' section.

The top navigation bar shows 'Studio > DATCOM\_Space > DATCOM\_PurchasingExample'. The left sidebar has a 'C' icon and lists 'All (3)', 'Analysis (1)', 'Knowledge (1)', 'New asset', 'DATCOM\_Conformance' (selected), 'DATCOM\_PurchasingExample Vi...', and 'DATCOM\_Model KM'. The top center shows '608 of 608 cases selected' and a zoom level of '100%'. The top right includes 'Search', 'CTRL + /', a search icon, a preview icon, and a 'Publish' button.

The main content area is titled 'Process conformance' with the sub-instruction 'Mine a model, upload an available model or draw a new process model.' It features four cards:

- Mine the target process**: Shows a process mining icon (two hexagons connected by an arrow) and the instruction 'Use our process mining tool to'. A red box highlights this card. A green button says 'Mine process model'.
- Upload process model**: Shows a file icon and a web browser icon with an arrow, and a green 'Select file' button.
- New process model**: Shows a process modeling icon (rectangle, diamond, and pencil) and the instruction 'Use our process modeling tool to'. A green button says 'Create process model'.
- Pull from process repository**: Shows a process repository icon and the instruction 'Retrieve your stored process model'. A green 'Select file' button is present.

The bottom left corner shows a progress bar 'Conformance 1' with a gear icon. The bottom right corner shows the page number '143'.

# Space - Análisis

## Conformidad – Seleccionar variantes

Choose Reference Variants

The screenshot shows the Space software interface for a project named DATCOM\_PurchasingExample. On the left, there's a sidebar with various icons and a tree view of assets: DATCOM\_Conformance, DATCOM\_PurchasingExample Vi..., and DATCOM\_Model KM. The main area displays a process flow diagram with nodes like 'Create Purchase Request' and 'Approve Purchase Request'. A callout box points to the right pane where a list of 'Most common variant' is shown. Another callout box at the bottom right points to the 'Launch analysis' button.

**Seleccione las variantes para generar el modelo.**

| Most common variant                 |               |                           |
|-------------------------------------|---------------|---------------------------|
| <input type="checkbox"/> Select all | 13% of cases  | 13.0 Days Throughput time |
| <input checked="" type="checkbox"/> | 36 Activities |                           |
| <input checked="" type="checkbox"/> | 11% of cases  | 12.3 Days Throughput time |
| <input checked="" type="checkbox"/> | 34 Activities |                           |
| <input checked="" type="checkbox"/> | 10% of cases  | 0.8 Days Throughput time  |
| <input checked="" type="checkbox"/> | 4 Activities  |                           |
| <input checked="" type="checkbox"/> | 8% of cases   | 4.3 Days Throughput time  |
| <input checked="" type="checkbox"/> | 8 Activities  |                           |
| <input checked="" type="checkbox"/> | 5% of cases   | 6.7 Days Throughput time  |
| <input checked="" type="checkbox"/> | 6 Activities  |                           |
| <input checked="" type="checkbox"/> | 4% of cases   | 12.9 Days Throughput time |
| <input checked="" type="checkbox"/> | 40 Activities |                           |
| <input checked="" type="checkbox"/> | 4% of cases   | 14.7 Days Throughput time |
| <input checked="" type="checkbox"/> | 38 Activities |                           |
| <input checked="" type="checkbox"/> | 3% of cases   | 13.2 Days Throughput time |
| <input type="checkbox"/>            | 2% of cases   | 13.0 Days Throughput time |
| <input type="checkbox"/>            | 36 Activities |                           |
| <input type="checkbox"/>            | 2% of cases   | 78.5 Days Throughput time |
| <input type="checkbox"/>            | 42 Activities |                           |
| <input type="checkbox"/>            | 2% of cases   | 13.0 Days Throughput time |
| <input type="checkbox"/>            | 44 Activities |                           |

8 of 107 variants      59% of cases covered

Luego lance el análisis

Launch analysis

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# Space - Análisis

## Conformidad

This screenshot shows the DATCOM Conformance Overview page in Studio. The top navigation bar includes 'Studio > DATCOM\_Space > DATCOM\_PurchasingExample'. The left sidebar lists assets: 'New asset', 'DATCOM\_Conformance' (selected), 'DATCOM\_PurchasingExample Vi...', and 'DATCOM\_Model KM'. The main content area displays a 'Conformance overview' with a 'Timeframe' set to 'All time' and a search bar for 'Start date' and 'End date'. A summary box shows '608 of 608 cases selected' and a '100%' completion rate. Below this are four KPI cards: 'Conforming cases (%)' at 86%, 'Conforming c... vs Non-conform...' (525 vs 83.0), 'Violations' (5), and 'Allowlisted violations' (0). A large red box highlights the 'Conformance history' chart, which is a line graph showing the percentage of conforming cases from December 2010 to October 2011. The chart starts at 60% in Dec 2010, rises to 85% in Jan 2011, stays flat until May, dips to 82% in June, rises to 90% in July, peaks at 100% in August, dips to 92% in September, and ends at 100% in October. A red box also highlights the 'KPIs for violating vs. conforming cases' section, which compares throughput time (29.0 vs 19.7 Days) and steps per case (12.9 vs 22.0).

# Space - Análisis

## Conformidad

Studio > DATCOM\_Space > DATCOM\_PurchasingExample

608 of 608 cases selected | 100%

**KPIs for violating vs. conforming cases**

|  |  |
|--|--|
| Throughput time<br><b>38.9 vs 18.7 Days</b><br>Violations increased throughput time by 20.3 Days | Steps per case<br><b>42.8 vs 28.0</b><br>Violations increased steps per case by 14.8 |
|--|--|

**Violations**

- Amend Request for Quotation Requester Manager** is an undesired activity
  - 7% of cases: 41
  - Effect on throughput time: 40 Days longer
  - Effect on steps per case: + 18.1 Steps per case
- Settle dispute with supplier Purchasing Agent** is an undesired activity
  - 4% of cases: 24
  - Effect on throughput time: 10 Days longer
  - Effect on steps per case: + 16.6 Steps per case
- Amend Purchase Requisition** is an undesired activity
  - 2% of cases: 11
  - Effect on throughput time: 6 Days shorter
  - Effect on steps per case: + 4.4 Steps per case
- Authorize Supplier's Invoice payment** is followed by **Pay invoice**
  - 2% of cases: 10
  - Effect on throughput time: 7 Days shorter
  - Effect on steps per case: + 9.0 Steps per case
- Analyze Purchase Requisition** is followed by **Create Request for Quotation Requester**
  - 0% of cases: 3
  - Effect on throughput time: 5 Days shorter
  - Effect on steps per case: + 4.7 Steps per case

Conformance 1

# Space - Análisis

## Conformidad

Studio > DATCOM\_Space > DATCOM\_PurchasingExample

608 of 608 cases selected 100%

Amend Request for Quotation Requester Manager is an undesired activity

[View cases in...](#) [Add to allowlist](#)

**Violation**

Violation cases (%)  
7.0% Percentage of cases with...

Violation cases  
41 Number of cases with t...

Violation history

| Month   | Violations (%) |
|---------|----------------|
| 2011-01 | 10             |
| 2011-02 | 3              |
| 2011-03 | 6              |
| 2011-04 | 3              |
| 2011-05 | 2              |
| 2011-06 | 10             |
| 2011-07 | 5              |
| 2011-08 | 3              |
| 2011-09 | 2              |

**Violation effect on KPIs**

Throughput time  
58.5 vs 18.7 Days Violating cases vs. non-violating cases

Steps per case  
46.1 vs 28.0 Number of events performed in this violation vs conforming cases

Possible root causes for violation  
PI configuration

Sort by correlation strength Sort by violations

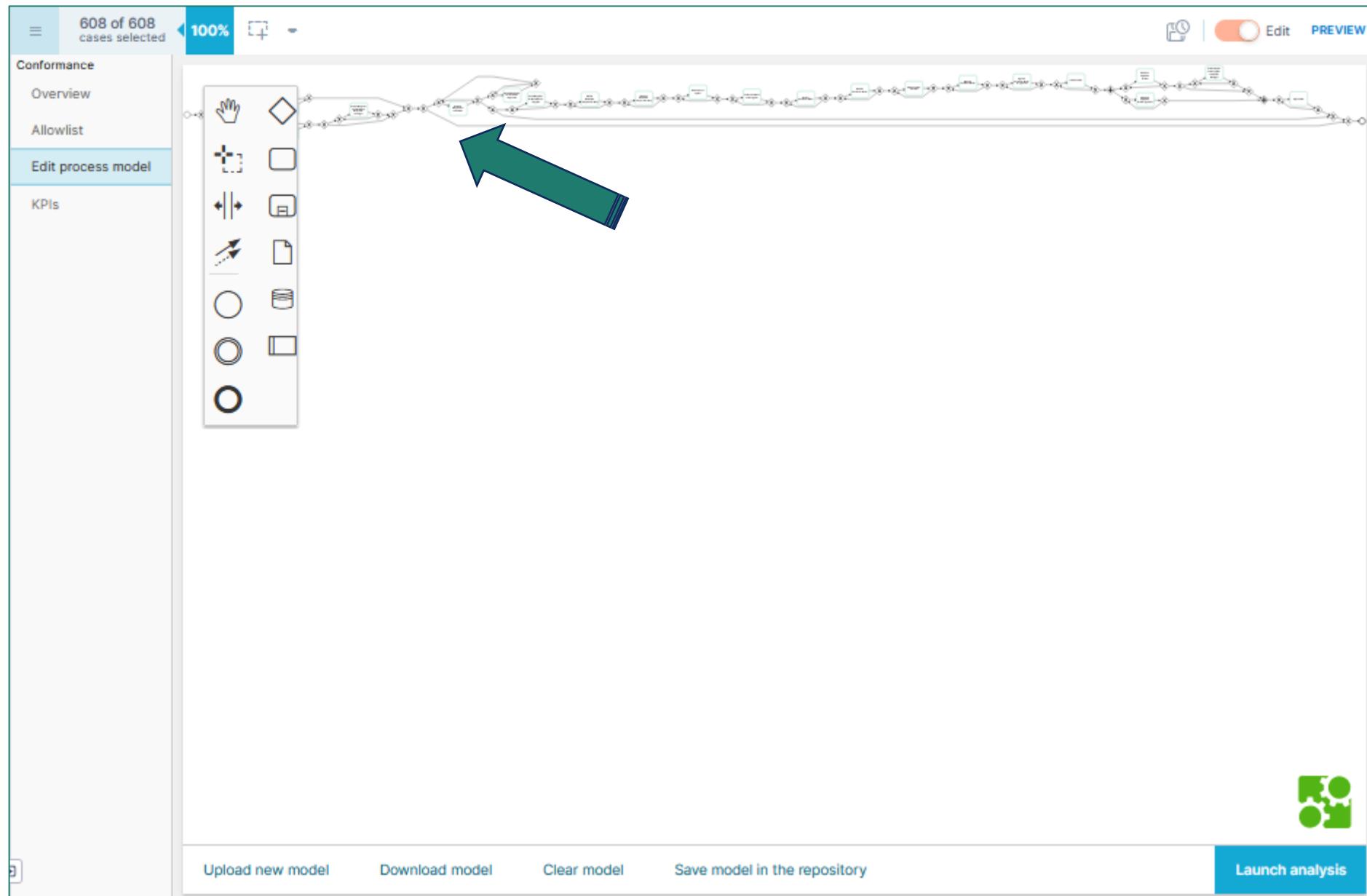
Perform root cause analysis

Conformance 1

147

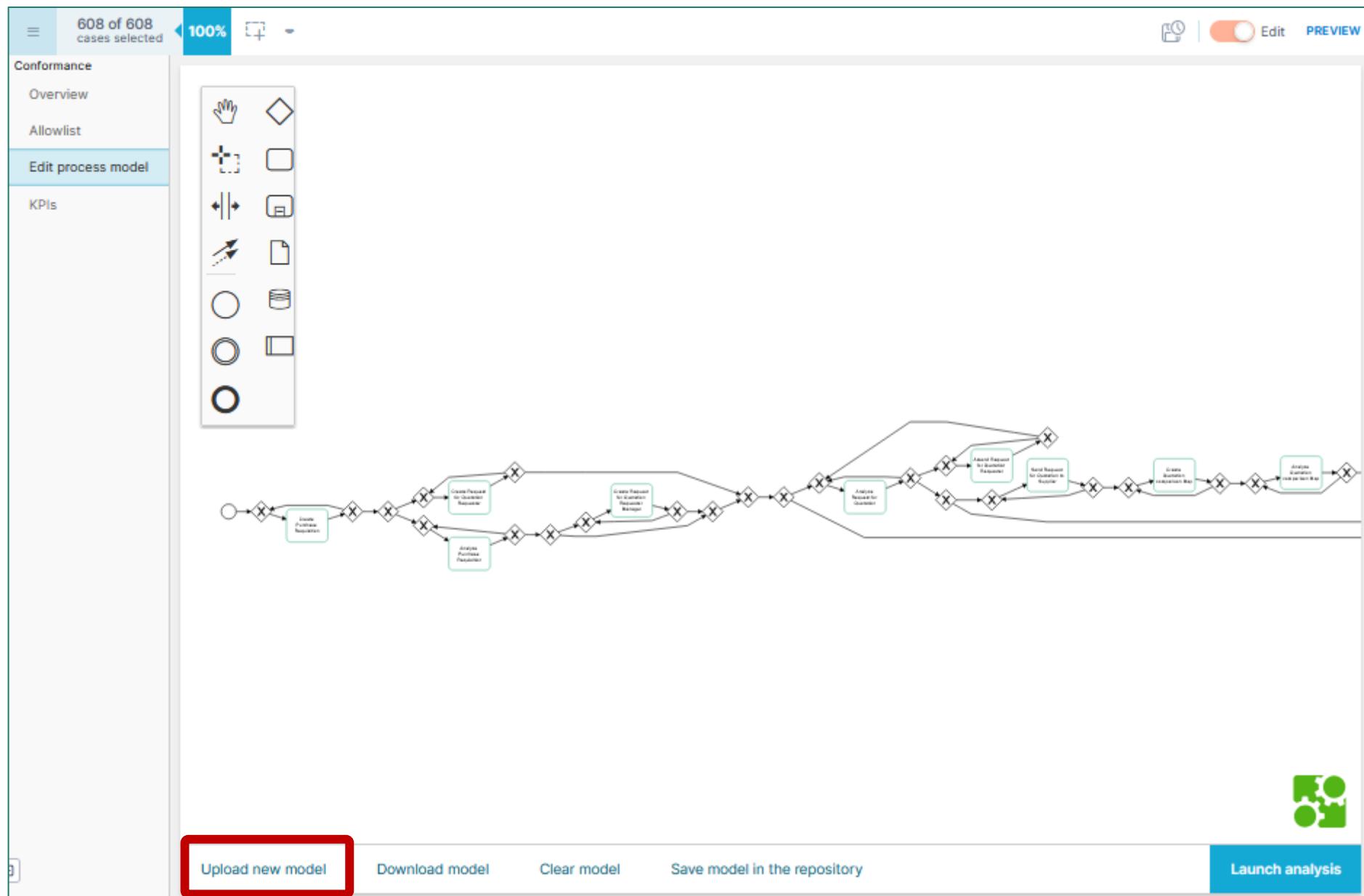
# Space - Análisis

## Generar modelo BPMN



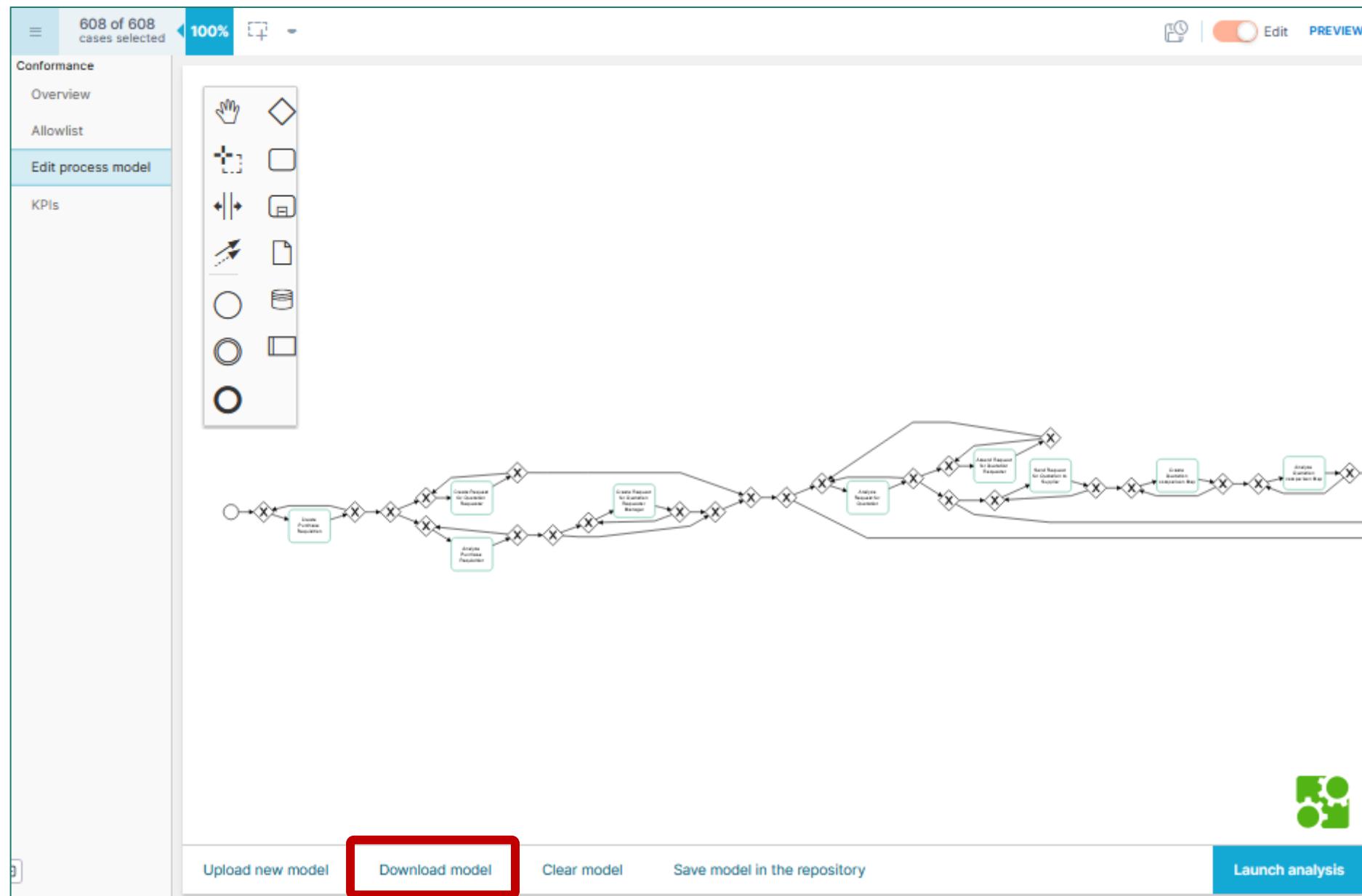
# Space - Análisis

# Generar modelo BPMN



# Space - Análisis

## Generar modelo BPMN



# Space - Análisis

## Generar modelo BPMN

```
C: > Users > ibest > Desktop > CLASES 2024-2025 II > DATCOM > Conformance 1.bpmn
```

```
1  <?xml version="1.0" encoding="UTF-8"?>
2  <bpmn2:definitions xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:bpmn2="http://www.omg.org/spec/BPMN/20100524/MODEL"
3  xmlns:bpmndi="http://www.omg.org/spec/BPMN/20100524/DI" xmlns:dc="http://www.omg.org/spec/DD/20100524/DC"
4  xmlns:di="http://www.omg.org/spec/DD/20100524/DI" id="discovered-model" targetNamespace="http://bpmn.io/schema/bpmn"
5  xsi:schemaLocation="http://www.omg.org/spec/BPMN/20100524/MODEL BPMN20.xsd" xmlns:celonis="http://www.celonis.com/schema/bpmn/celonis">
6  <bpmn2:process id="Process_1" isExecutable="false">
7  <bpmn2:startEvent id="StartEvent_-1">
8  <bpmn2:outgoing>SequenceFlow_-1_1</bpmn2:outgoing>
9  </bpmn2:startEvent>
10 <bpmn2:endEvent id="EndEvent_-2">
11 <bpmn2:incoming>SequenceFlow_81_-2</bpmn2:incoming>
12 </bpmn2:endEvent>
13 <bpmn2:exclusiveGateway id="ExclusiveGateway_1">
14 <bpmn2:incoming>SequenceFlow_-1_1</bpmn2:incoming>
15 <bpmn2:incoming>SequenceFlow_79_1</bpmn2:incoming>
16 <bpmn2:outgoing>SequenceFlow_1_4</bpmn2:outgoing>
17 </bpmn2:exclusiveGateway>
18 <bpmn2:exclusiveGateway id="ExclusiveGateway_79">
19 <bpmn2:incoming>SequenceFlow_4_79</bpmn2:incoming>
20 <bpmn2:outgoing>SequenceFlow_79_1</bpmn2:outgoing>
21 <bpmn2:outgoing>SequenceFlow_79_2</bpmn2:outgoing>
22 </bpmn2:exclusiveGateway>
23 <bpmn2:task id="Task_4" name="Create Purchase Requisition">
24 <bpmn2:incoming>SequenceFlow_1_4</bpmn2:incoming>
25 <bpmn2:outgoing>SequenceFlow_4_79</bpmn2:outgoing>
26 </bpmn2:task>
27 <bpmn2:exclusiveGateway id="ExclusiveGateway_2">
28 <bpmn2:incoming>SequenceFlow_79_2</bpmn2:incoming>
29 <bpmn2:outgoing>SequenceFlow_2_10</bpmn2:outgoing>
30 <bpmn2:outgoing>SequenceFlow_2_7</bpmn2:outgoing>
31 </bpmn2:exclusiveGateway>
32 <bpmn2:exclusiveGateway id="ExclusiveGateway_80">
33 <bpmn2:incoming>SequenceFlow_89_80</bpmn2:incoming>
34 <bpmn2:incoming>SequenceFlow_85_80</bpmn2:incoming>
35 <bpmn2:outgoing>SequenceFlow_80_3</bpmn2:outgoing>
36 </bpmn2:exclusiveGateway>
37 <bpmn2:exclusiveGateway id="ExclusiveGateway_10">
38 <bpmn2:incoming>SequenceFlow_2_10</bpmn2:incoming>
39 <bpmn2:incoming>SequenceFlow_88_10</bpmn2:incoming>
```

¿Cómo es un archivo .bpmn?

Introducción

Herramientas de Minería de Procesos

# Minería de Procesos con Celonis

- Acceso y Entorno
- Análisis - Spaces
- Descubrimiento - Carga de datos
- Vistas personalizadas
- Análisis - Conformidad
- Ejercicios



Máster en Ciencia de Datos e Ingeniería de Computadores  
Minería de Procesos y Planificación Automática – Minería de procesos

# Explorando la Minería de Procesos

## Una experiencia práctica con Celonis

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*¡Gracias!*

Abril 10, 2025