



fluxicon

TU/e

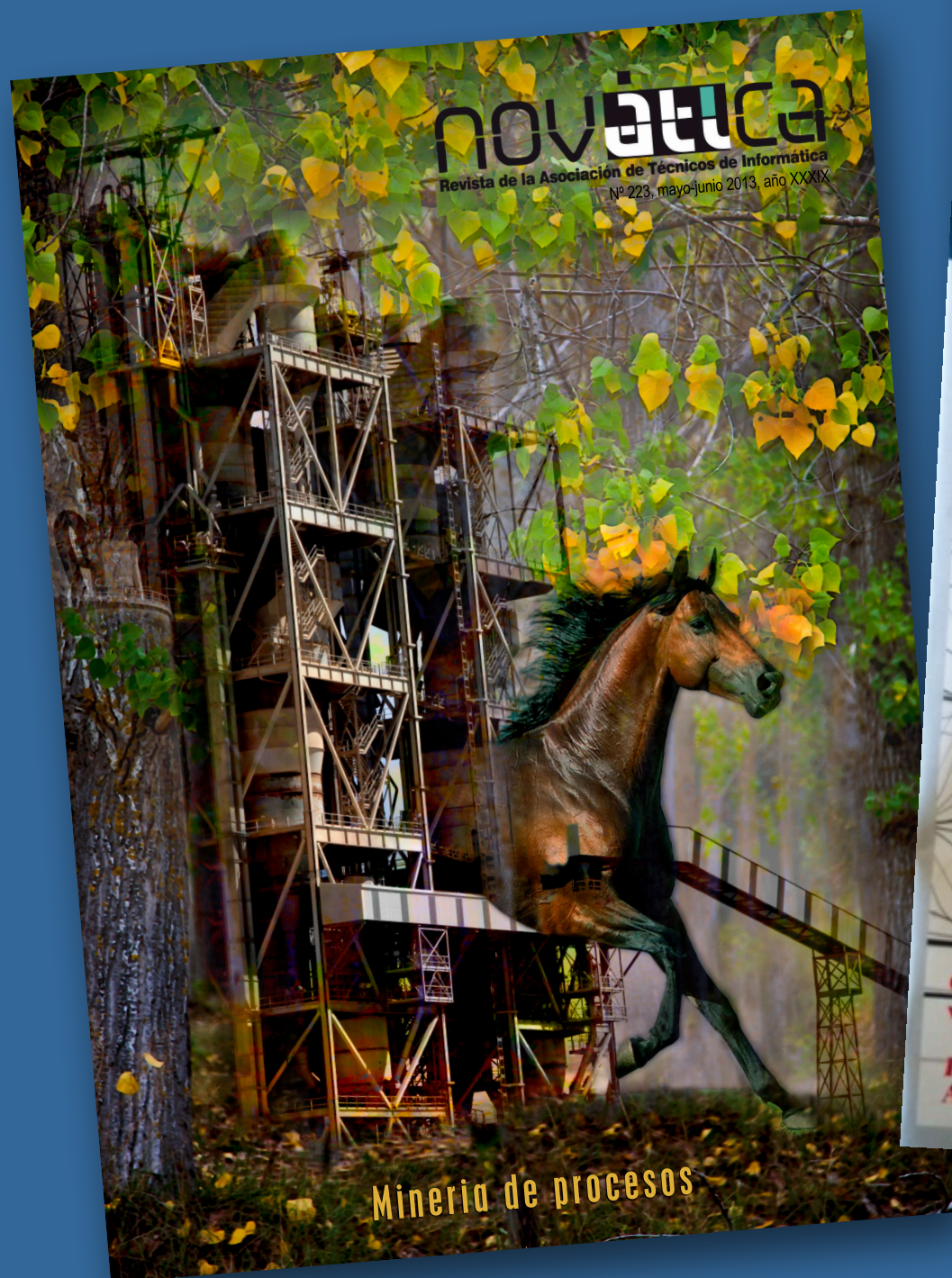


IEEE

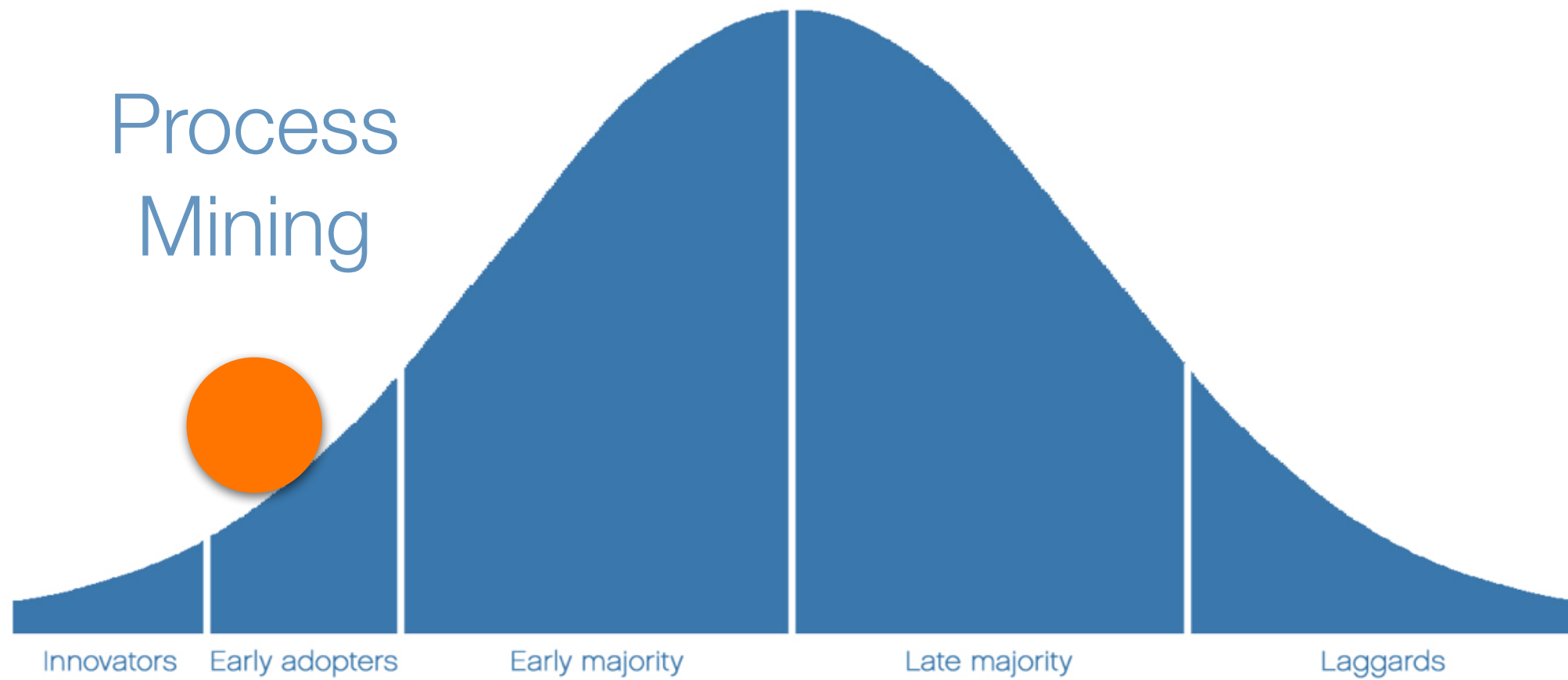
Ngî

BPM
Roundtable





Process Mining



How can we advance Process Mining adoption?

ADDED VALUE DIFFERENTIATION

ADDED VALUE













My Company



Process Manager



**Business Analyst /
Process Excellence**



Internal Auditor



Consultant



External Auditor

My Company



Process Manager



**Business Analyst /
Process Excellence**



Internal Auditor



Consultant



External Auditor



Get people to

If there is a way to get
someone to help you
work it out then
looking for someone
to help you

The way to
to get someone
to help you

The way to
to get someone
to help you

The way to
to get someone
to help you

Looked to get help and
the way to get help

something to get
up and the way to
do it

Expected a change
but thought about
what to do next

made a list of the
summary of the
that when you become
member - per your
needs

I have made a list of
the things to do
then to do it

On the way to
the way to do it

On the way to
the way to do it

On the way to
the way to do it

On the way to
the way to do it

On the way to
the way to do it

On the way to
the way to do it

On the way to
the way to do it



TIME-CONSUMING
SUBJECTIVE
INCOMPLETE
NO WAY TO
MEASURE IMPACT

ADDED VALUE

**COMMUNICATE
ADDED VALUE**

DIFFERENTIATION



Cat



WHAT IS PROCESS MINING?

**WHAT IS PROCESS
MINING?**

**WHAT MAKES IT
UNIQUE?**

**WHAT IS PROCESS
MINING?**

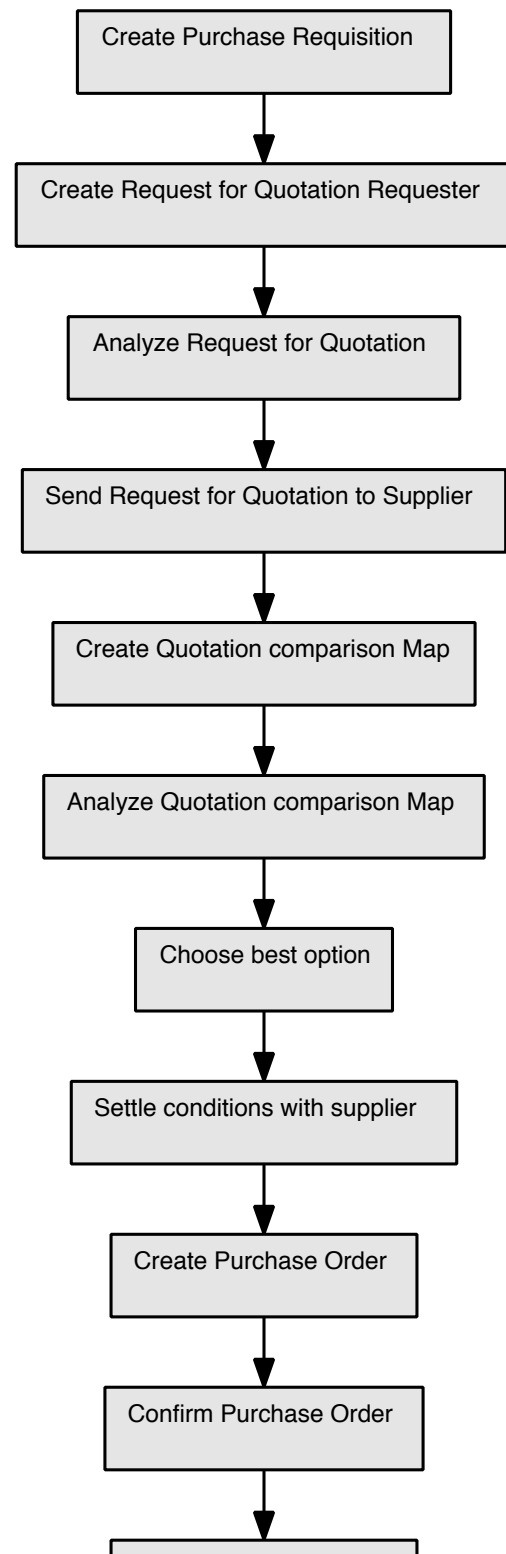
**WHAT MAKES IT
UNIQUE?**

**WHAT IS PROCESS
MINING *NOT*?**

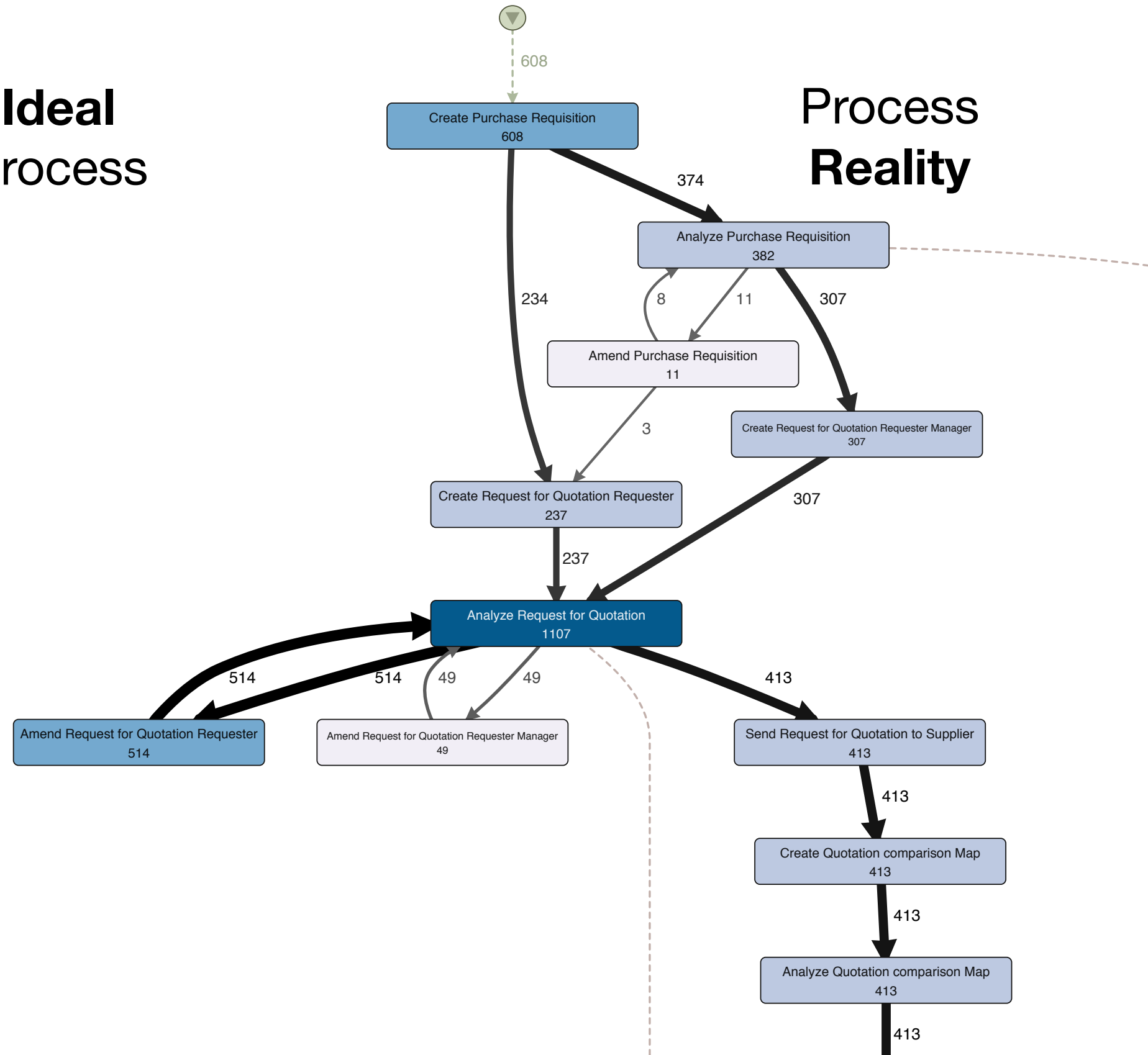
**WHAT MAKES IT
UNIQUE?**

What makes process mining unique?

**NO ASSUMPTIONS
ABOUT THE PROCESS**

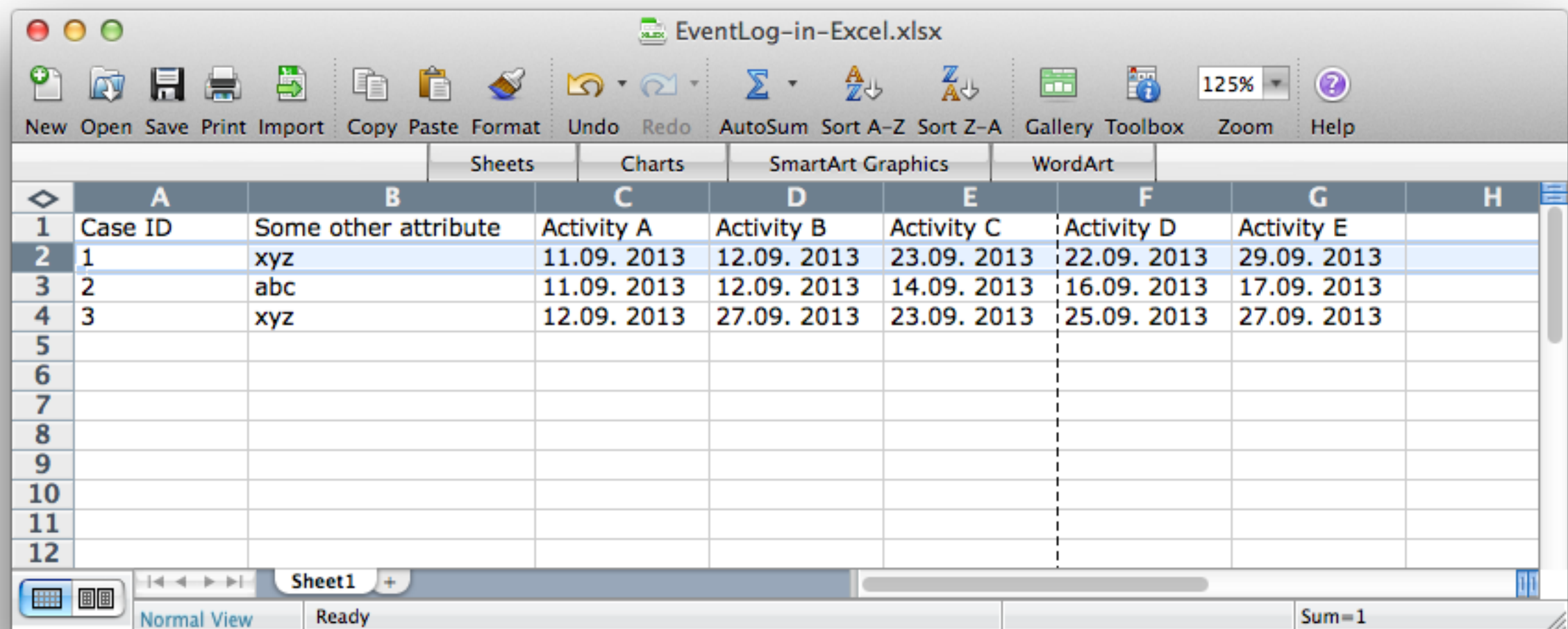


Ideal Process



Process Reality

Typical process data in Excel:



EventLog-in-Excel.xlsx

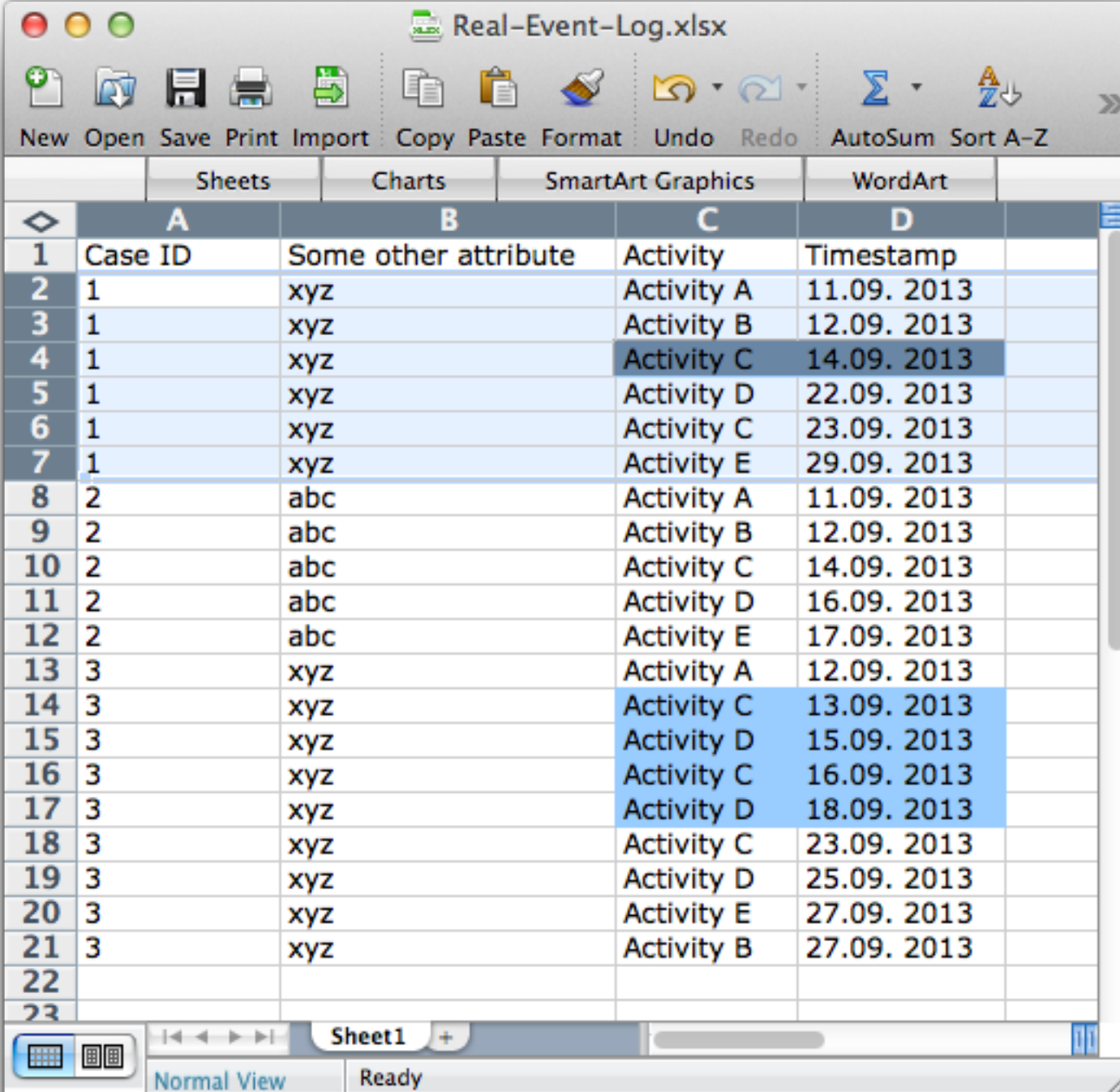
New Open Save Print Import Copy Paste Format Undo Redo AutoSum Sort A-Z Sort Z-A Gallery Toolbox Zoom 125% Help

	A	B	C	D	E	F	G	H
1	Case ID	Some other attribute	Activity A	Activity B	Activity C	Activity D	Activity E	
2	1	xyz	11.09. 2013	12.09. 2013	23.09. 2013	22.09. 2013	29.09. 2013	
3	2	abc	11.09. 2013	12.09. 2013	14.09. 2013	16.09. 2013	17.09. 2013	
4	3	xyz	12.09. 2013	27.09. 2013	23.09. 2013	25.09. 2013	27.09. 2013	
5								
6								
7								
8								
9								
10								
11								
12								

Sheet1

Normal View Ready Sum=1

But in reality there are repetitions!



The screenshot shows a Microsoft Excel window titled "Real-Event-Log.xlsx". The spreadsheet contains a table with 5 columns: Case ID, Some other attribute, Activity, and Timestamp. The data is organized into three groups based on Case ID (1, 2, and 3). Each group contains multiple rows with different activities and timestamps, illustrating repetitions in the data.

	A	B	C	D
	Case ID	Some other attribute	Activity	Timestamp
1	1	xyz	Activity A	11.09. 2013
2	1	xyz	Activity B	12.09. 2013
3	1	xyz	Activity C	14.09. 2013
4	1	xyz	Activity D	22.09. 2013
5	1	xyz	Activity C	23.09. 2013
6	1	xyz	Activity E	29.09. 2013
7	2	abc	Activity A	11.09. 2013
8	2	abc	Activity B	12.09. 2013
9	2	abc	Activity C	14.09. 2013
10	2	abc	Activity D	16.09. 2013
11	2	abc	Activity E	17.09. 2013
12	3	xyz	Activity A	12.09. 2013
13	3	xyz	Activity C	13.09. 2013
14	3	xyz	Activity D	15.09. 2013
15	3	xyz	Activity C	16.09. 2013
16	3	xyz	Activity D	18.09. 2013
17	3	xyz	Activity C	23.09. 2013
18	3	xyz	Activity D	25.09. 2013
19	3	xyz	Activity E	27.09. 2013
20	3	xyz	Activity B	27.09. 2013
21				
22				
23				

Case ID *Timestamp* *Activity*

1

3

2

	A	B	C	D	E	F	G
1	CaseID	Timestamp	Medium	Status	Service Line	Urgency	
2	case9700	20.8.09 11:46	Phone	Registered	1st line	0	
3	case9700	20.8.09 11:50	Phone	Completed	1st line	0	
4	case9701	23.9.09 12:23	Phone	Registered	1st line	0	
5	case9701	23.9.09 12:27	Phone	Completed	1st line	0	
6	case9705	20.10.09 14:21	Phone	Registered	Specialist	2	
7	case9705	20.10.09 16:48	Phone	At specialist	Specialist	2	
8	case9705	19.11.09 10:31	Phone	In progress	Specialist	2	
9	case9705	19.11.09 10:32	Phone	Completed	Specialist	2	
10	case3939	15.10.09 11:48	Mail	Registered	Specialist	2	
11	case3939	15.10.09 11:48	Mail	Offered	Specialist	2	
12	case3939	20.10.09 17:18	Mail	In progress	Specialist	2	
13	case3939	20.10.09 17:19	Mail	At specialist	Specialist	2	
14	case3939	21.10.09 14:49	Mail	In progress	Specialist	2	
15	case3939	21.10.09 14:49	Mail	In progress	Specialist	2	
16	case3939	28.10.09 10:17	Mail	In progress	Specialist	2	
17	case3939	28.10.09 10:18	Mail	Completed	Specialist	2	
18	case9704	20.10.09 14:19	Mail	Registered	1st line	0	
19	case9704	20.10.09 14:24	Mail	Completed	1st line	0	
20	case9703	20.10.09 14:40	Phone	Registered	1st line	0	
21	case9703	20.10.09 14:58	Phone	Completed	1st line	0	
22	case9702	24.8.09 12:24	Mail	Registered	2nd line	2	
23	case9702	24.8.09 12:30	Mail	Offered	2nd line	2	
24	case9702	24.8.09 12:31	Mail	Scheduled	2nd line	2	
25	case9702	26.8.09 9:05	Mail	In progress	2nd line	2	
26	case9702	26.8.09 9:19	Mail	Completed	2nd line	2	
27	case9709	20.10.09 14:26	Mail	Registered	Specialist	2	
28	case9700	20.10.09 14:26	Mail	Offered	Specialist	2	

What makes process mining unique?

EXPLORATIVE

```
C:\WINDOWS\system32\cmd.exe - sqlplus "sys/as sysdba"

      ID Name                                Short Hire
-----
Long Hire Date
-----
      100 S. King                            17.06.1987
Mittwoch, 17. Juni 1987

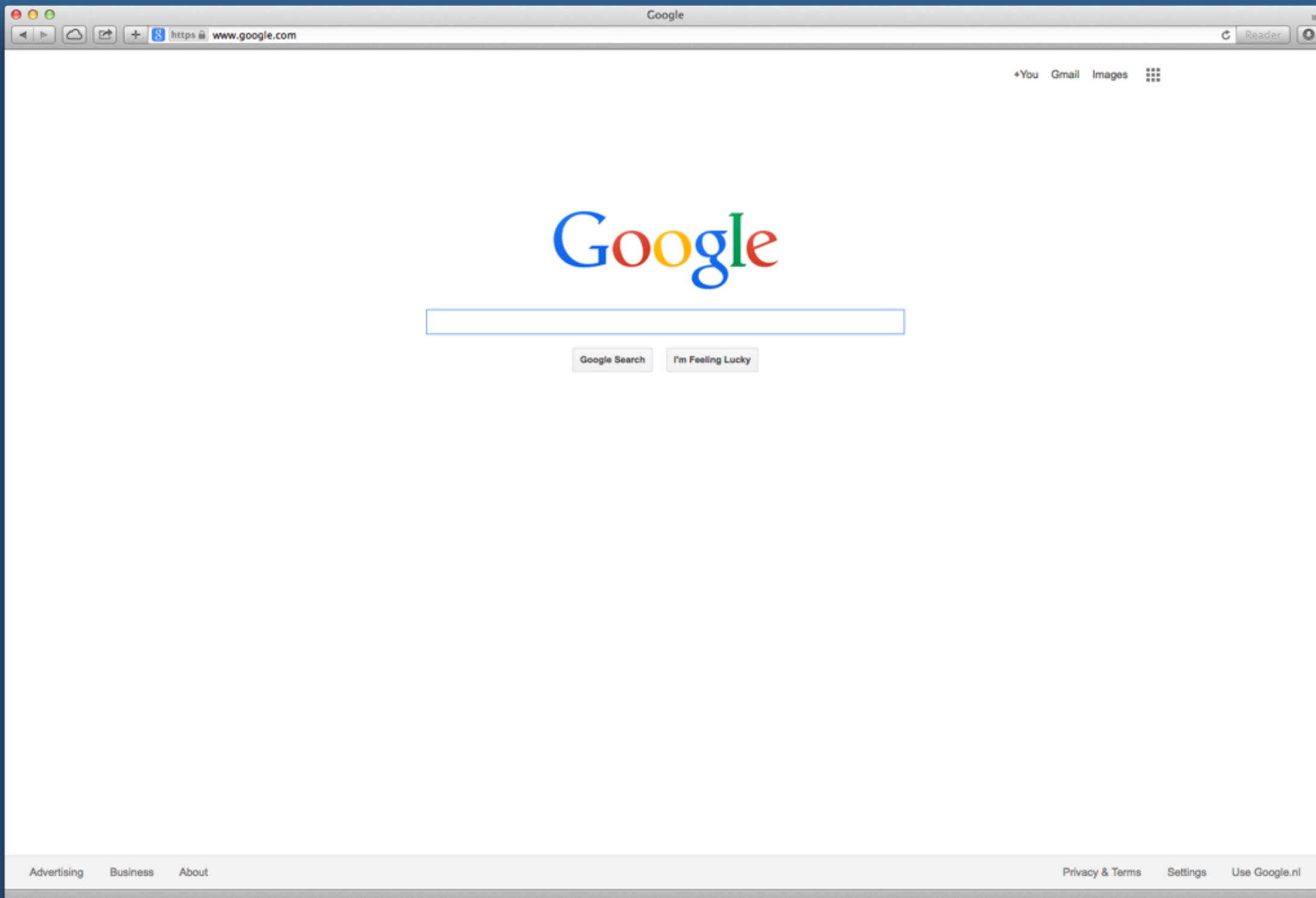
      101 N. Kochhar                         21.09.1989
Donnerstag, 21. September 1989

      102 L. De Haan                         13.01.1993
Mittwoch, 13. Januar 1993

      ID Name                                Short Hire
-----
Long Hire Date
-----
      103 A. Hunold                          03.01.1990
Mittwoch, 3. Januar 1990

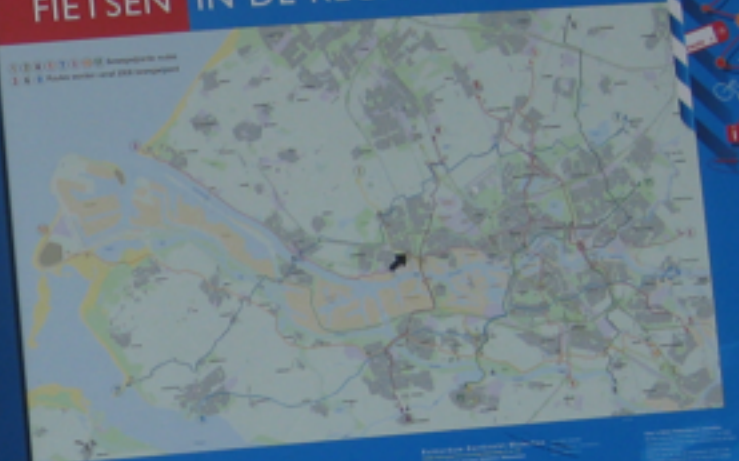
      104 B. Ernst                           21.05.1991
Dienstag, 21. Mai 1991

SQL>
```

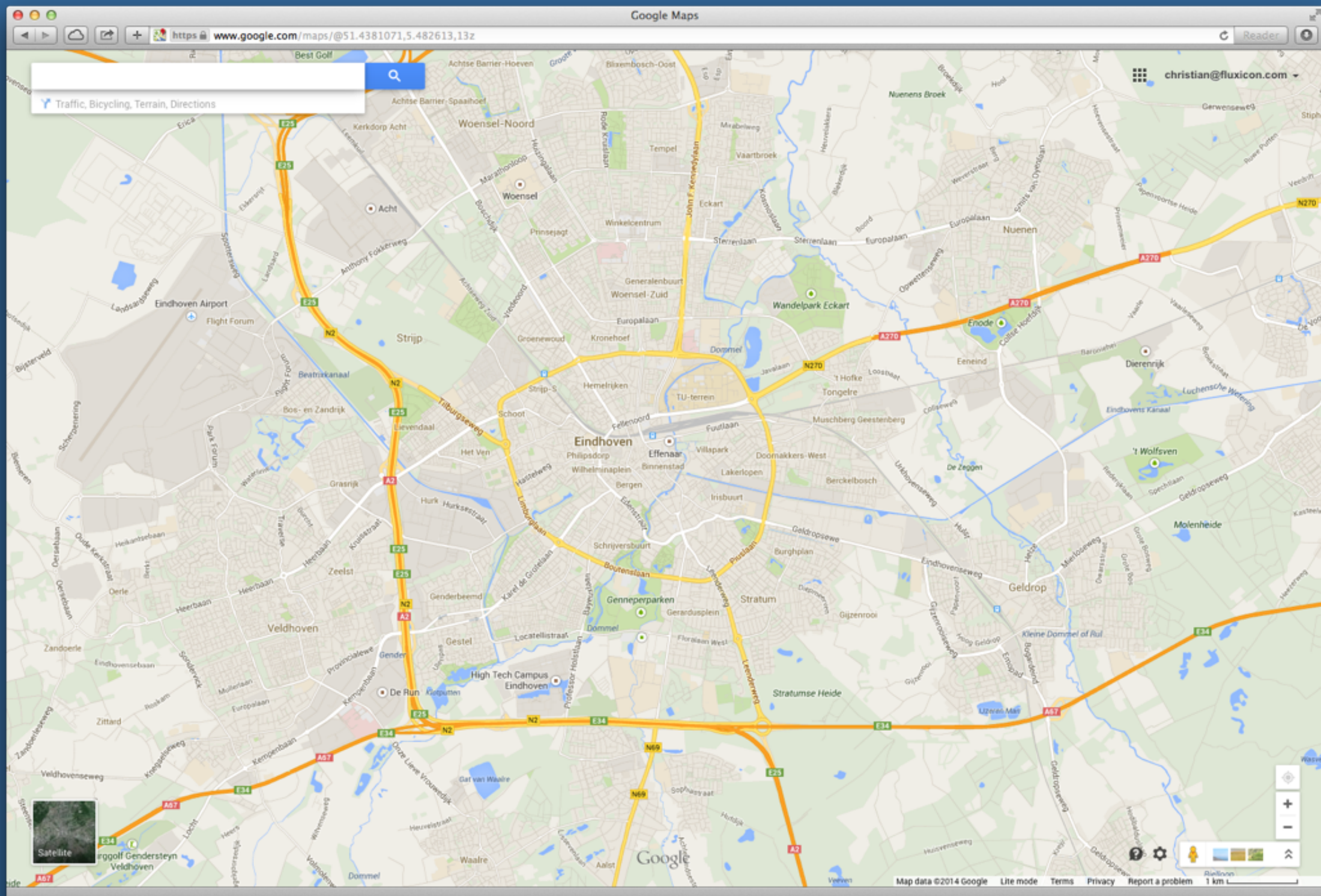


FIETSEN IN DE REGIO ROTTERDAM



Legenda	
	Streekfietsroute
	Stadsfietsroute
	Natuurfietseroute
	Wielervedroute
	Wielervedroute
	Stations
	Wielervedstations
	Natuurfietseroutes
	Wielervedroutes
	Wielervedroutes







**“I KNOW IT WHEN
I SEE IT”**

- Potter Stewart

What makes process mining unique?

**EMPOWERS
BUSINESS USERS**

powerful



Hadoop,
R, Python

Process
Mining

Excel

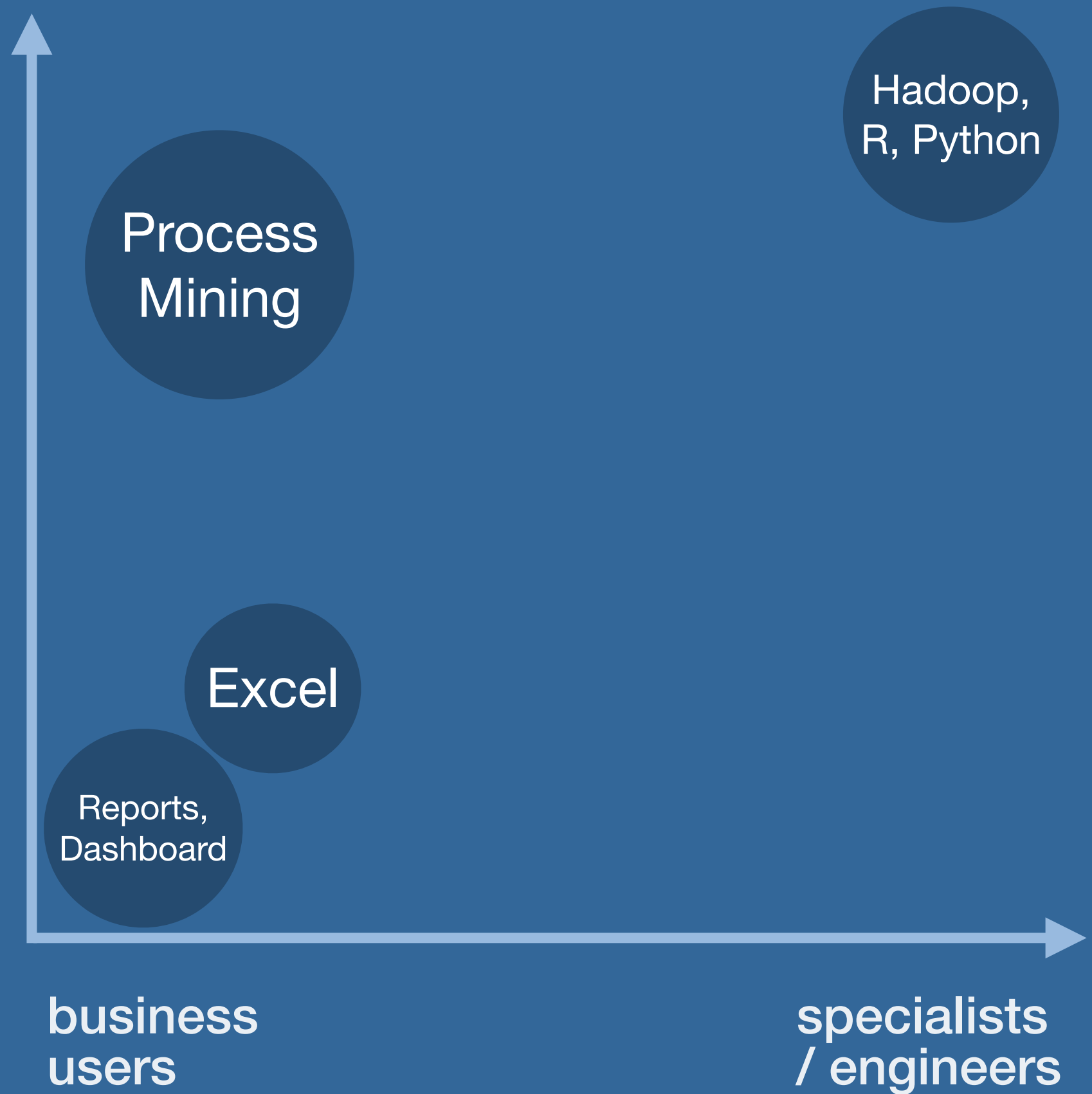
Reports,
Dashboard

basic



business
users

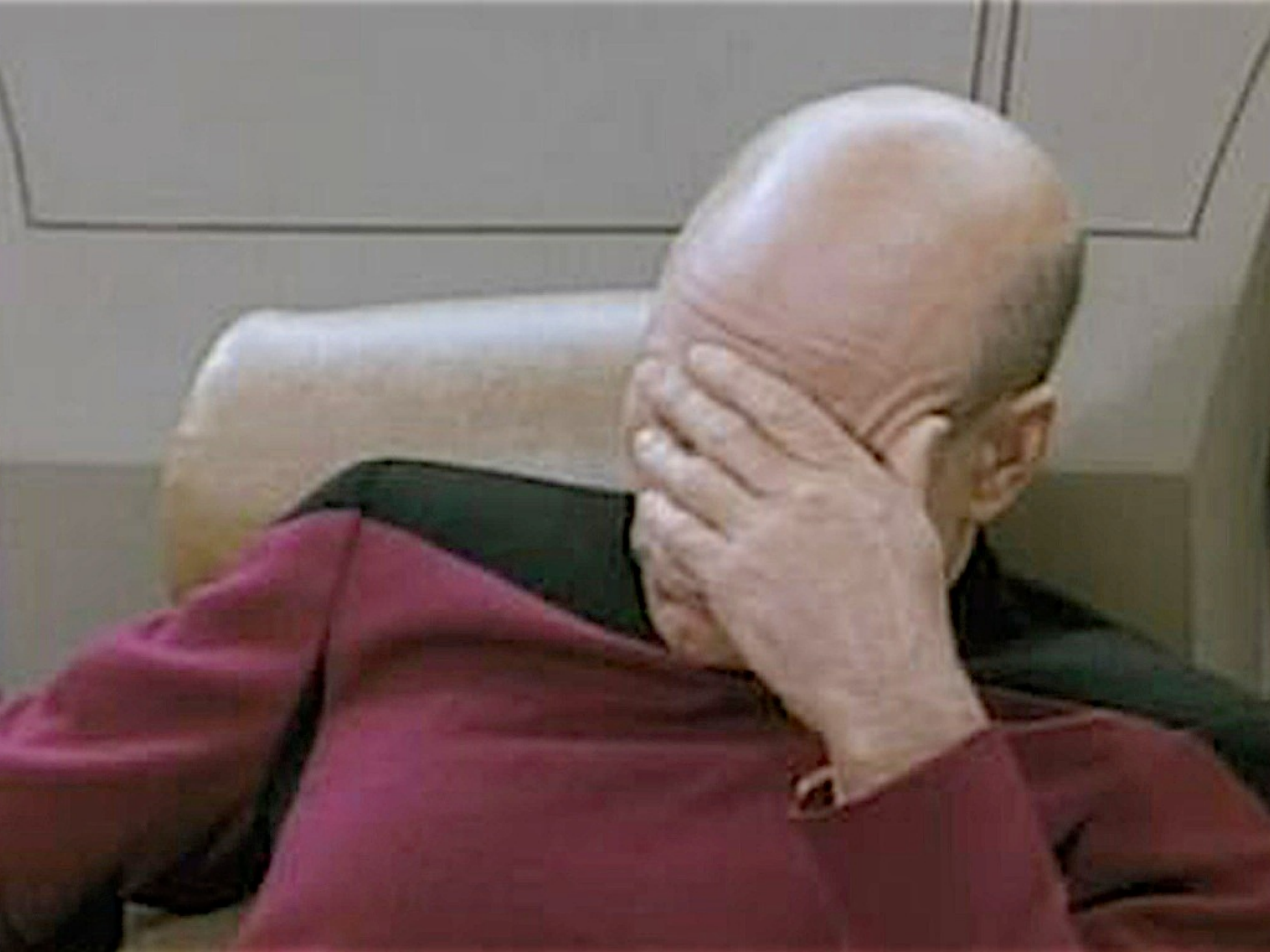
specialists
/ engineers



**WHAT IS PROCESS
MINING *NOT*?**

**This process mining
thing sounds great.
Can you automate it?**





**WE SHOULD NOT
BE AFRAID TO SAY
“NO” TO...**

**Can you generate
reports with it?**



**Can it recommend
next steps during the
process?**



**Can you do data
mining with it?**



**Can you do
simulation with it?**



**Can you do process
modeling with it?**





WHAT IS PROCESS MINING?

Process Mining

EMPOWERS BUSINESS USERS

Process Mining
EMPOWERS BUSINESS
USERS to understand
COMPLEX processes

Process Mining
EMPOWERS BUSINESS
USERS to understand
COMPLEX processes
OBJECTIVELY

Process Mining
EMPOWERS BUSINESS
USERS to understand
COMPLEX processes
OBJECTIVELY, in an
EXPLORATIVE way

**Process Mining
EMPOWERS BUSINESS
USERS to understand
COMPLEX processes
OBJECTIVELY, in an
EXPLORATIVE way, and
WITHOUT THE NEED
FOR UPFRONT
QUESTIONS.**



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IEEE

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