

Data Storytelling

3) Eliminate clutter

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HdM Stuttgart

6 Lessons in data storytelling

1. Understand the context
2. Choose an appropriate visual display
- 3. Eliminate clutter**
4. Focus attention where you want it
5. Think like a designer
6. Tell a story



VISUAL ELEMENTS *that* TAKE UP SPACE
and DON'T AID *our* UNDERSTANDING

COGNITIVE LOAD

The MENTAL EFFORT that's REQUIRED
to LEARN NEW INFORMATION



Every element we put
on a page or screen
puts cognitive burden
on our audience...

so we should take
care not to include
things that aren't
adding information

Name the color you see



How is her knee today?

hoe

har

is

HJOED

knie

Constructing a sentence

Cognitive load

Intrinsic load

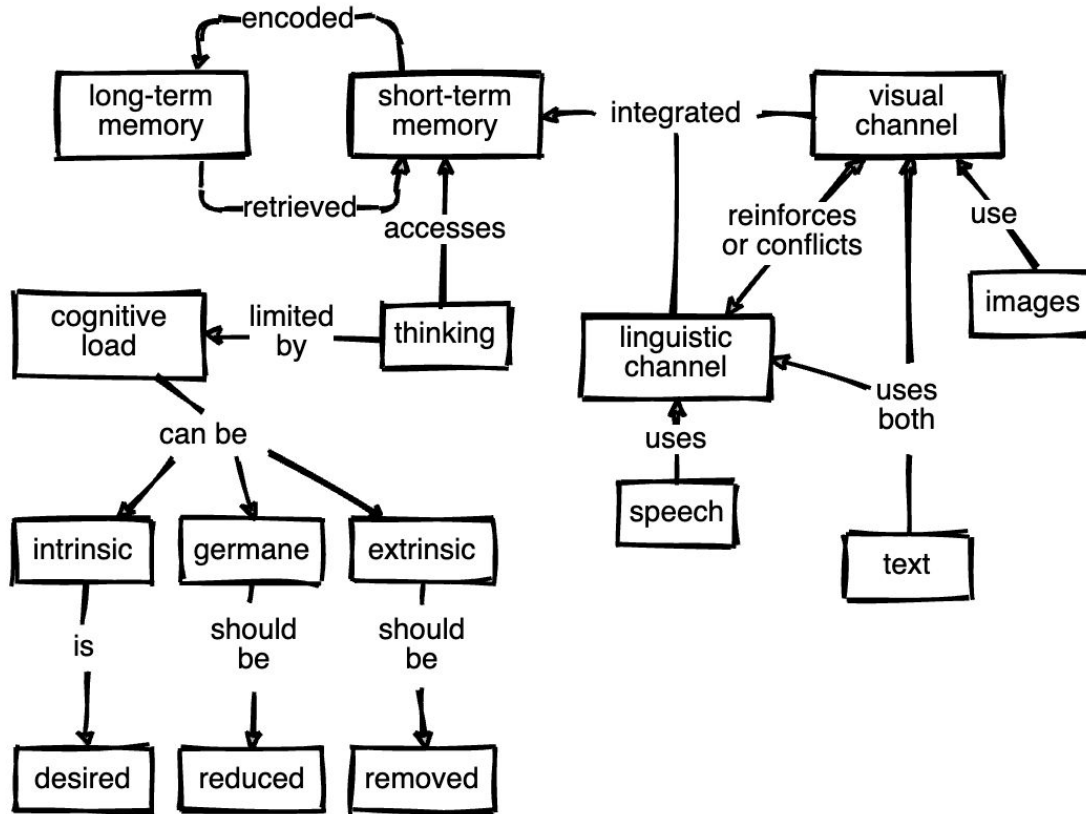
- is what people have to keep in mind in order to absorb new material.

Germane Load

- is the (desirable) mental effort required to link new information to old, which is one of the things that distinguishes learning from memorization.

Extraneous Load

- is anything that **distracts** from **learning**



Concepts: Cognitive load

Lack of visual order

**LACK of
VISUAL
ORDER**

(Another type of **CLUTTER**)

LEVERAGE WHITE SPACE
and ALIGN ELEMENTS

*Aim for clean horizontal
and vertical elements,
avoid diagonal*

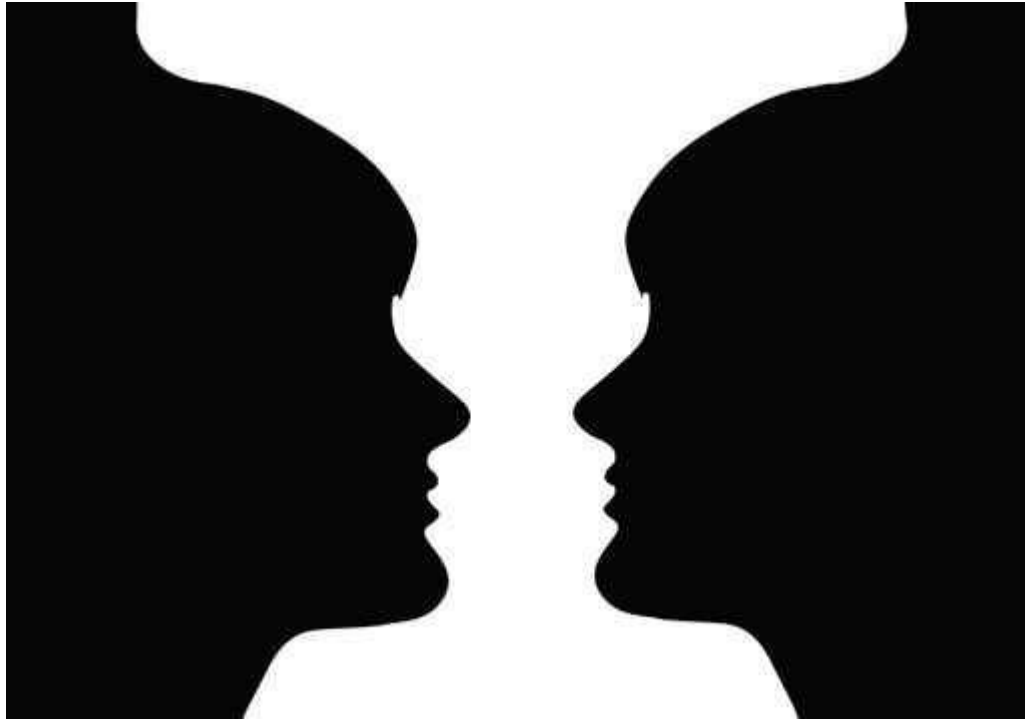


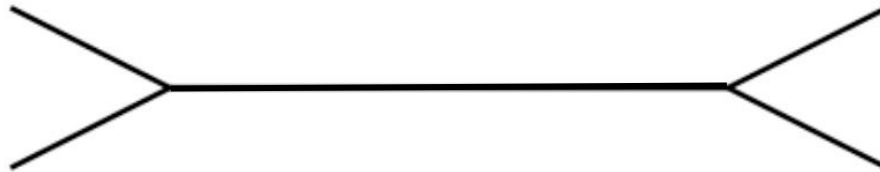
Non strategic use of contrast

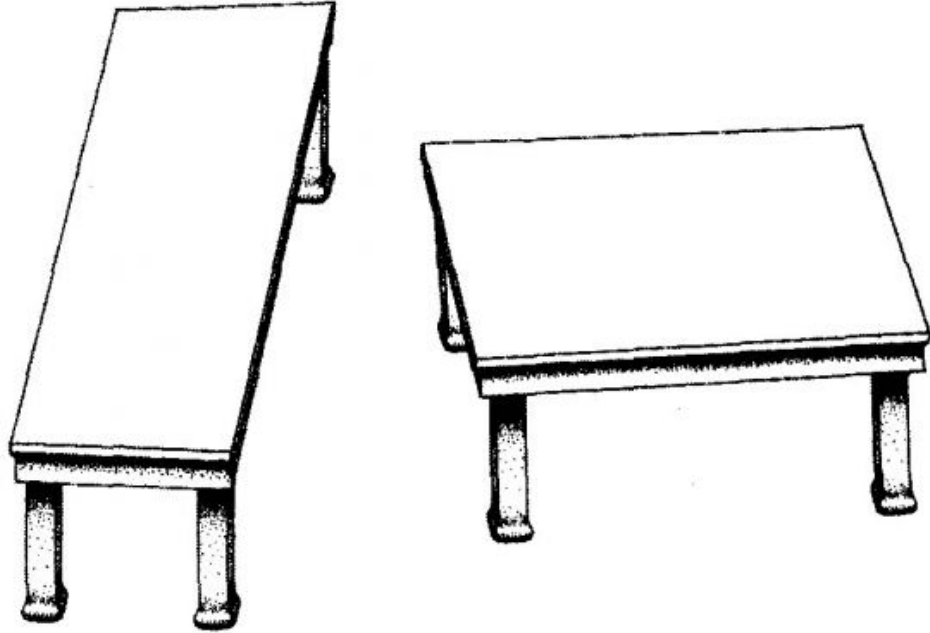
**NON-STRATEGIC
USE of CONTRAST**

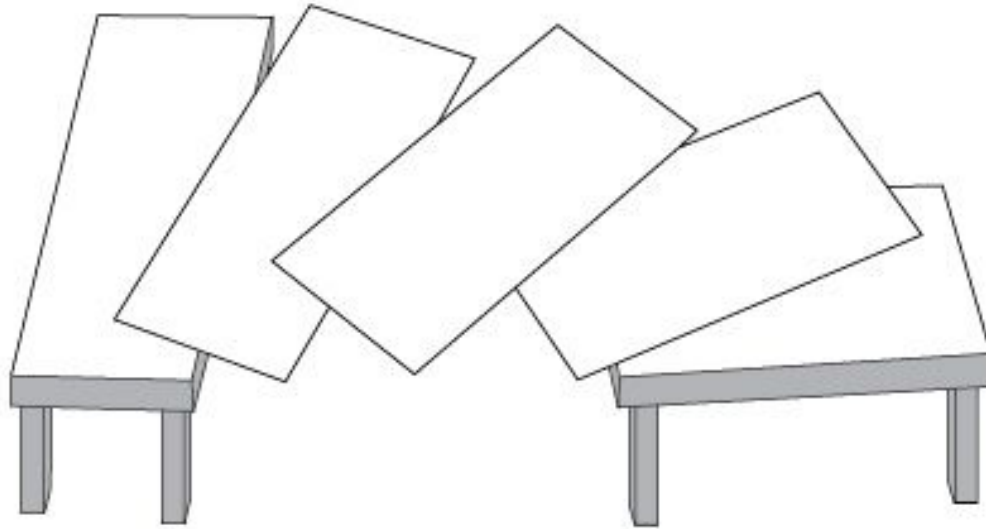
CLEAR CONTRAST is a SIGNAL,
INDICATING WHERE to LOOK
*Don't make too many things different,
or key points will get lost*

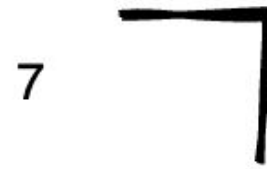
Perception





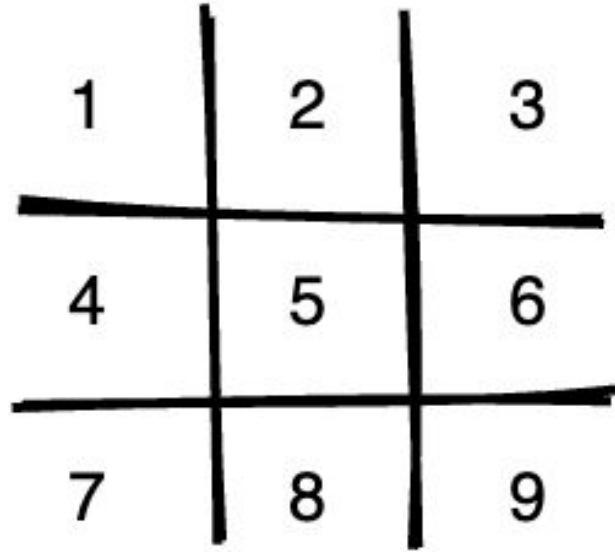






Look at the figure for 10 seconds, then look away and try to write out your phone number with these symbols





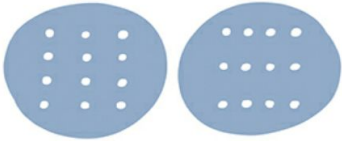
Look at the figure for 10 seconds, then look away and try to write out your phone number with these symbols

GESTALT PRINCIPLES

DESCRIBE HOW we SUBCONSCIOUSLY
ORDER what we SEE in the WORLD

We can use this understanding of how people
see to help identify & eliminate **CLUTTER**

PROXIMITY



SIMILARITY



ENCLOSURE



CLOSURE

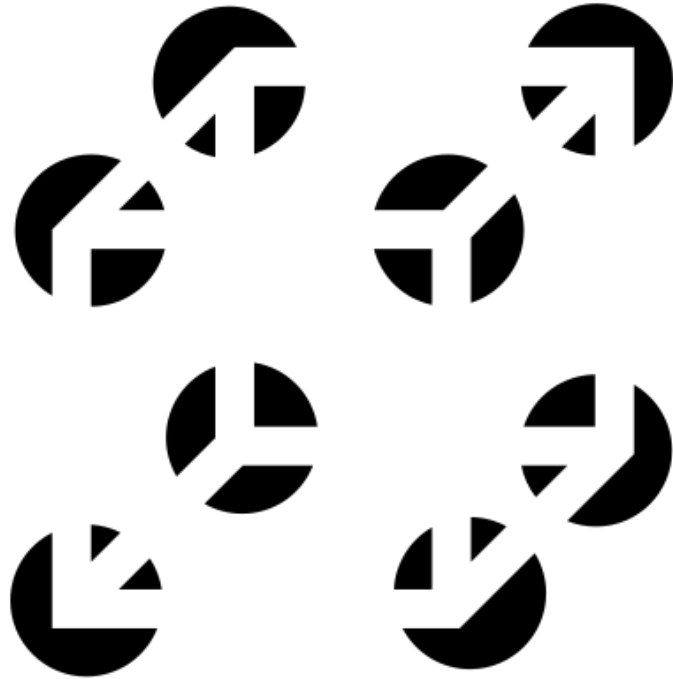


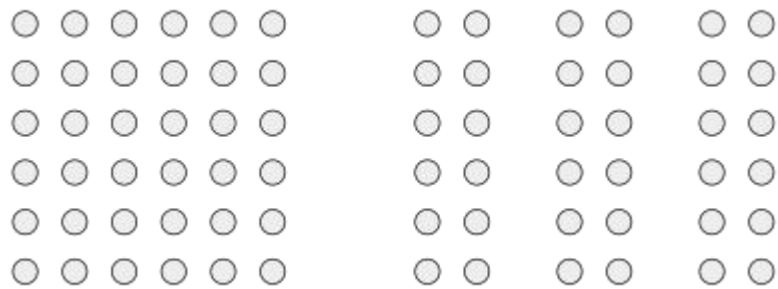
CONTINUITY



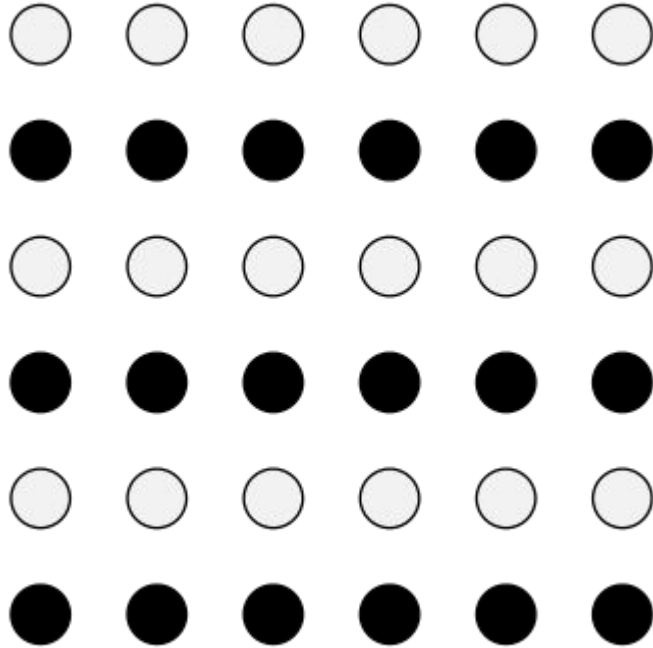
CONNECTION

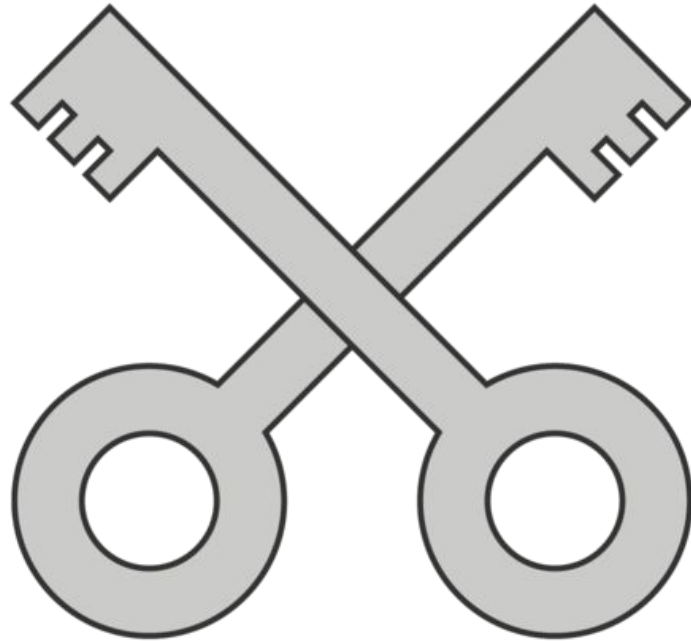








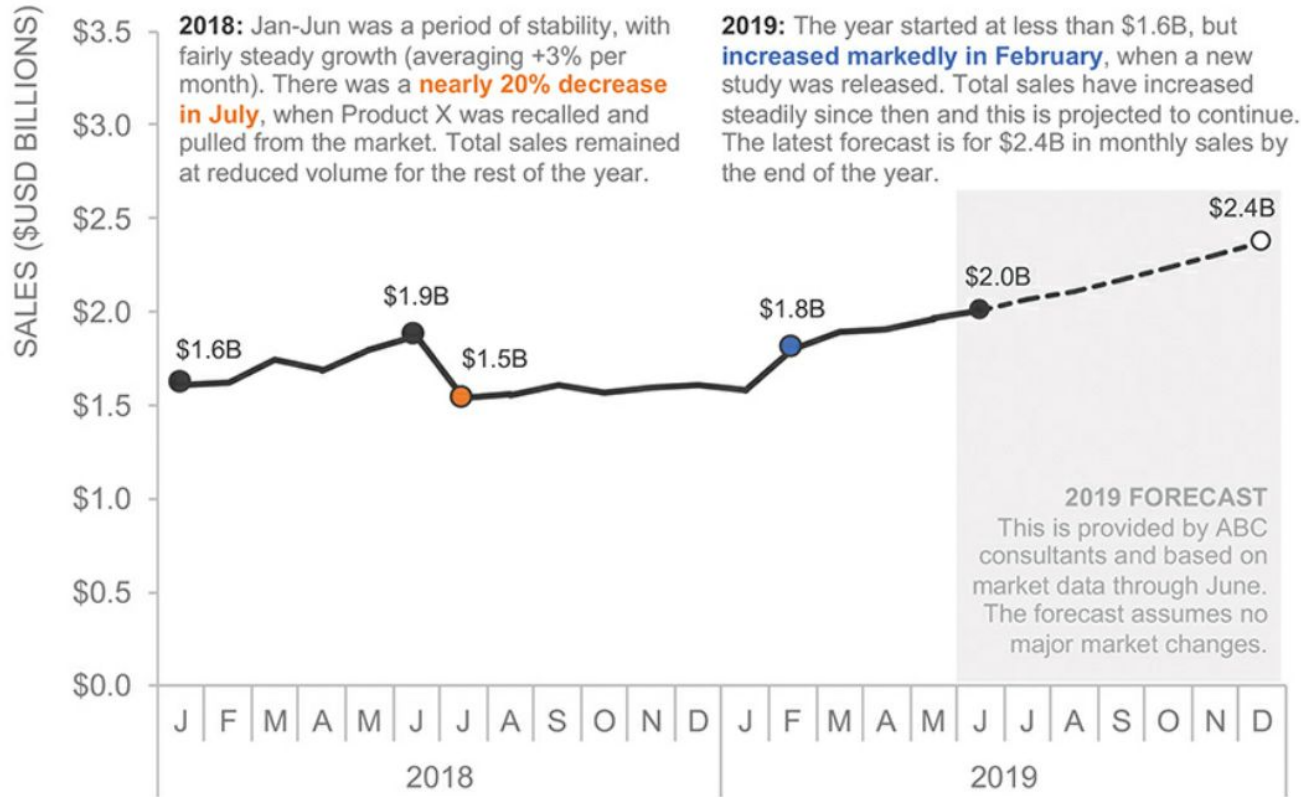






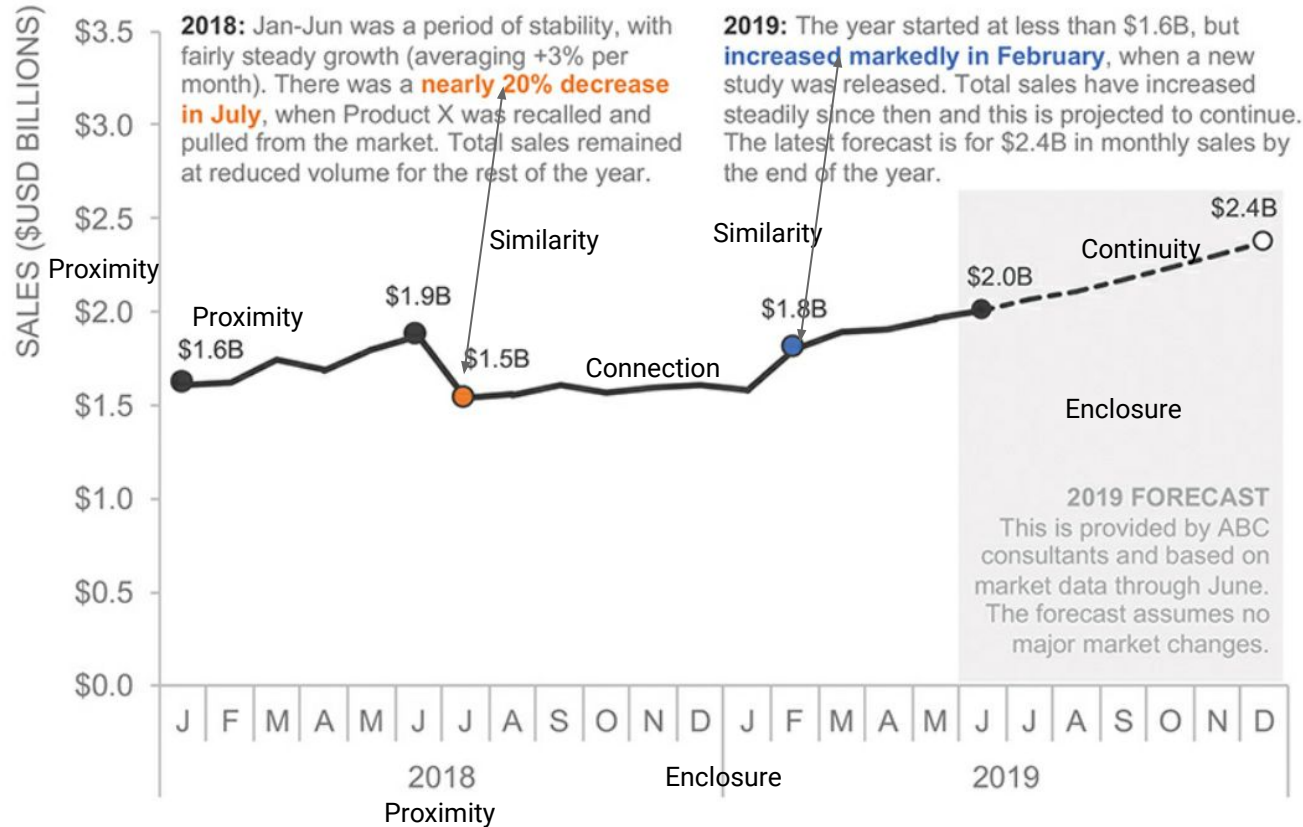
Example 3.1

Market size over time



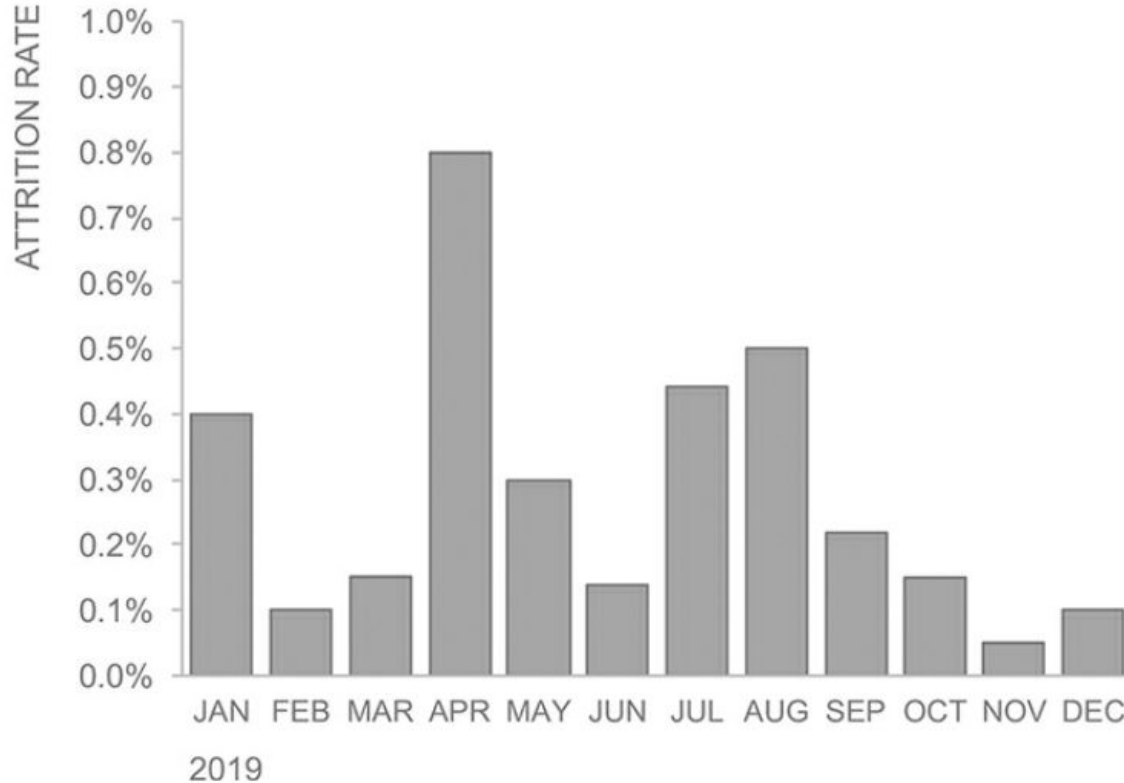
Market size over time

Closure



Example 3.2

2019 monthly voluntary attrition rate



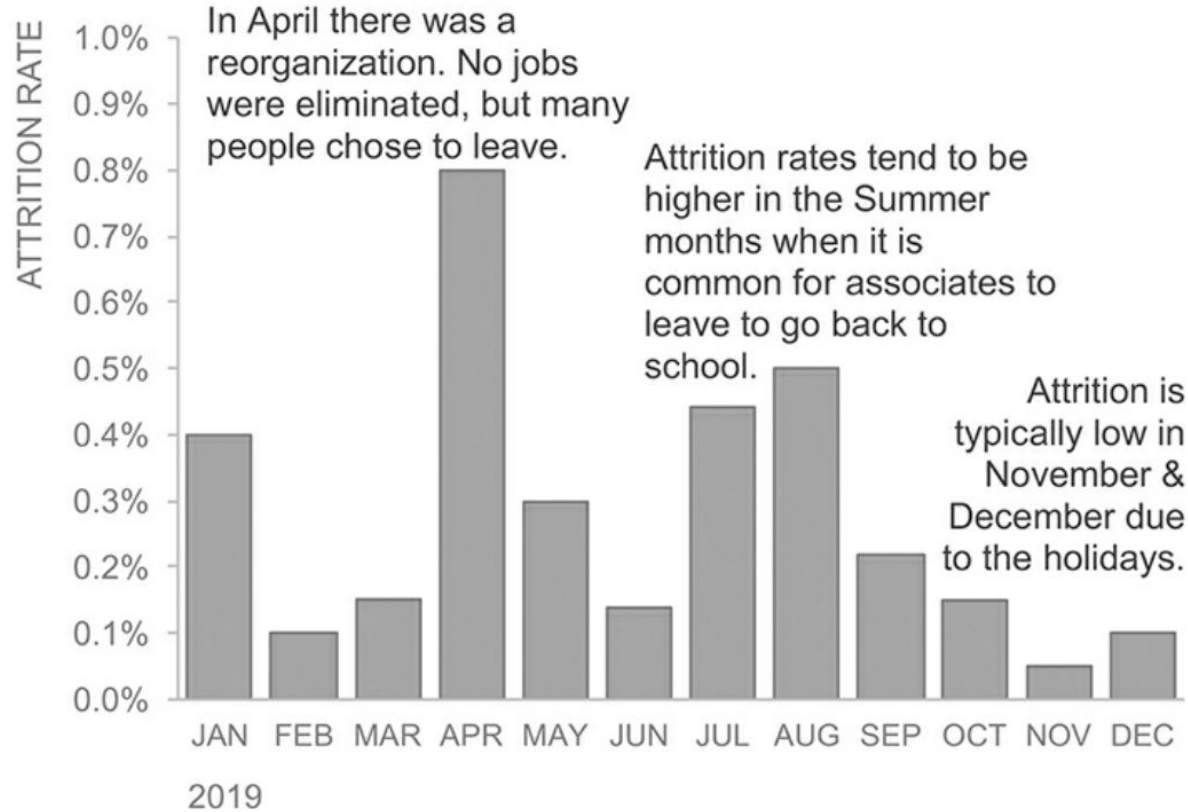
Highlights:

In April there was a reorganization. No jobs were eliminated, but many people chose to leave.

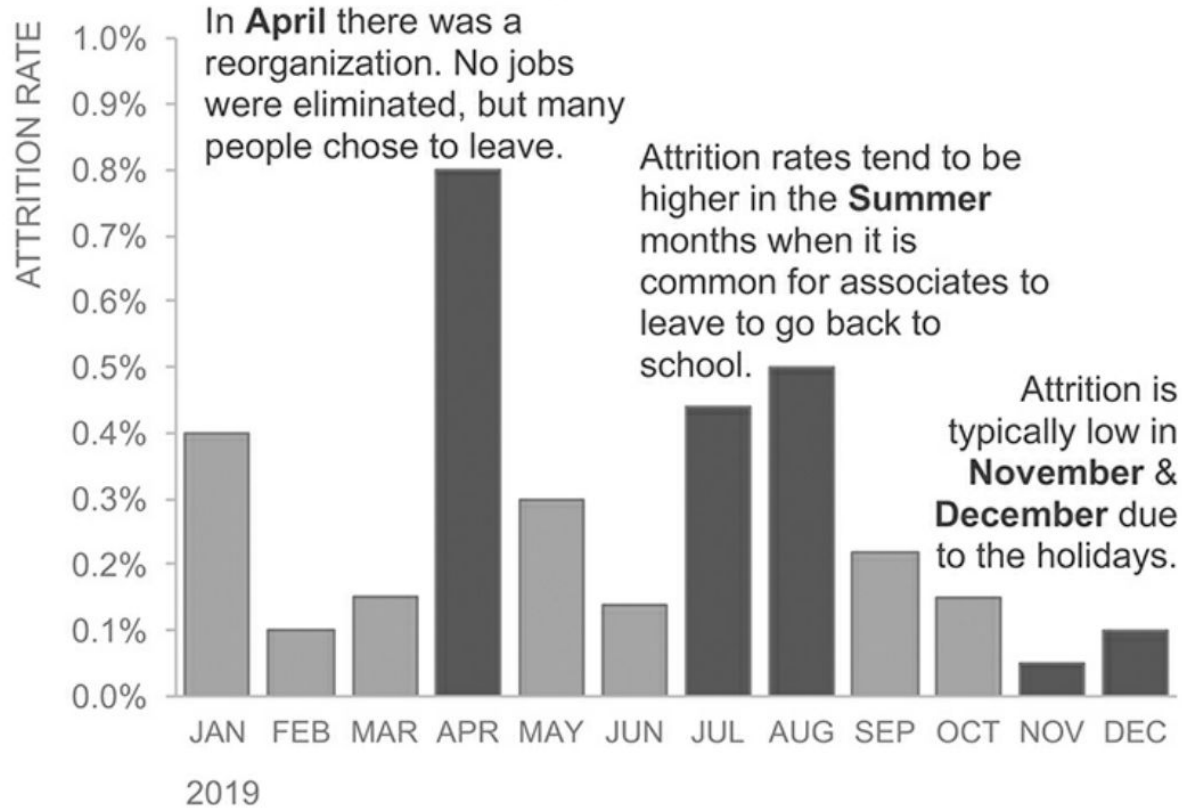
Attrition rates tend to be higher in the Summer months when it is common for associates to leave to go back to school.

Attrition is typically low in November and December due to the holidays.

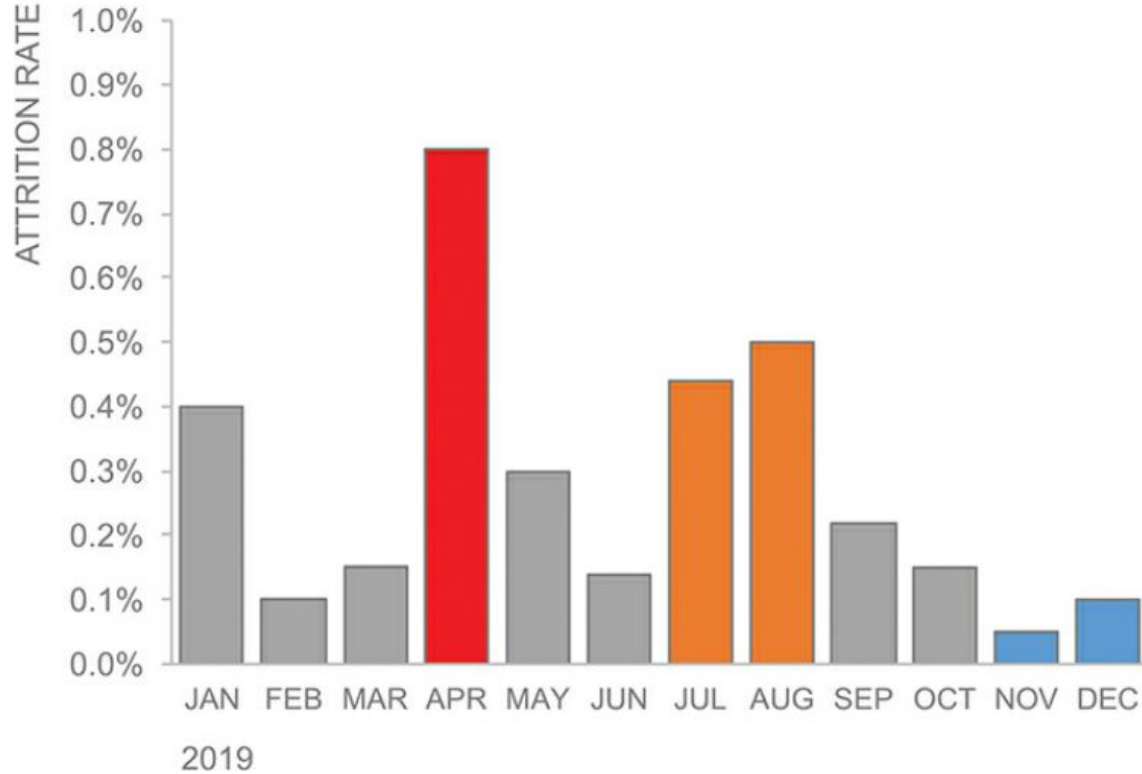
2019 monthly voluntary attrition rate



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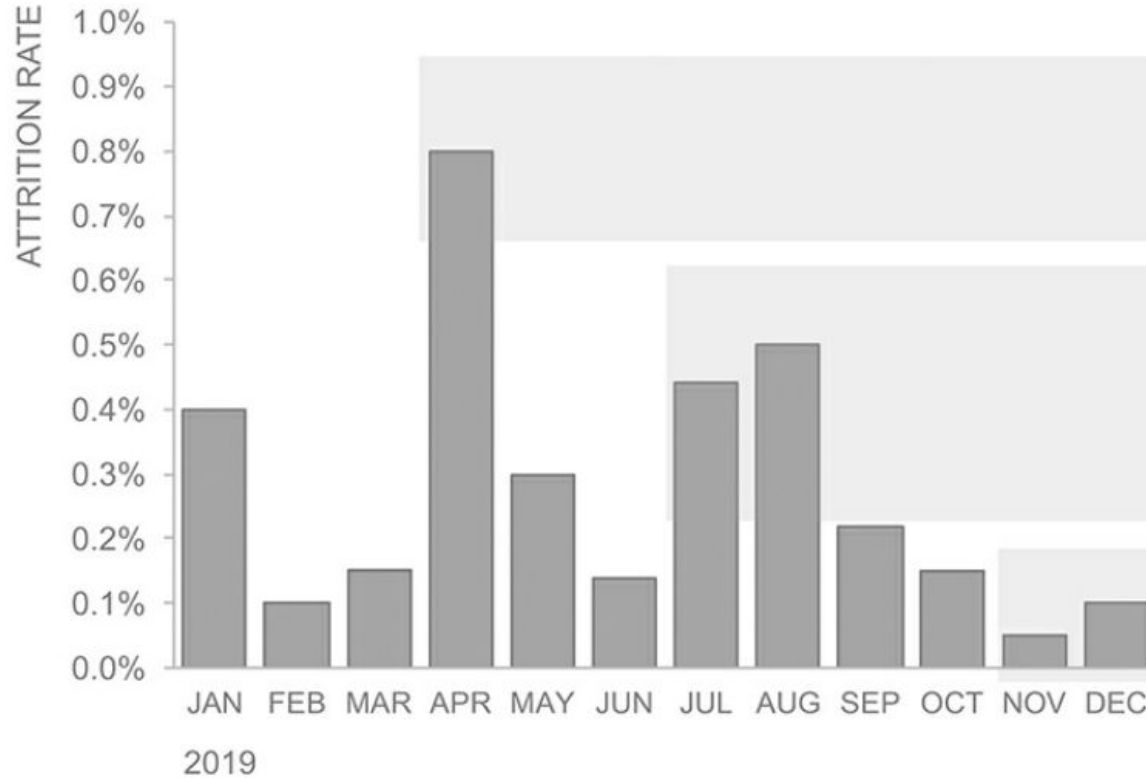
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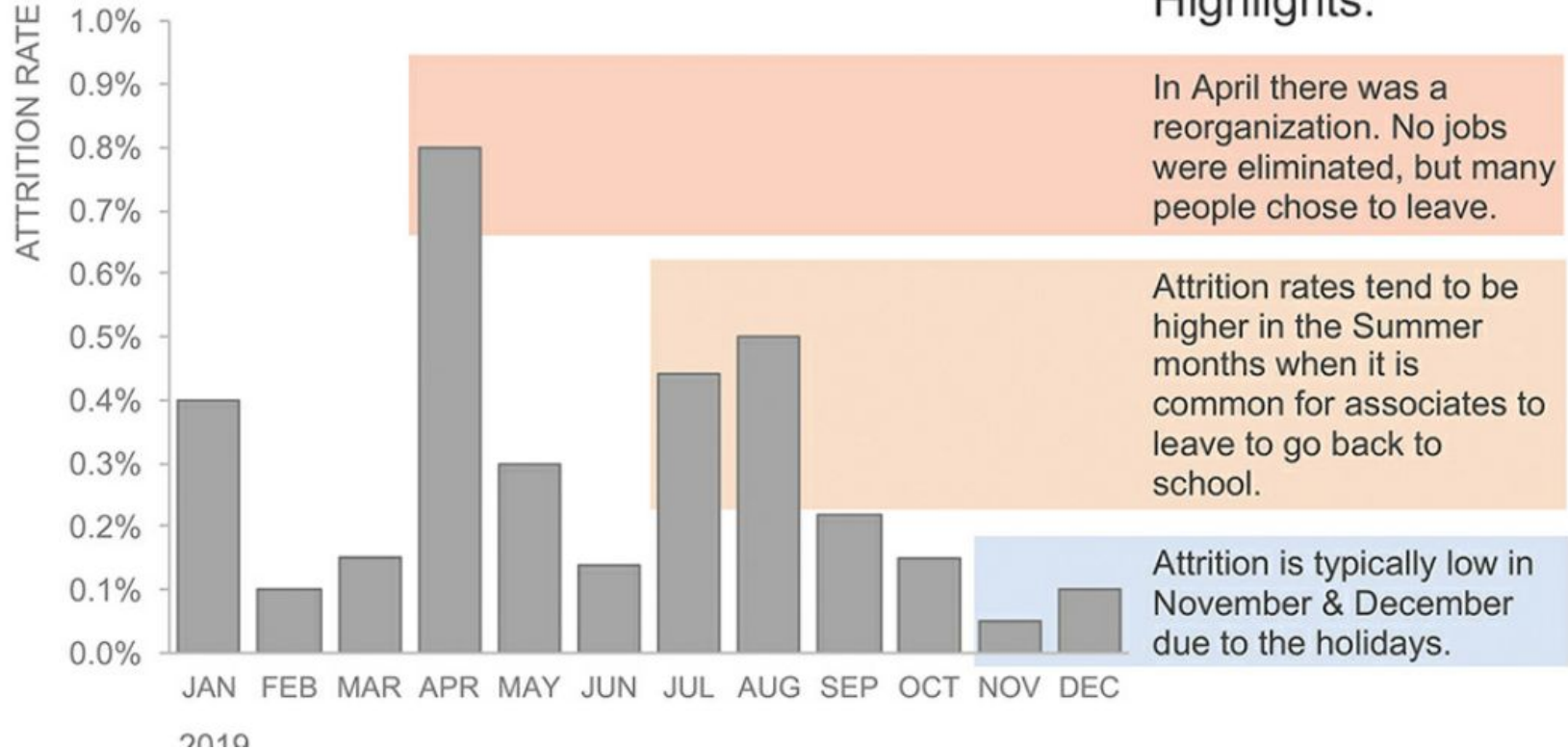
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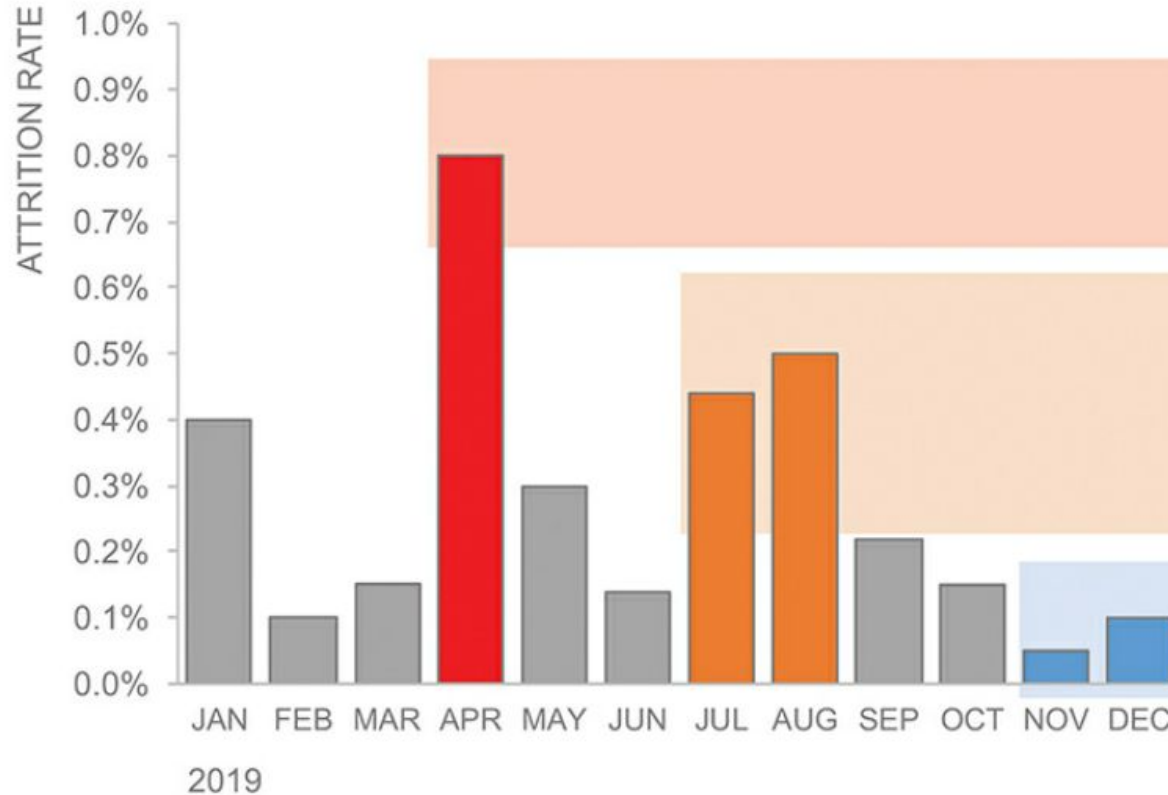
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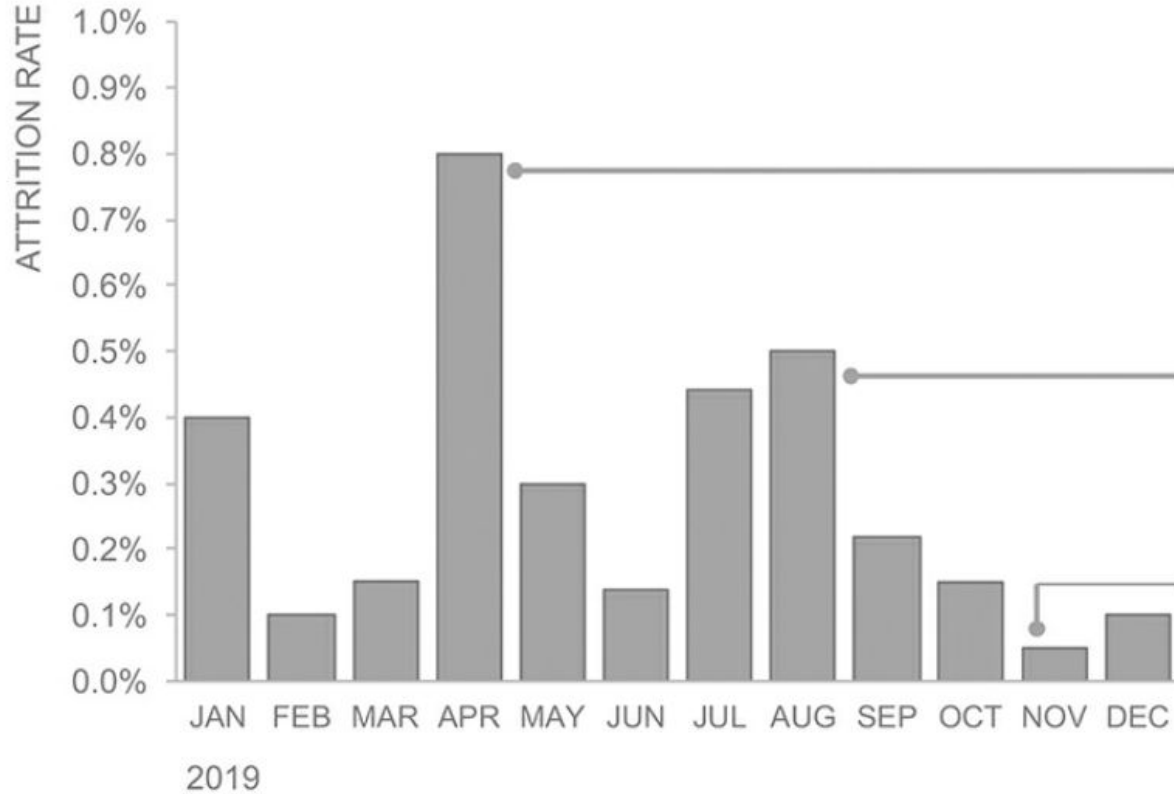
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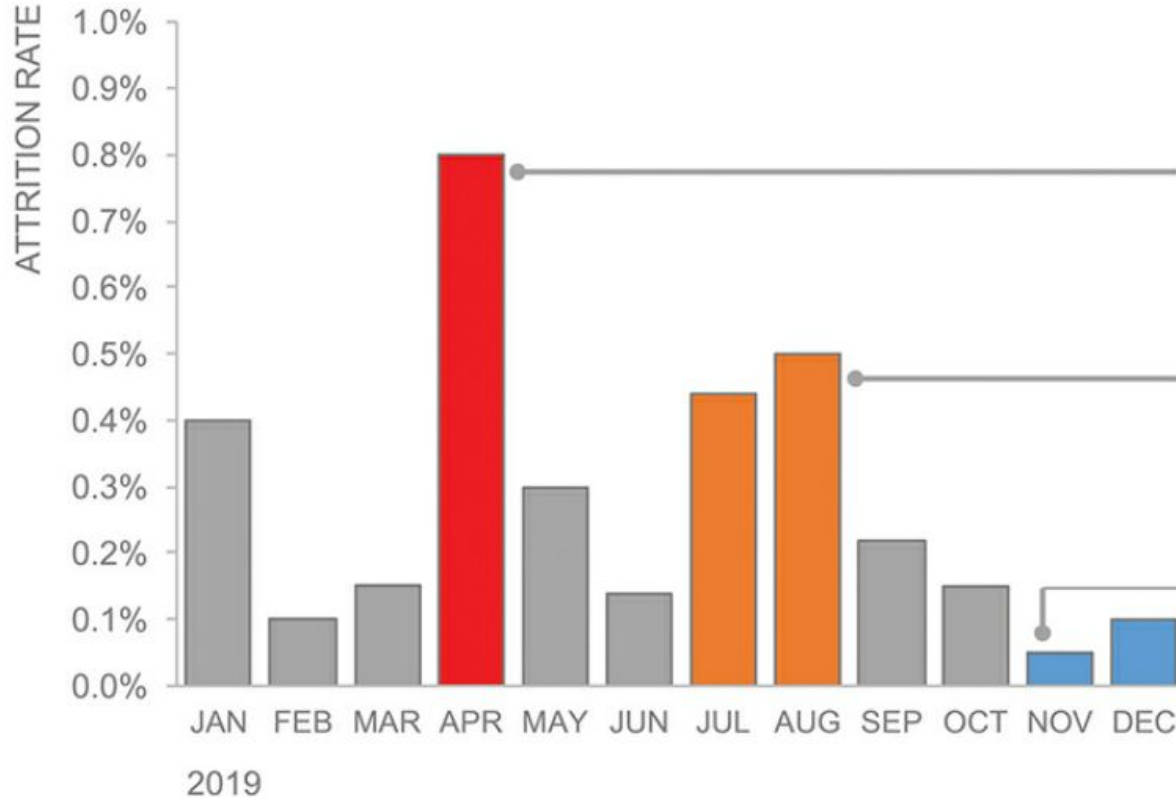
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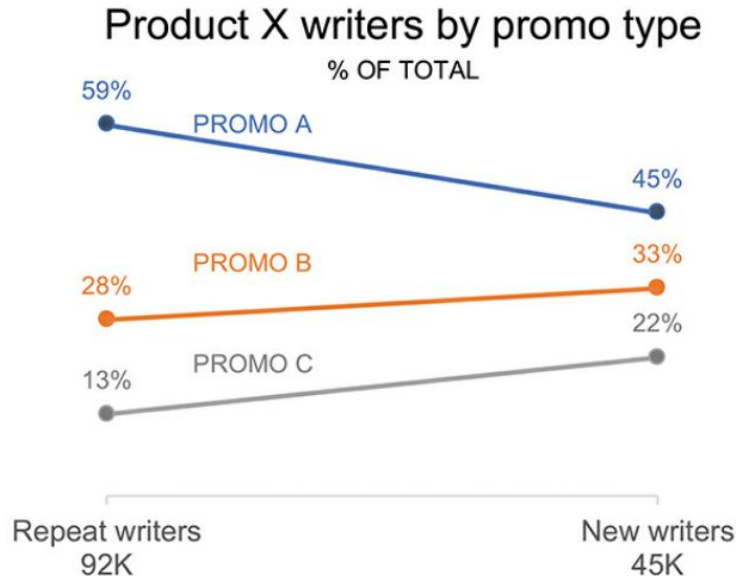
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Example 3.3

There were 45K new writers in the past year.

The distribution across promo types looks different than repeat writers.



Though **Promo A** makes up the biggest segment overall, they contribute less to new writers than to repeat writers.

Both **Promo B** and **Promo C** brought in higher proportion of new writers compared to repeat writers.

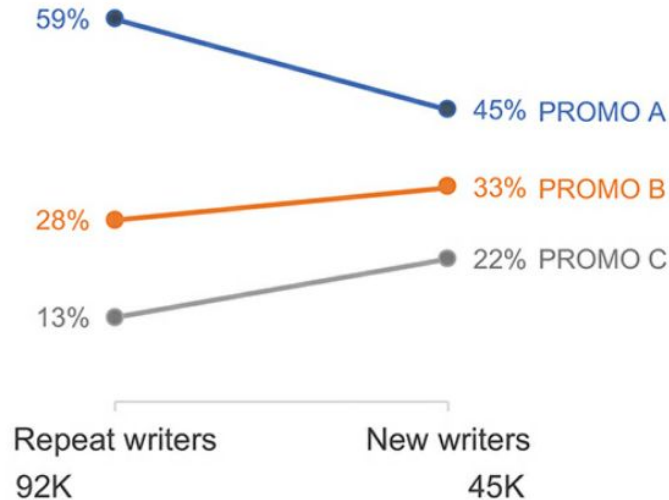
How should we use this data for our future promotion strategy?

There were 45K new writers in the past year.

The distribution across promo types looks different than repeat writers.

Product X writers by promo type

% OF TOTAL



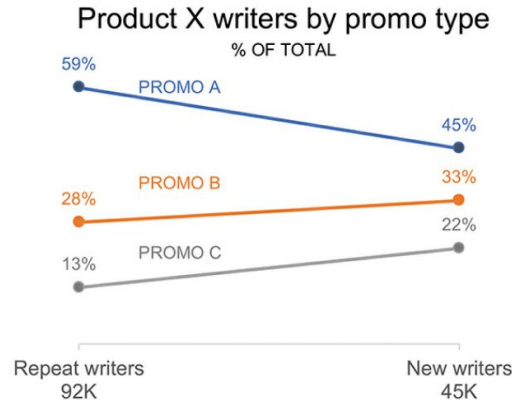
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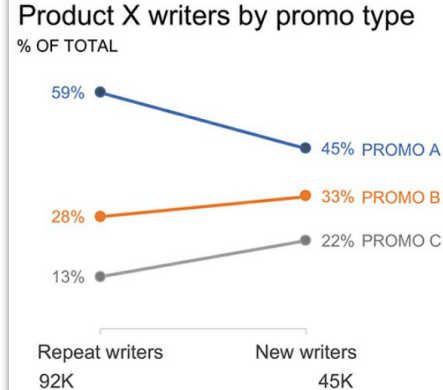
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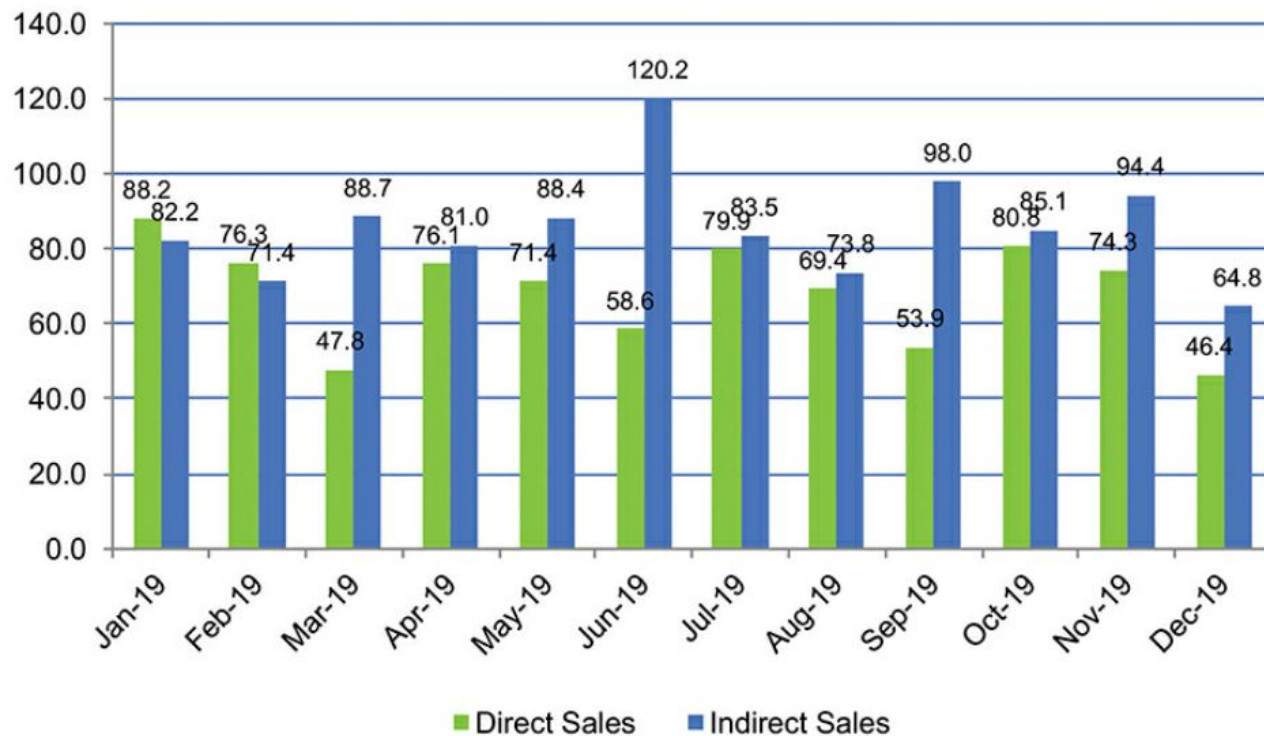
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How should we use this data for our future promotion strategy?

Example 3.4

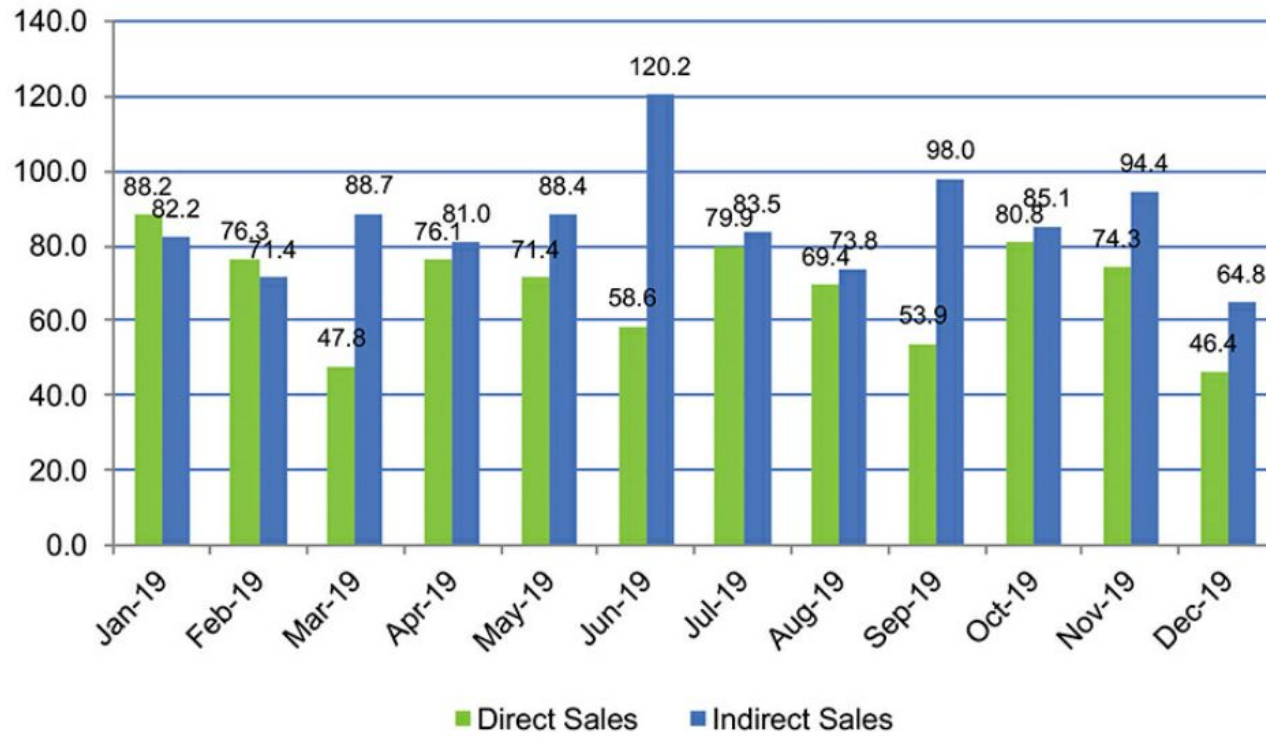
Time to Close Deal

Goal = 90 days



Time to Close Deal

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Time to Close Deal

Goal = 90 days



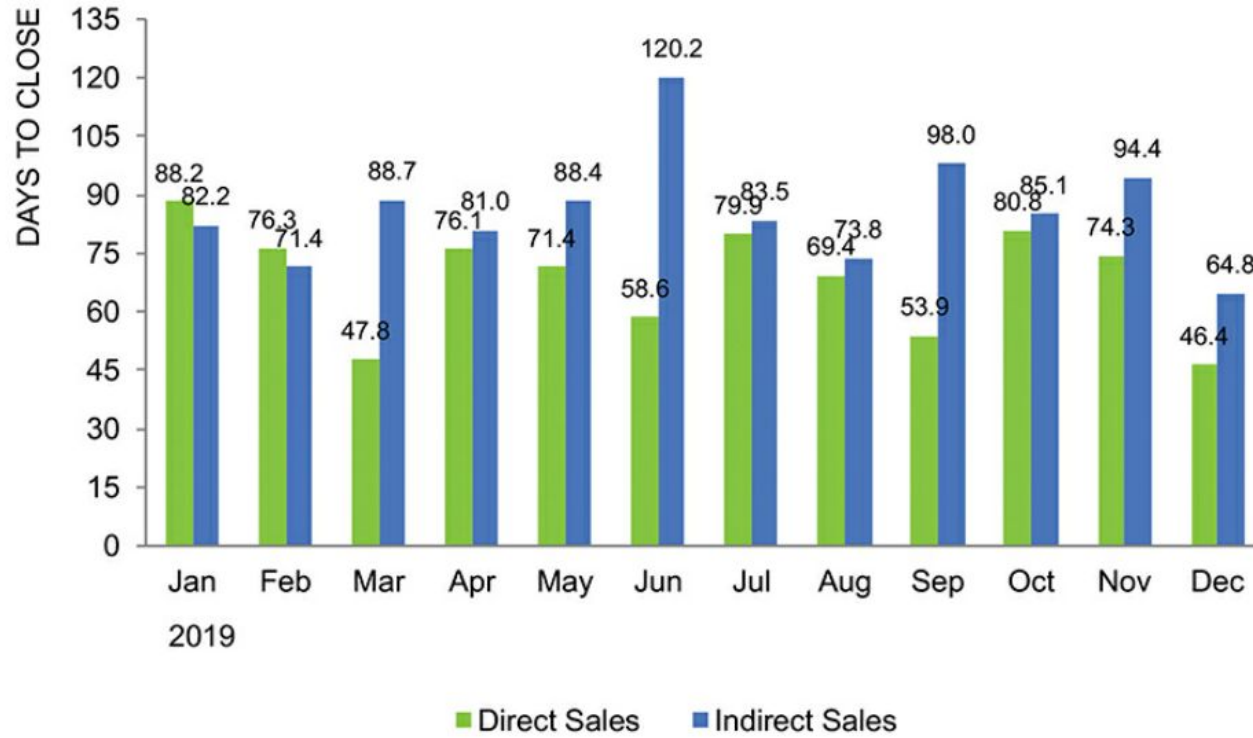
Time to Close Deal

Goal = 90 days



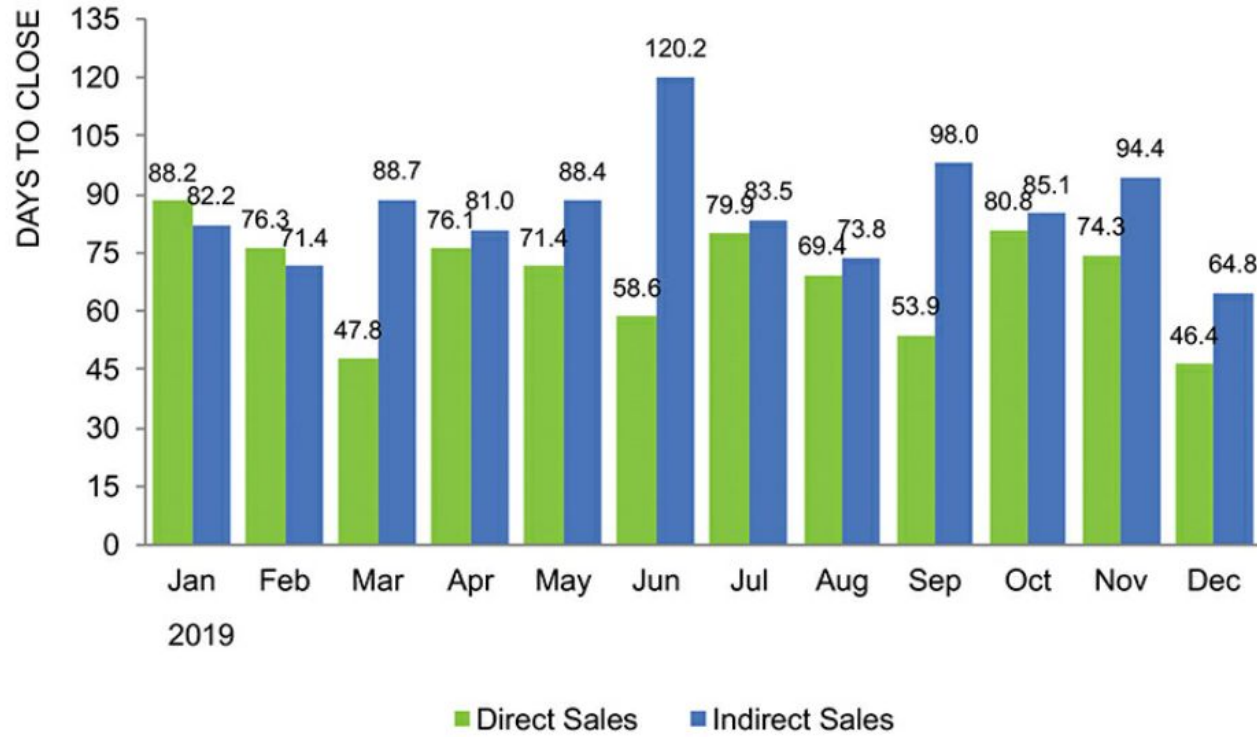
Time to Close Deal

Goal = 90 days



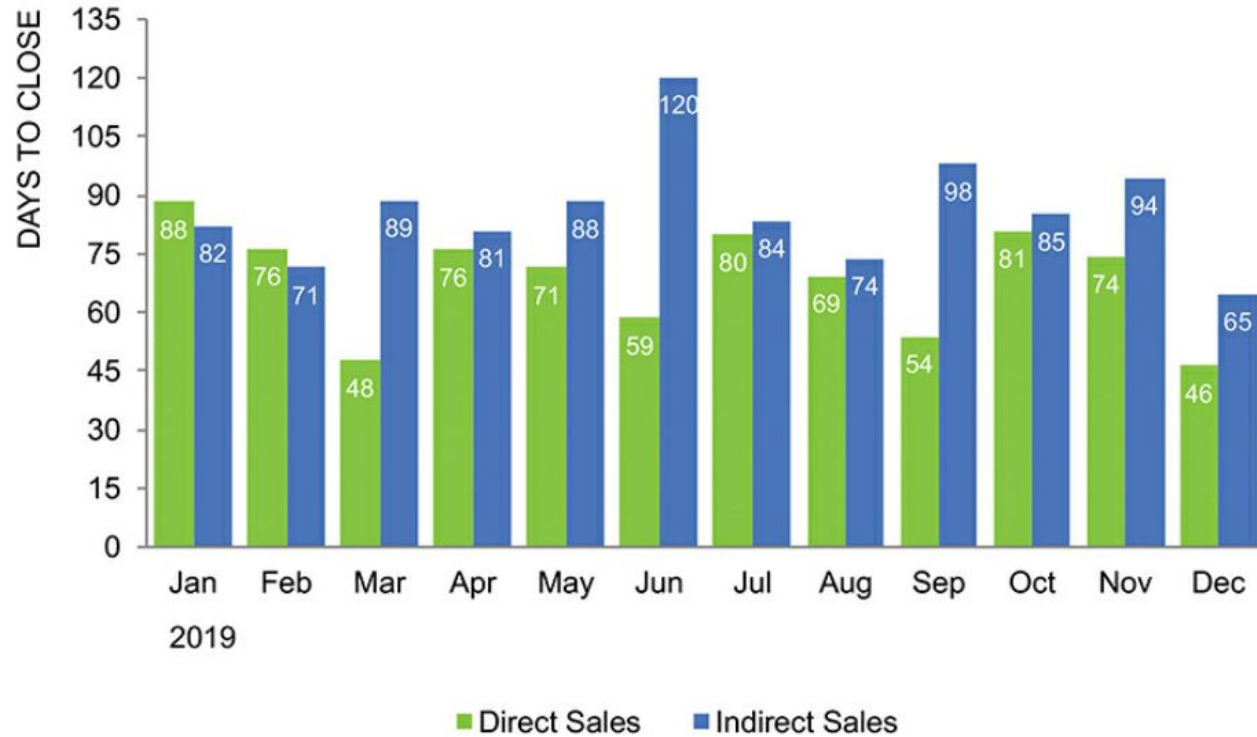
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Goal = 90 days



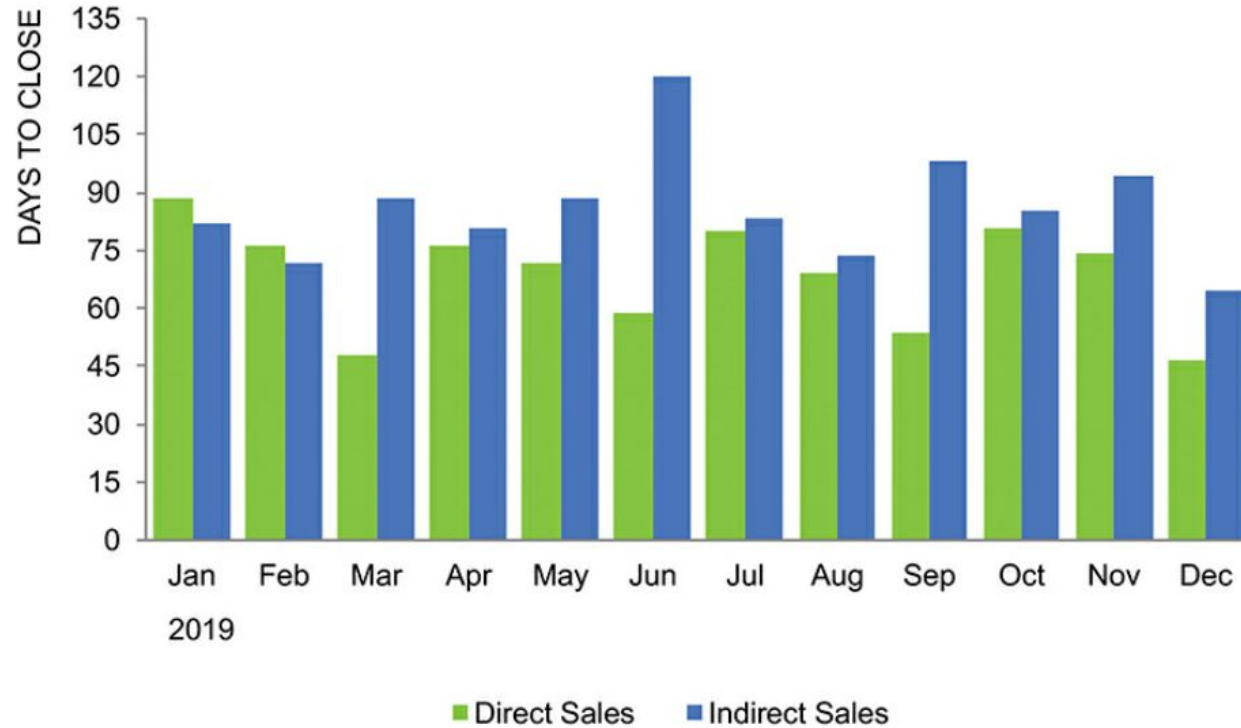
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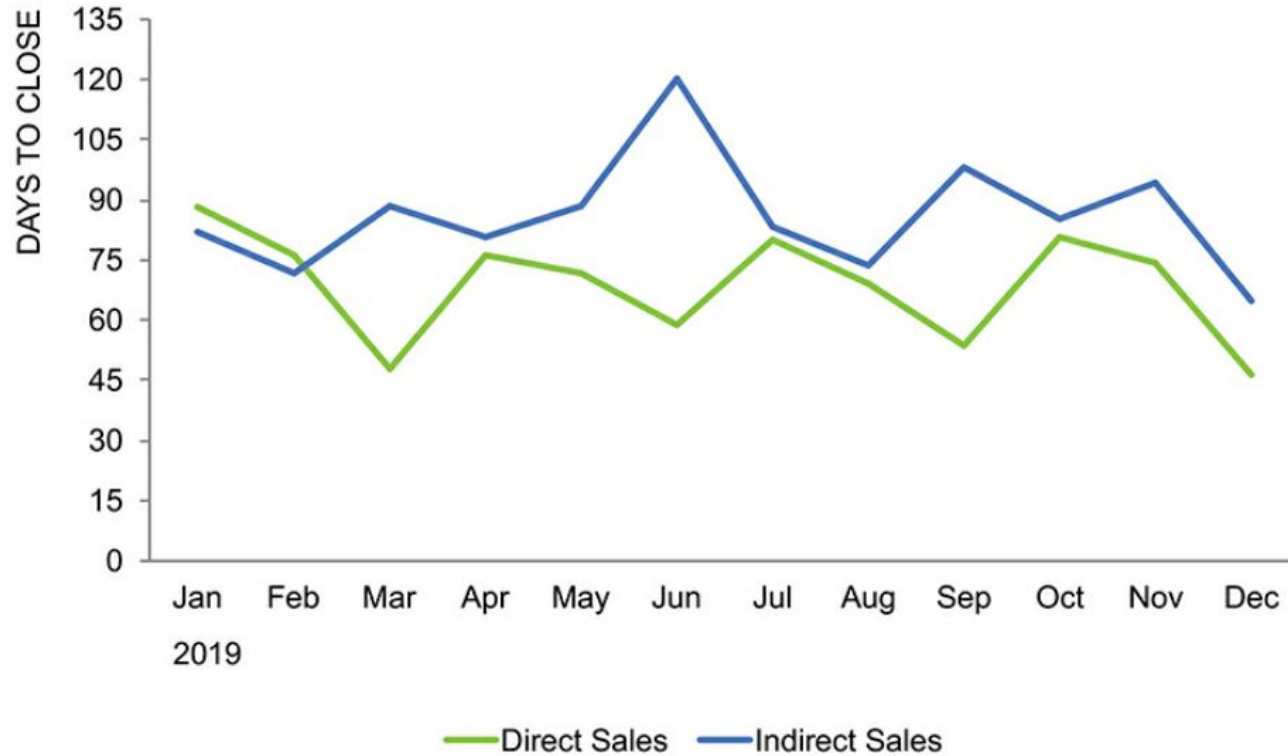
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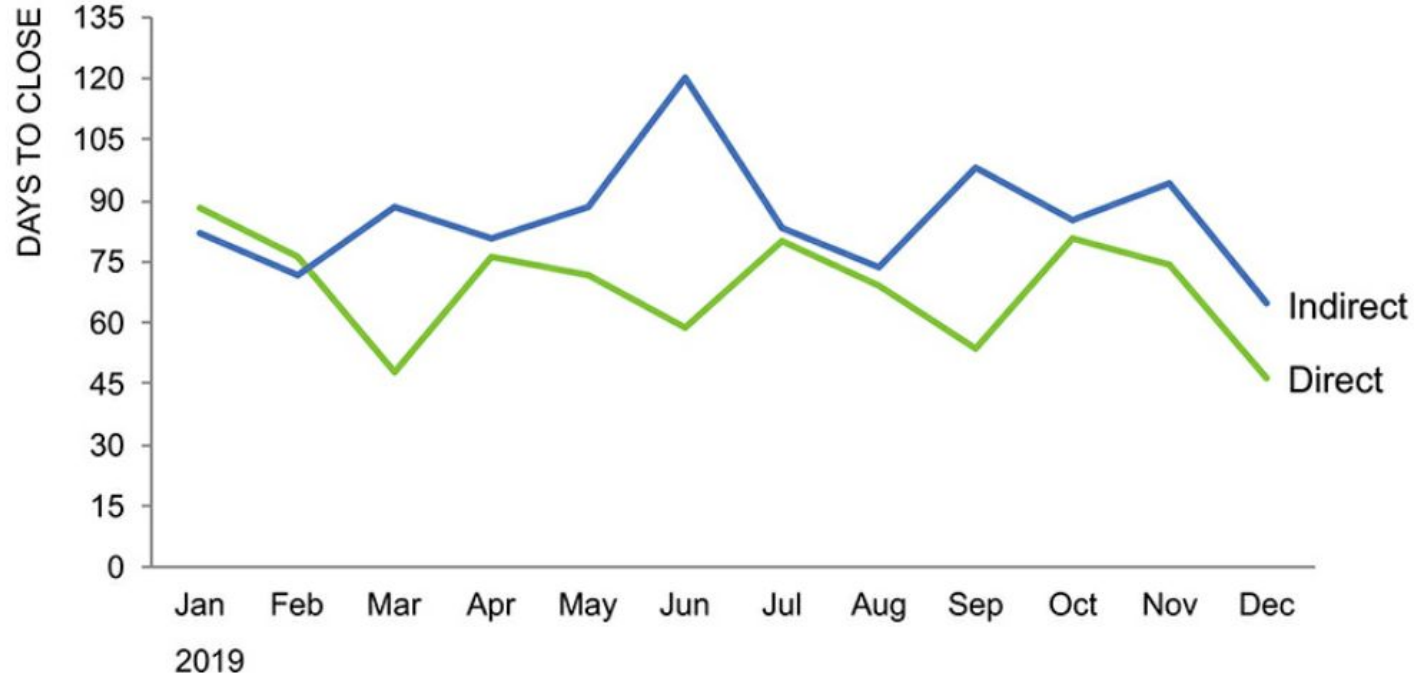
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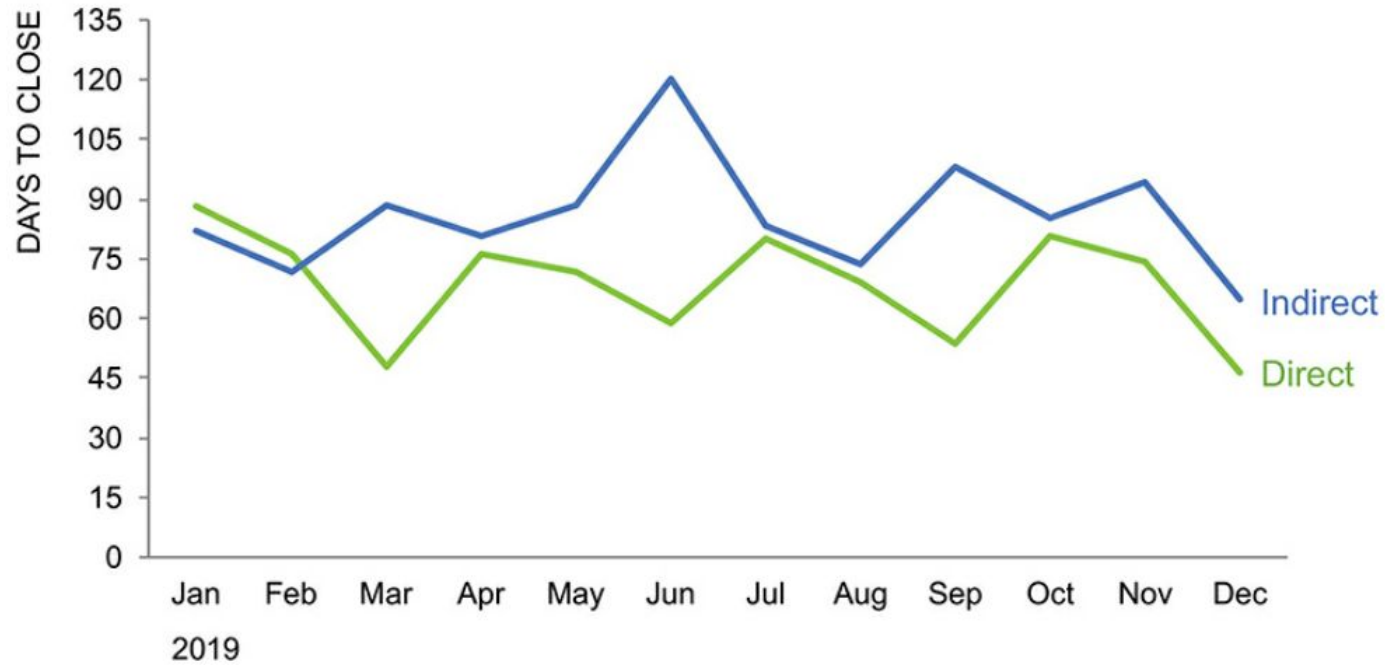
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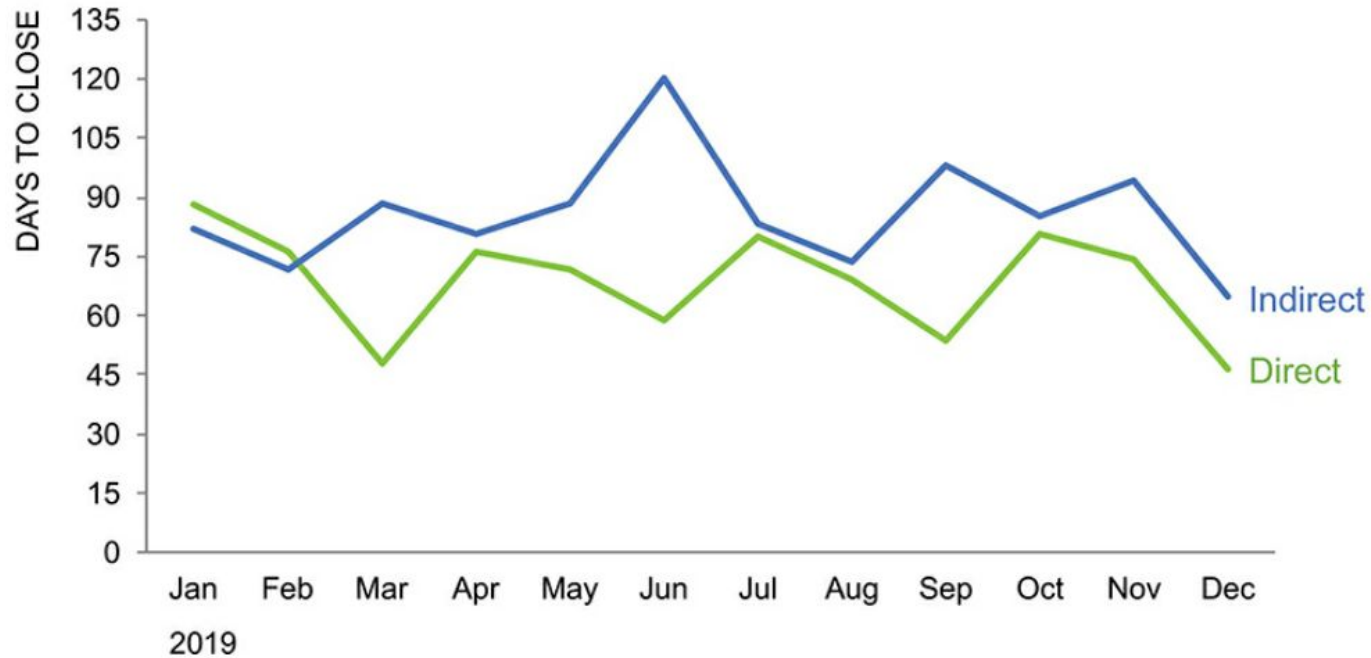
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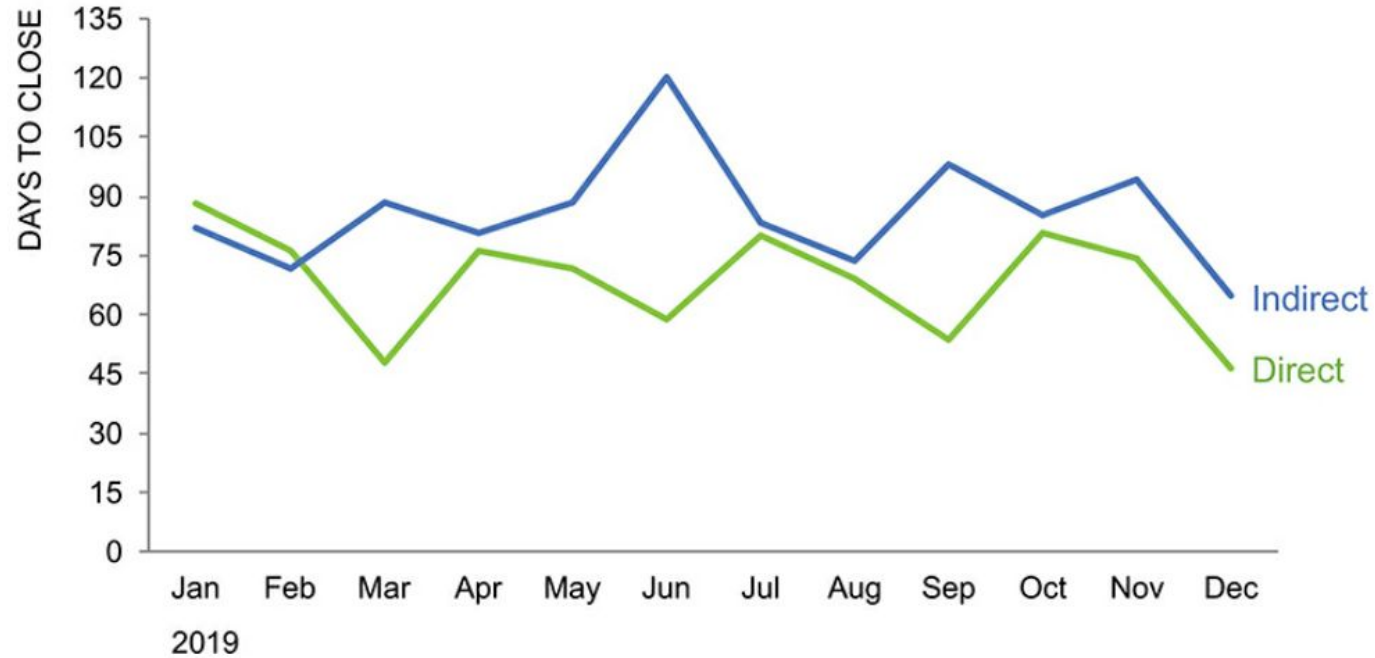
Time to Close Deal

Goal = 90 days

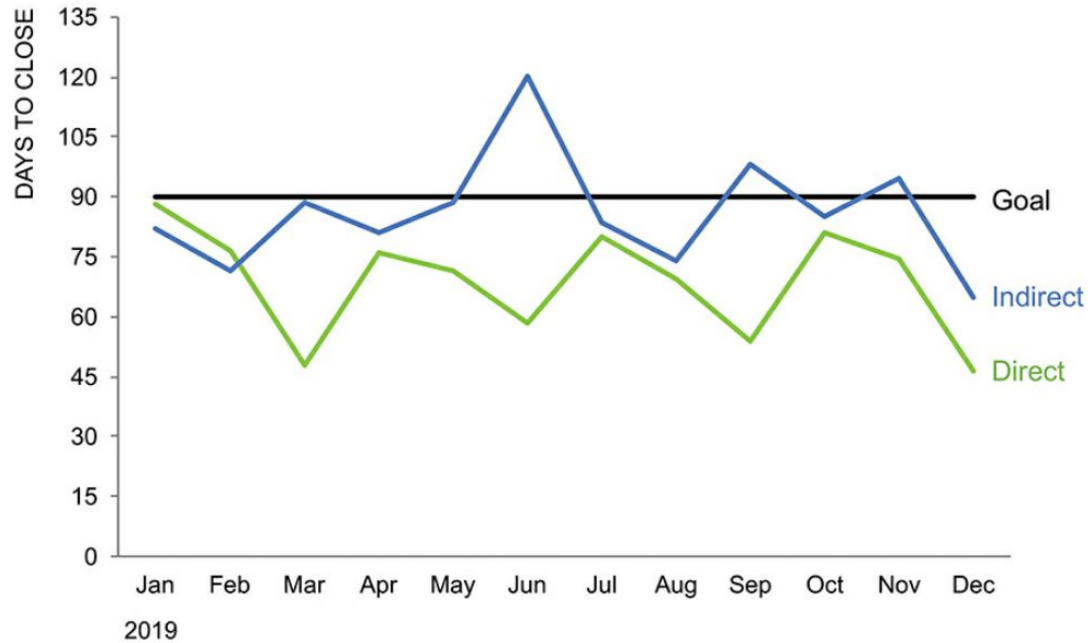


Time to close deal

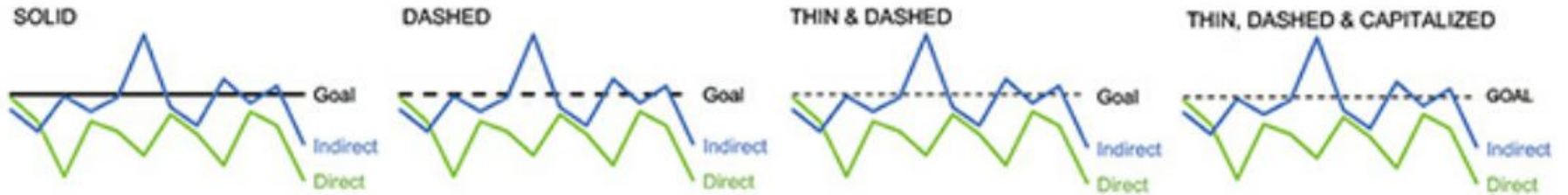
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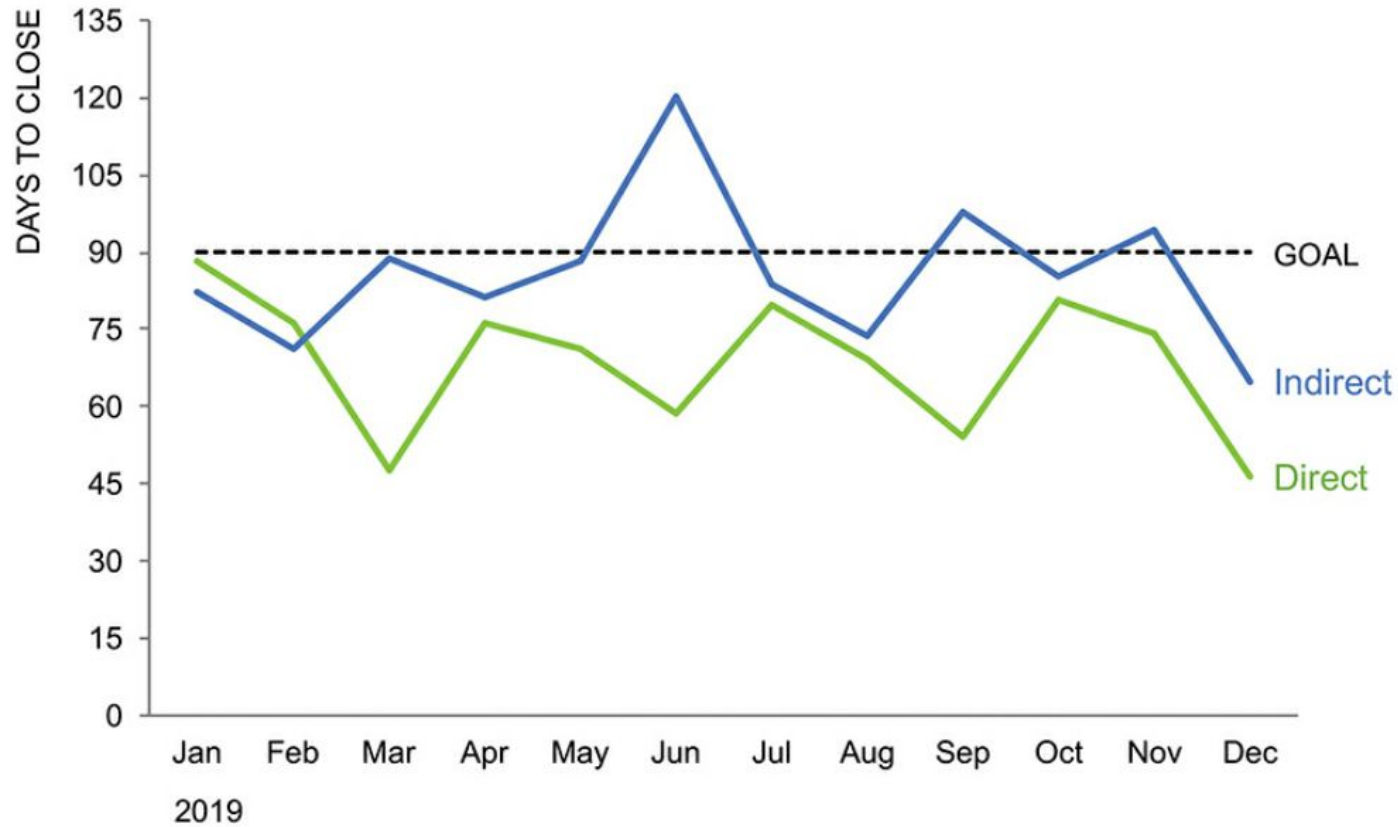
Time to close deal



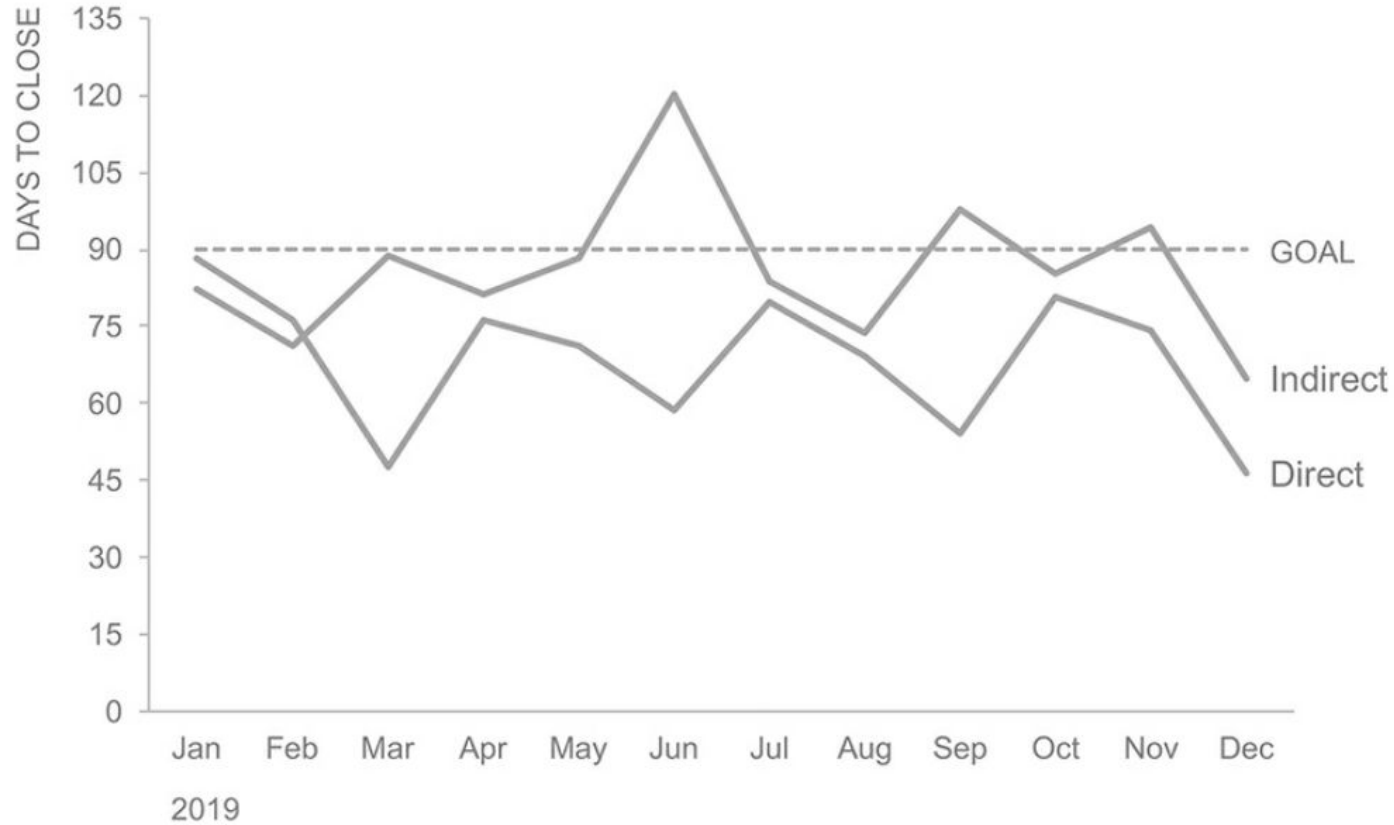
Iterating on **goal** line



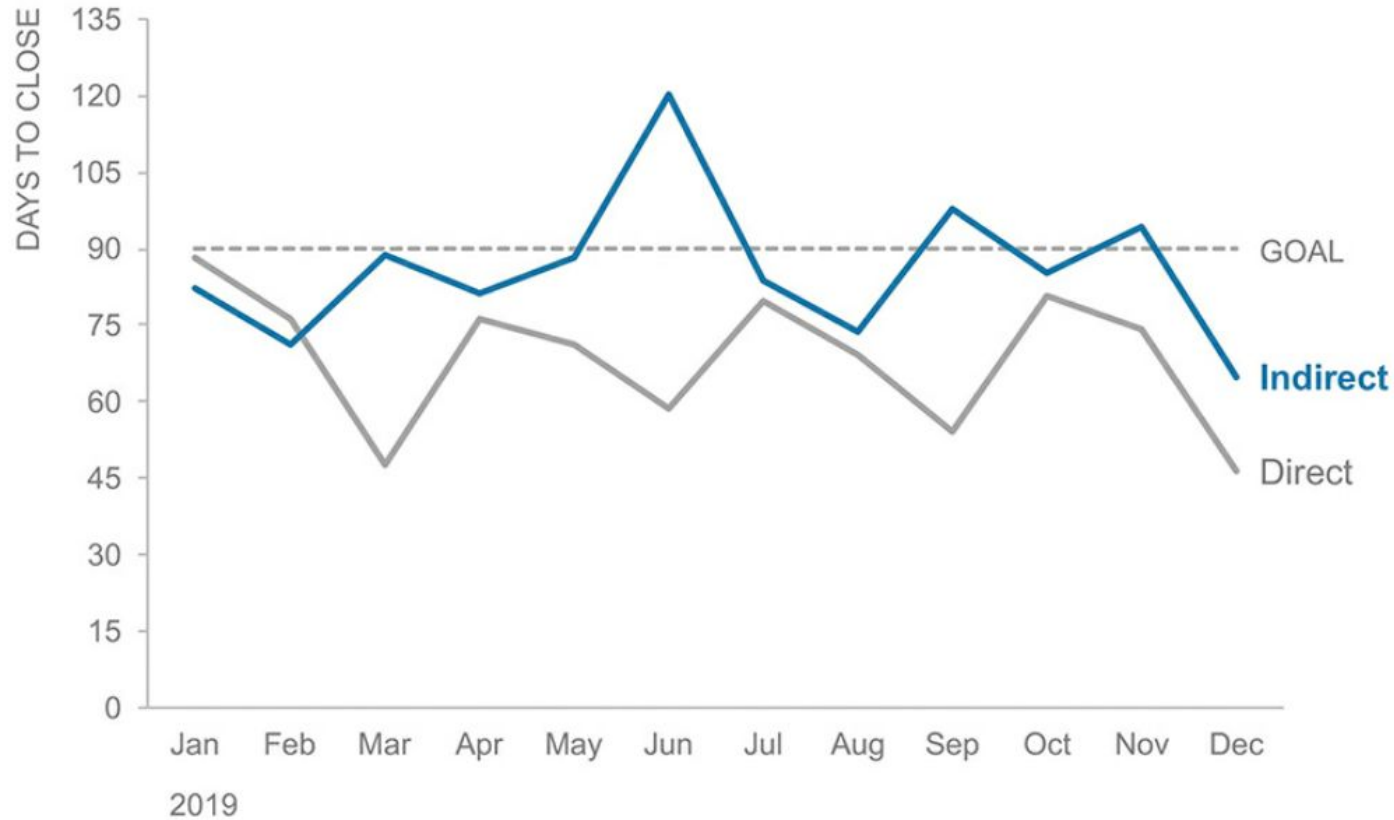
Time to close deal



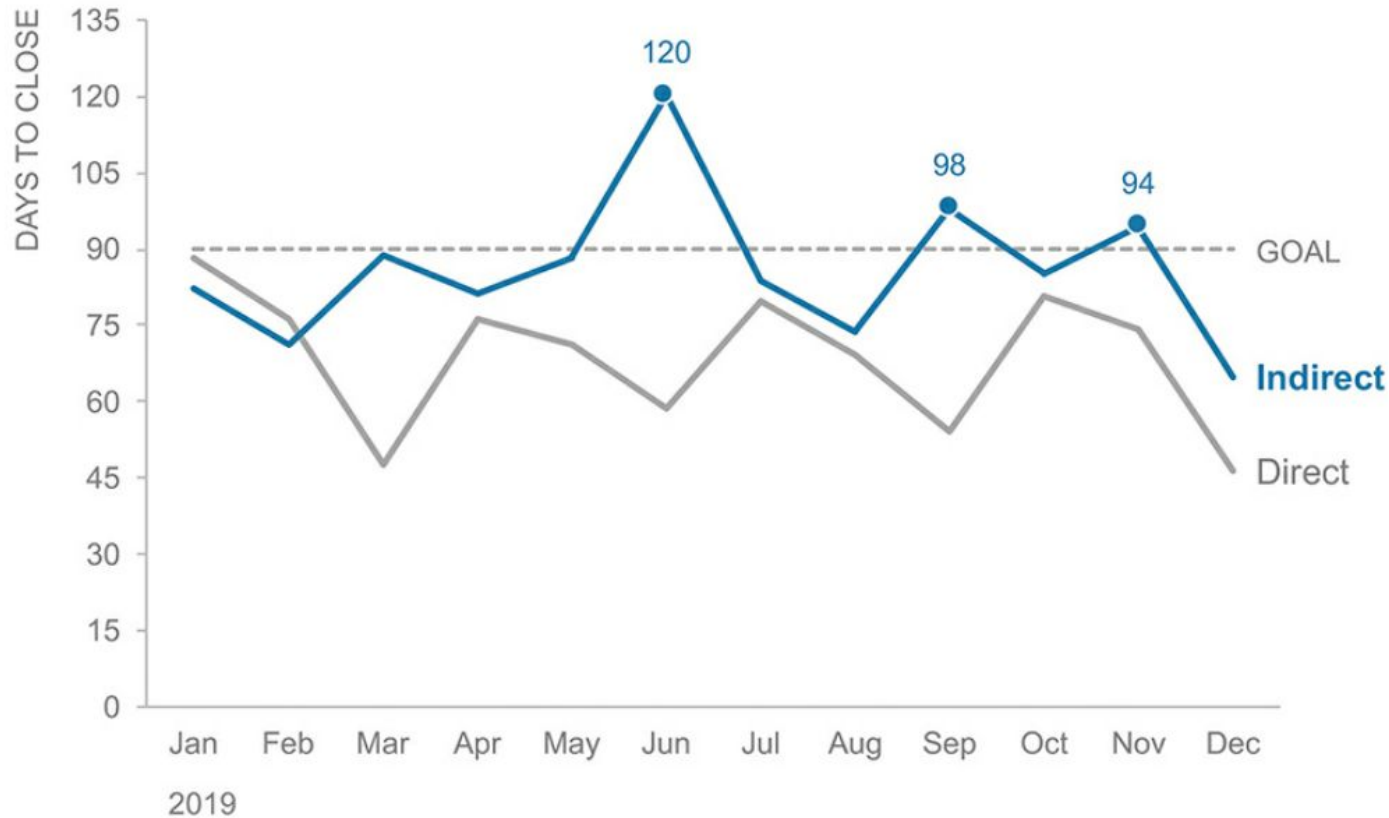
Time to close deal



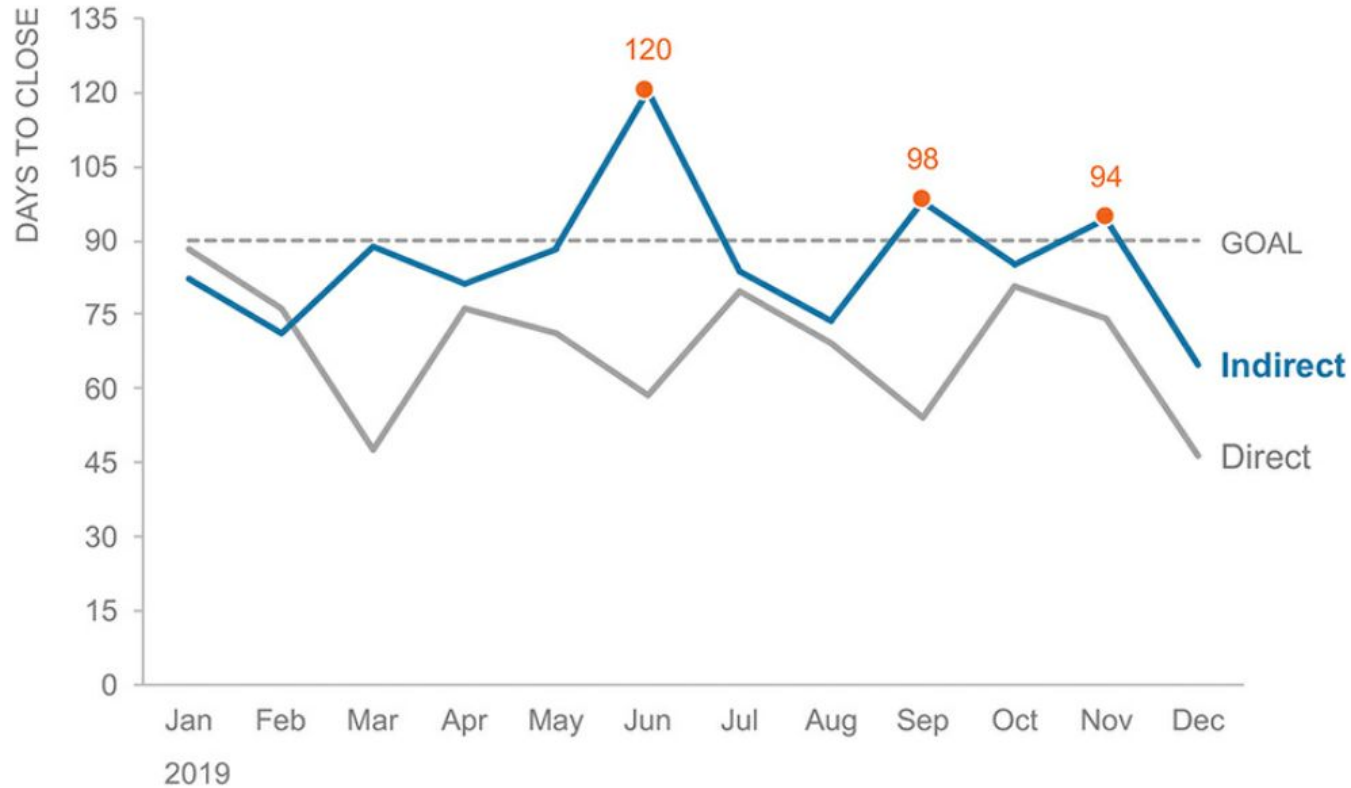
Time to close deal: **indirect varies over time**



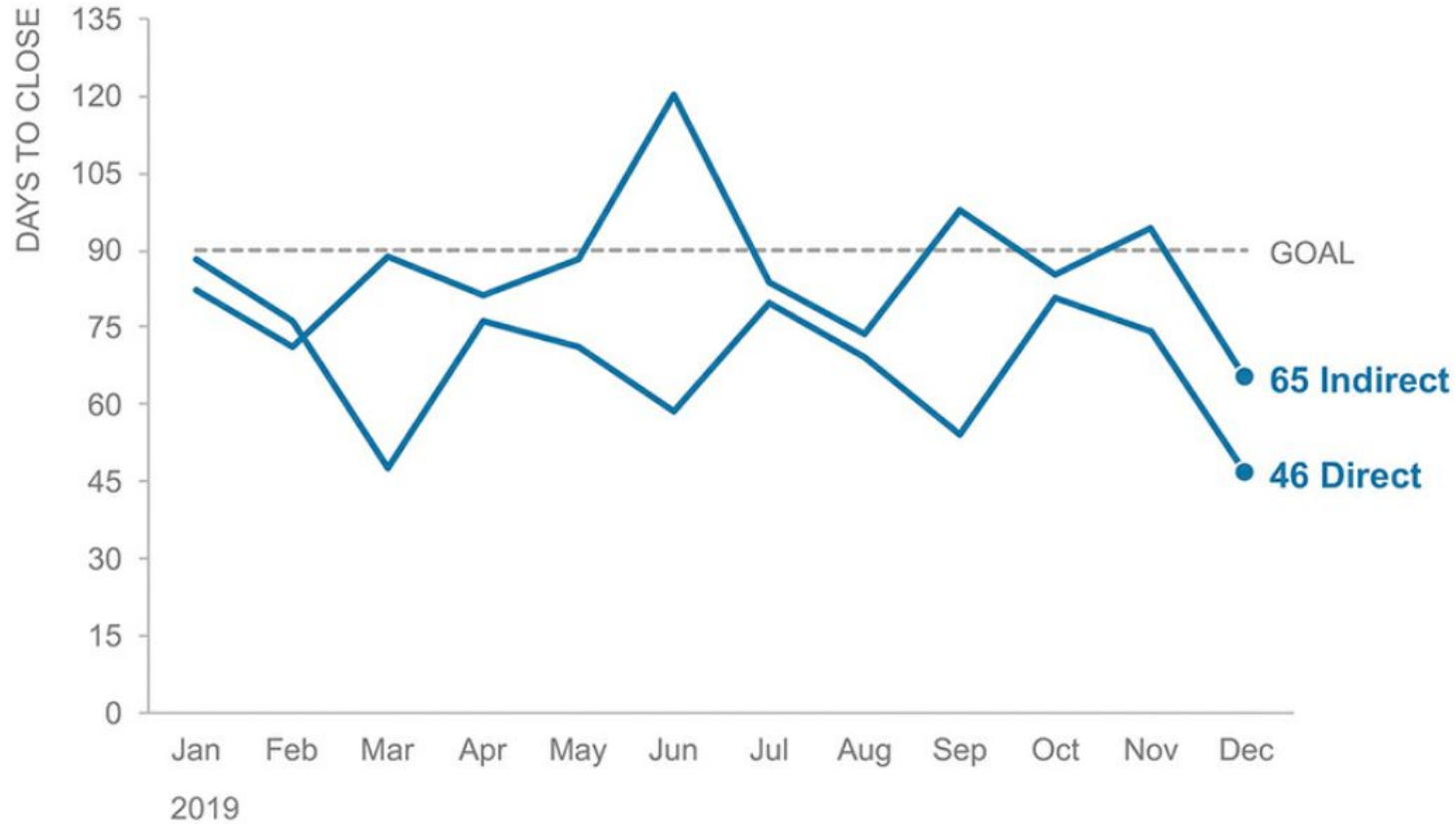
Time to close deal: **indirect sales missed goal 3 times**



Time to close deal: **indirect sales missed goal 3 times**



Time to fill: **beating goal the majority of time**



All resources (exercises & solutions)

Data and solutions for all exercises

Download

