



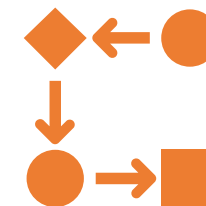
Análise de conformidade: Exemplos didáticos

José Francisco dos Santos Neto
Prof. Dra. Sarajane Marques Peres
Prof. Dr. Marcelo Fantinato

2021

Para referenciar esse material:

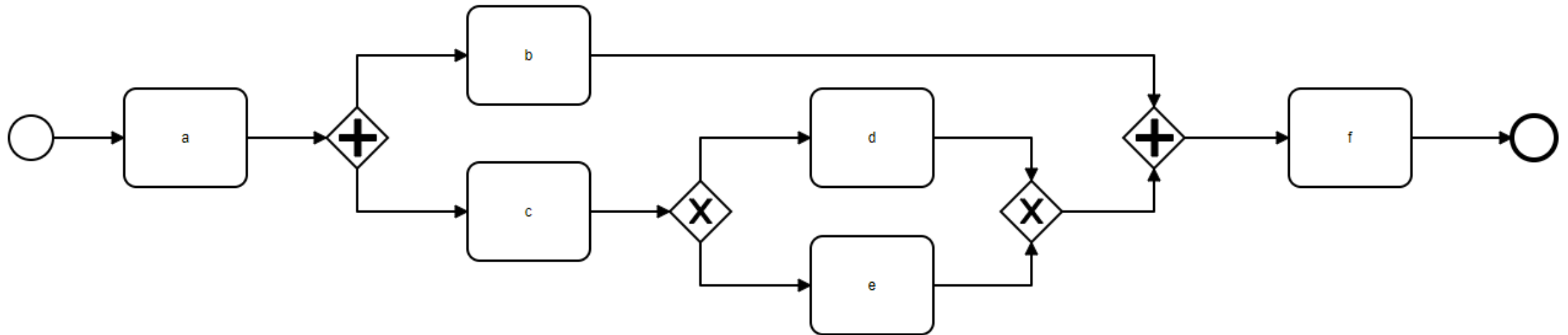
Santos Neto, J. F.; Peres, S. M.; Fantinato, M. "Notas de Aula: Introdução à ciência de processos e ciência de dados como base para a mineração de processos - Algoritmo α : Exemplos didáticos". Grupo Process Mining @ USP, 2021.



Modelo normativo

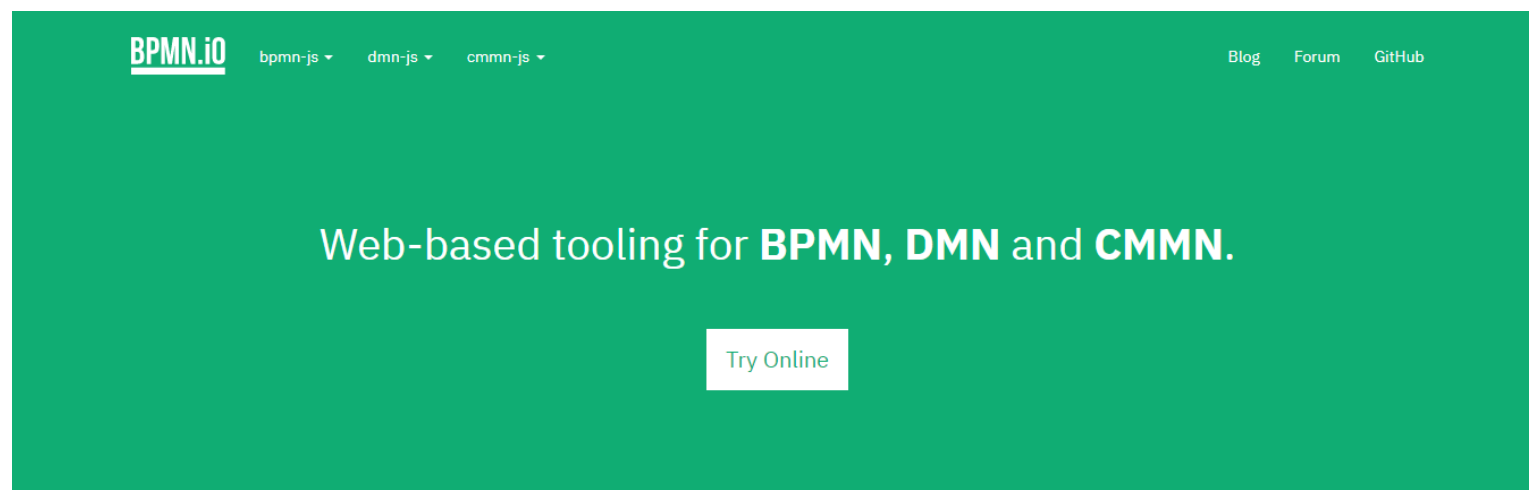


Modelo normativo



Modelo normativo – BPMN.io

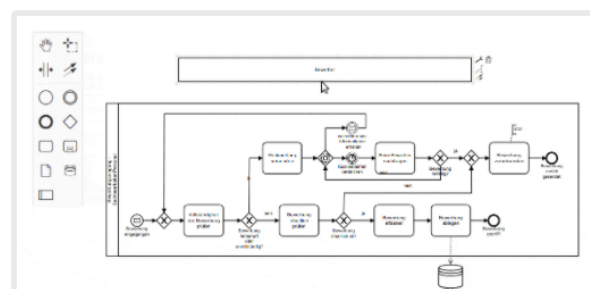
<https://bpmn.io/>



BPMN.io bpmn-js dmn-js cmmn-js Blog Forum GitHub

Web-based tooling for **BPMN**, **DMN** and **CMMN**.

Try Online



BPMN Viewer and Editor

Use **bpmn-js** to display BPMN 2.0 diagrams on your website.

Embed it as a BPMN 2.0 web modeler into your applications and customize it to suit your needs.

[Learn more](#) [Try Online](#)



Arquivo de log



Arquivo de log

Event ID	Case ID	Activity	Timestamp
1	0	a	2018-01-01 09:00:00.000
9	0	c	2018-01-03 09:40:26.420
10	0	b	2018-01-03 11:41:39.582
72	0	d	2018-01-25 09:13:39.916
219	0	f	2018-03-19 11:41:42.866
2	1	a	2018-01-01 11:31:21.553
14	1	c	2018-01-04 11:25:30.301
15	1	b	2018-01-04 13:22:50.736
108	1	d	2018-02-07 12:47:07.362
281	1	f	2018-04-10 06:15:32.659
3	2	a	2018-01-01 12:55:45.338
22	2	c	2018-01-08 13:22:07.849
23	2	b	2018-01-09 07:02:09.391
137	2	e	2018-02-19 06:05:55.913
320	2	f	2018-04-23 10:06:51.711
4	3	a	2018-01-02 07:04:05.582
30	3	c	2018-01-10 12:53:35.484
31	3	b	2018-01-10 13:47:18.731
150	3	e	2018-02-22 08:33:09.077
327	3	f	2018-04-25 06:47:57.629

⋮



Arquivo de log – *id do evento*

Event ID	Case ID	Activity	Timestamp
1	0	a	2018-01-01 09:00:00.000
9	0	c	2018-01-03 09:40:26.420
10	0	b	2018-01-03 11:41:39.582
72	0	d	2018-01-25 09:13:39.916
219	0	f	2018-03-19 11:41:42.866
2	1	a	2018-01-01 11:31:21.553
14	1	c	2018-01-04 11:25:30.301
15	1	b	2018-01-04 13:22:50.736
108	1	d	2018-02-07 12:47:07.362
281	1	f	2018-04-10 06:15:32.659
3	2	a	2018-01-01 12:55:45.338
22	2	c	2018-01-08 13:22:07.849
23	2	b	2018-01-09 07:02:09.391
137	2	e	2018-02-19 06:05:55.913
320	2	f	2018-04-23 10:06:51.711
4	3	a	2018-01-02 07:04:05.582
30	3	c	2018-01-10 12:53:35.484
31	3	b	2018-01-10 13:47:18.731
150	3	e	2018-02-22 08:33:09.077
327	3	f	2018-04-25 06:47:57.629

...

Arquivo de log – *id do caso*

Event ID	Case ID	Activity	Timestamp
1	0	a	2018-01-01 09:00:00.000
9	0	c	2018-01-03 09:40:26.420
10	0	b	2018-01-03 11:41:39.582
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2	1	a	2018-01-01 11:31:21.553
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31	3	b	2018-01-10 13:47:18.731
150	3	e	2018-02-22 08:33:09.077
327	3	f	2018-04-25 06:47:57.629

...

Arquivo de log – *atividade*

Event ID	Case ID	Activity	Timestamp
1	0	a	2018-01-01 09:00:00.000
9	0	c	2018-01-03 09:40:26.420
10	0	b	2018-01-03 11:41:39.582
72	0	d	2018-01-25 09:13:39.916
219	0	f	2018-03-19 11:41:42.866
2	1	a	2018-01-01 11:31:21.553
14	1	c	2018-01-04 11:25:30.301
15	1	b	2018-01-04 13:22:50.736
108	1	d	2018-02-07 12:47:07.362
281	1	f	2018-04-10 06:15:32.659
3	2	a	2018-01-01 12:55:45.338
22	2	c	2018-01-08 13:22:07.849
23	2	b	2018-01-09 07:02:09.391
137	2	e	2018-02-19 06:05:55.913
320	2	f	2018-04-23 10:06:51.711
4	3	a	2018-01-02 07:04:05.582
30	3	c	2018-01-10 12:53:35.484
31	3	b	2018-01-10 13:47:18.731
150	3	e	2018-02-22 08:33:09.077
327	3	f	2018-04-25 06:47:57.629

...



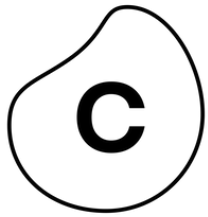
Arquivo de log – *timestamp*

Event ID	Case ID	Activity	Timestamp
1	0	a	2018-01-01 09:00:00.000
9	0	c	2018-01-03 09:40:26.420
10	0	b	2018-01-03 11:41:39.582
72	0	d	2018-01-25 09:13:39.916
219	0	f	2018-03-19 11:41:42.866
2	1	a	2018-01-01 11:31:21.553
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108	1	d	2018-02-07 12:47:07.362
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137	2	e	2018-02-19 06:05:55.913
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4	3	a	2018-01-02 07:04:05.582
30	3	c	2018-01-10 12:53:35.484
31	3	b	2018-01-10 13:47:18.731
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327	3	f	2018-04-25 06:47:57.629

...

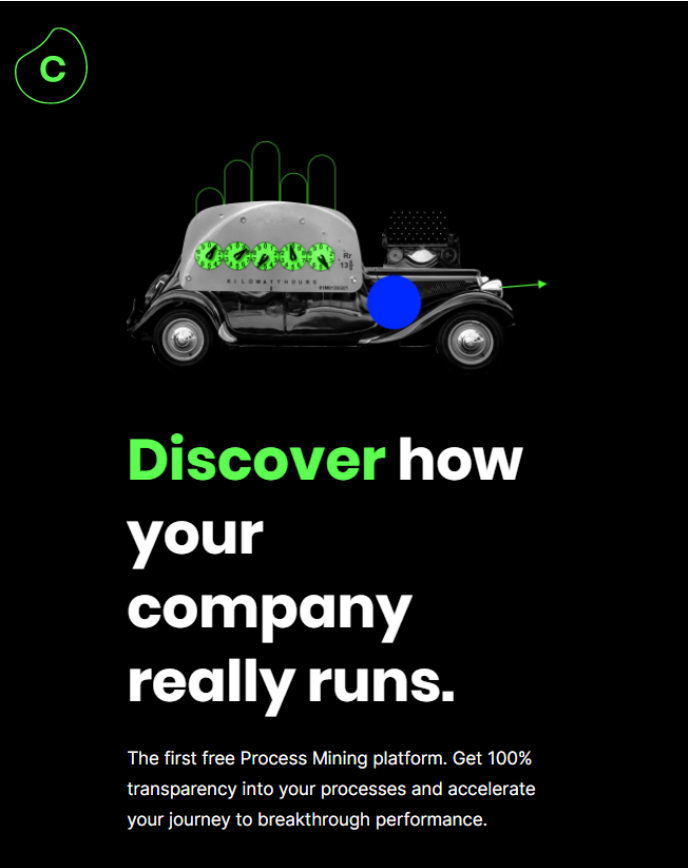






Celonis Snap – *signup*

<https://www.celonis.com/snap-signup/>



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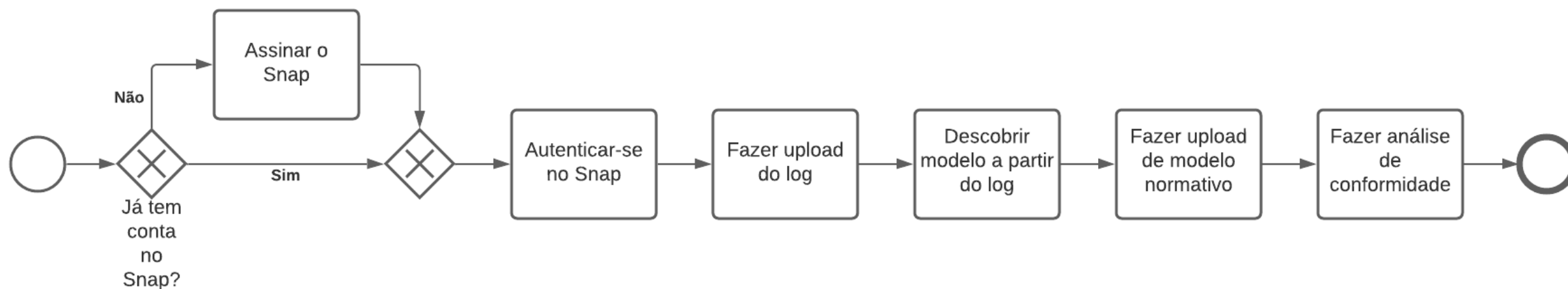

Privacy - Terms



Análise de conformidade



Análise de conformidade – *processo*



Análise de conformidade – Celonis Snap

The screenshot displays the Celonis Snap web application interface. At the top, the navigation bar includes the Celonis Snap logo, a search icon, and menu items for Quickstart, Process Analytics, and Event Collection. The main content area is divided into several sections:

- Analyze your process:** A card with an upload icon and text: "Upload your custom process or use our predefined business processes for common source systems."
- View demo process:** A card with a document icon and text: "No data upload is required. Choose from a list of demo processes and view analyses."
- Custom Process:** A section with a note: "Note: Your data must be formatted as an Event Log. [Learn about Event Logs.](#)" Below this are three upload options: "CSV/XLSX File", "Google Sheets", and "XES File".
- System Supported Business Processes:** A section with a note: "Note: [View all enterprise connectors.](#) If your use case or source system is missing, book a call with us." Below this are several process cards:
 - Supply Chain (with a red envelope icon and "Covid-19" tag) and Cash Preservation (with "Covid-19" tag), both featuring the SAP logo.
 - Accounts Payable, Purchase to Pay, and Order to Cash, all featuring the SAP logo.
 - Incident Management (with the ServiceNow logo) and Opportunity Management (with the Microsoft Dynamics logo).

On the right side, there is a "Resources" sidebar with links to Celonis Training, Data Security and Privacy, Snap Guide (.pdf), Snap Webinar, and Snap Community Forum. Below this is a "Have questions?" section with a "Book a Call" button. Further down is a "Snap Updates" section with a "View All (3)" link and three update cards:

- New Quickstart for SAP Purchase to Pay:** "The new Quickstart for the Purchase to Pay process for SAP is now available, featuring an assisted data extraction flow to facilitate uploading and analysing your own data."
- New Quickstarts: SAP Accounts Payable a...:** "The new Quickstarts SAP Accounts Payable and SAP Cash Preservation are now available, featuring an assisted data extraction flow to facilitate uploading and..."
- Daily reload feature for Google sheets Quic...:** "This feature allows users to reload their data daily after they use the Google sheet Quickstart. The data model will be uploaded automatically every day and if there are ne..."

 At the bottom of the sidebar is a blue button labeled "Enterprise Editions and Pricing".





Introdução à ciência de processos e ciência de dados como base para a mineração de processos

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