Measuring Client Retention

SEEP AGM

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Why Measure Client Retention?

- We measure things that are important!
- … and retention is very important to a business
- Client retention is a useful (but limited!) measure of client satisfaction
- Client retention has significant implications for institutional costs, productivity, income, market saturation, competitiveness, public image, staff morale, financial sustainability, and many other areas!

How to Measure Retention

- When picking the specifics of *any* management ratio, we first need to ask the question:

  "What is it exactly that you want to know?"

- For example, are you interested in:
  - Projecting portfolio activity?
  - Tracking "Active Clients" (not exclusively borrowers)
  - Answering the question: "Are our clients satisfied?"
- Your decision will affect how you choose to define and measure client retention

The Simple Approach

Retention	80%	(do our clients remain?)
Desertion	20%	(do our clients leave?)

Total	100%	

The Simple Approach

Retention	80%
Desertion	20%

Total	100%

Immediate Renewal

Resting

Graduate/shift to another product

The Simple Approach

Retention	80%
Desertion	20%

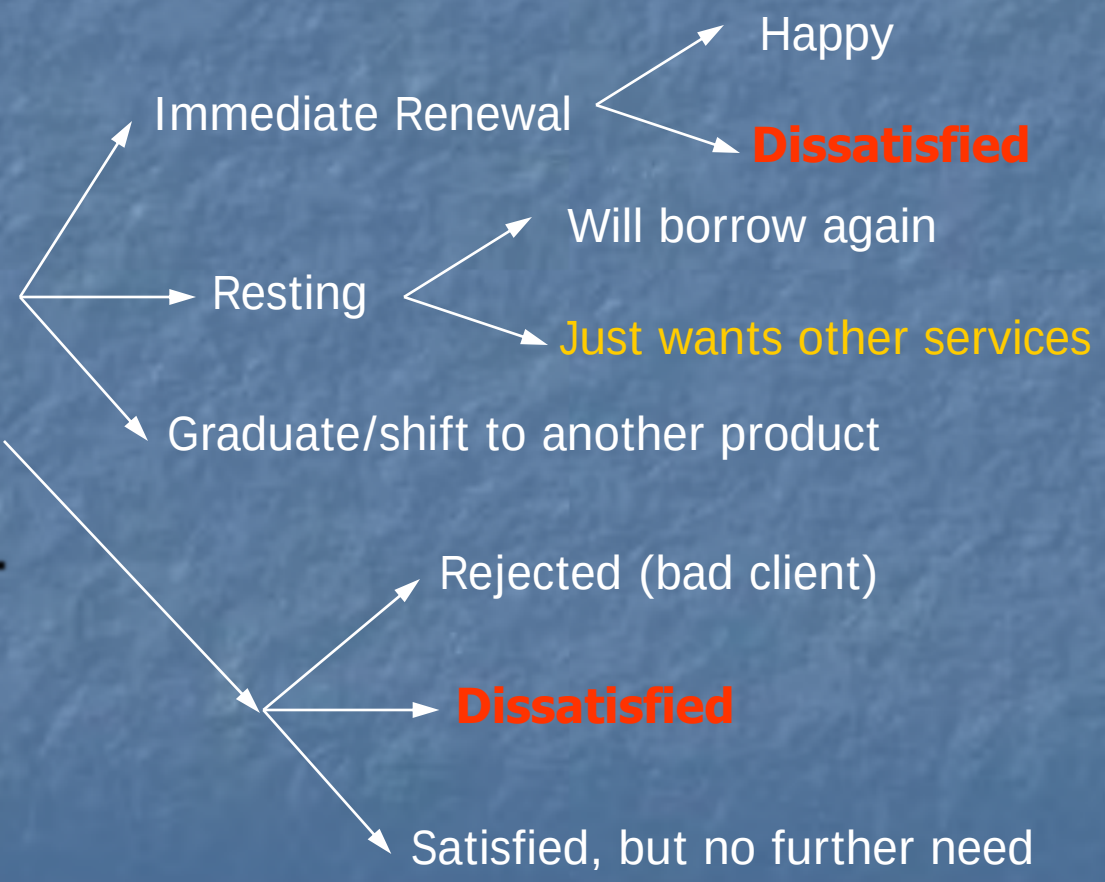
Total	100%

- Immediate Renewal
  - Happy
  - **Dissatisfied**
- Resting
  - Will borrow again
  - Just wants other services
- Graduate/shift to another product

The Simple Approach

Retention	80%
Desertion	20%

Total	100%



The ~~Simple~~ Complex Approach

Retention	80%
Desertion	20%

Total	100%

- Immediate Renewal
  - Happy
  - **Dissatisfied**
- Resting
  - Will borrow again
  - Just wants other services
- Graduate/shift to another product

- Rejected (bad client)
- **Dissatisfied**
- Satisfied, but no further need

Counting Active Clients

Retention	80%
Desertion	20%
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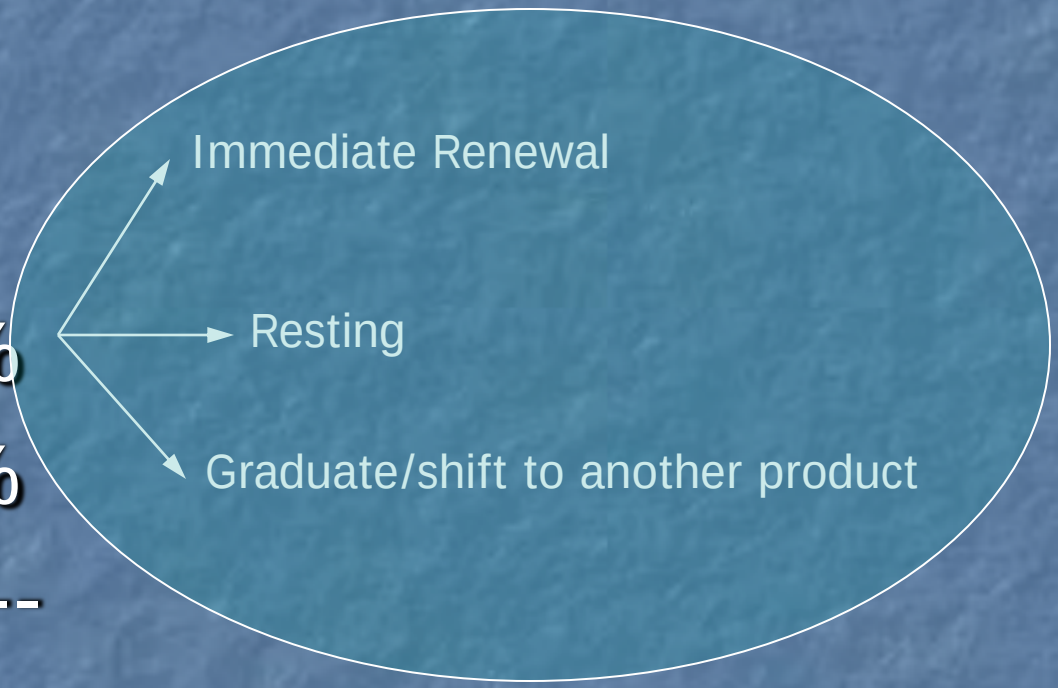
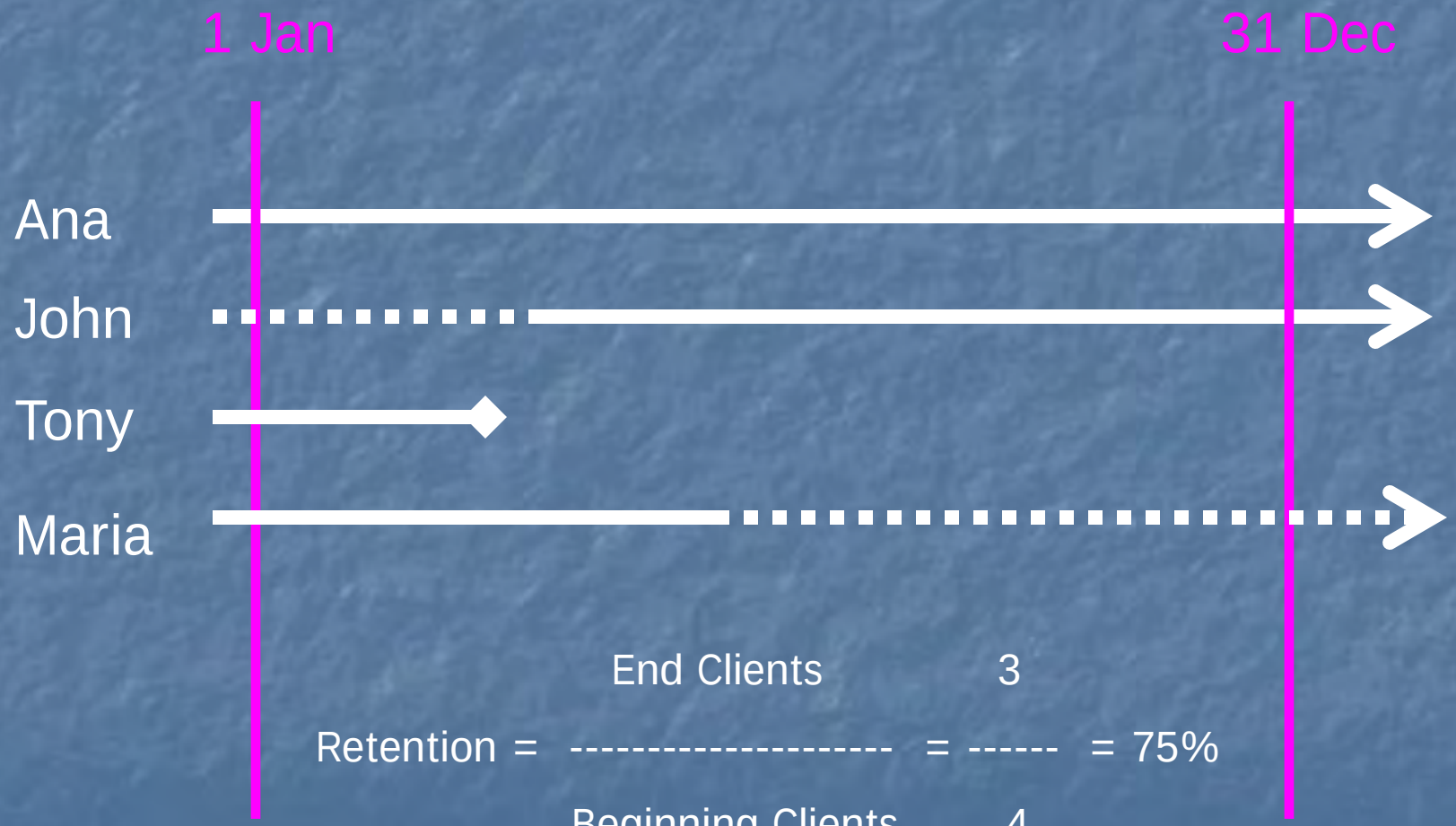
Total	100%



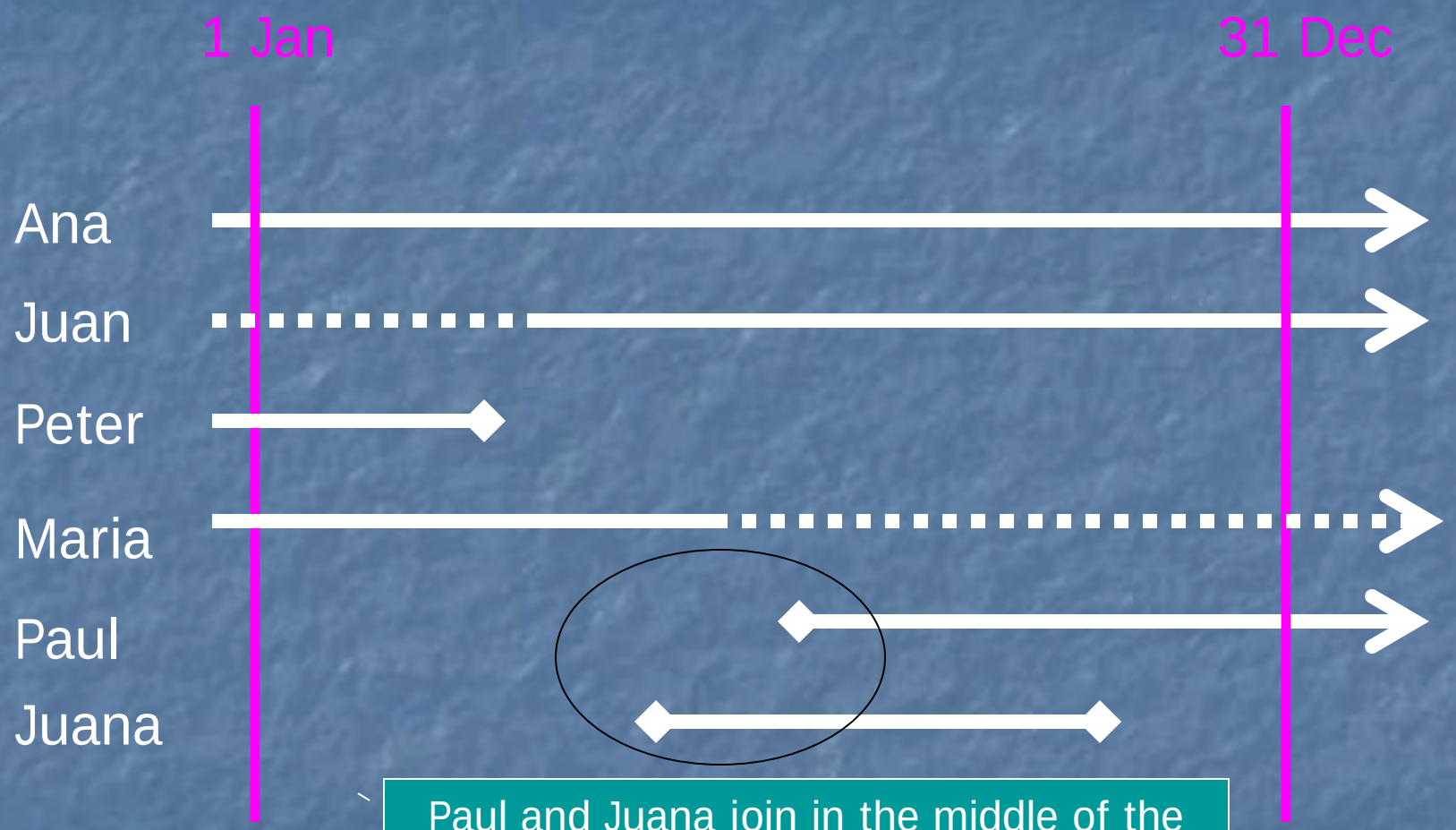
Let's work out a way to count "Active Clients", which captures all three of these categories

Using a Timeline…



$$\text{Retention} = \frac{\text{End Clients}}{\text{Beginning Clients}} = \frac{3}{4} = 75\%$$

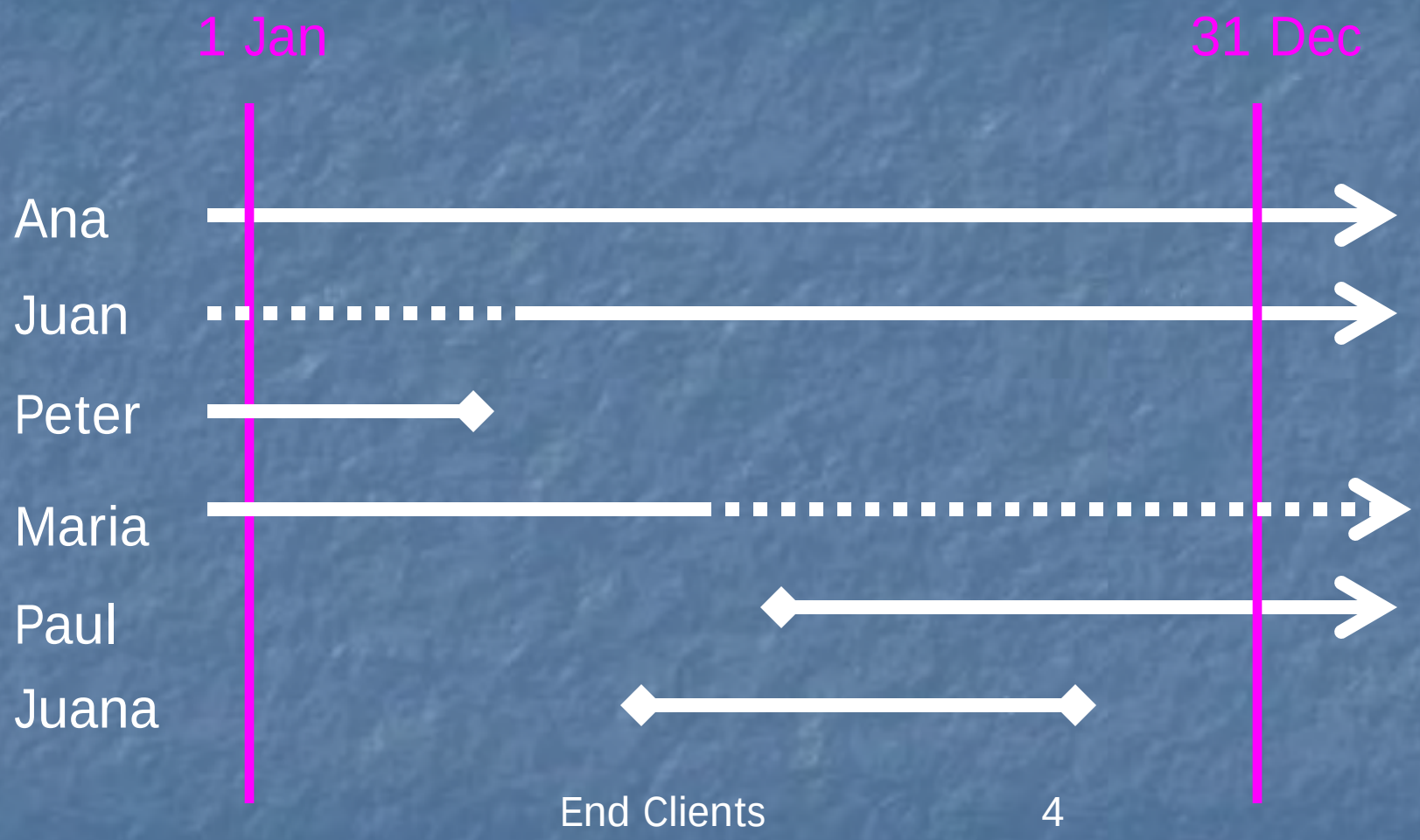
Complicating the Timeline



Paul and Juana join in the middle of the year. Juana pays her loan and leaves.

How can we include them in our formula?

Complicating the Timeline



Retention = ---------- = --------- = 67%

Begin Clients + New Clients 4 + 2

So is this what the Industry uses?

No, many use:

$$\text{Desertion} = \frac{\text{Begin Clients} + \text{New Clients} - \text{End Clients}}{\text{Begin Clients}}$$

After doing lots of algebra (trust me on this…) this converts into:

$$\text{Retention} = \frac{\text{End Clients} - \text{New Clients}}{\text{Begin Clients}}$$

Compare with ours:

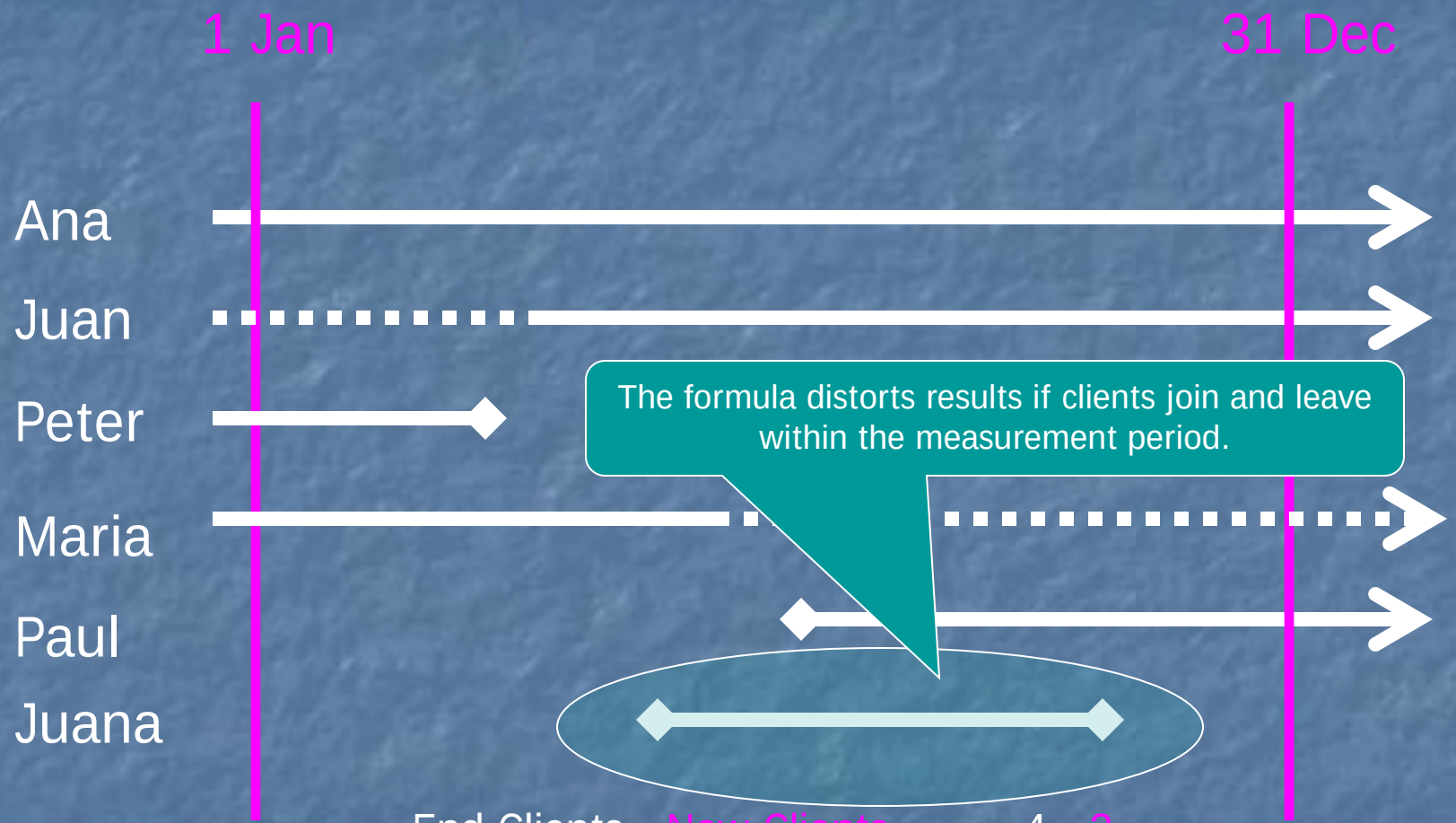
$$\text{Retention} = \frac{\text{End Clients}}{\text{Begin Clients} + \text{New Clients}}$$

Testing our two formulas

	"Old" Formula End Clients - New Clients ---------- Begin Clients	Our formula-in-development End Clients ---------- Begin Clients + New Clients
Begin = 4 New = 2 End = 4	4 – 2 / 4 = 2 / 4 = 50%	4 / 4 + 2 = 4 / 6 = 67%
Begin = 1000 New = 2000 End = 2000	2000 – 2000 / 1000 = 0 / 1000 = 0%	2000 / 1000 + 2000 = 2000 / 3000 = 66%
Begin = 100 New = 2000 End = 1900	1900 – 2000 / 100 = -100 / 100 = -100%	1900 / 100 + 2000 = 1900 / 2100 = 90%

Which formula seems to give more logical results?

Visualizing the "Old" Formula

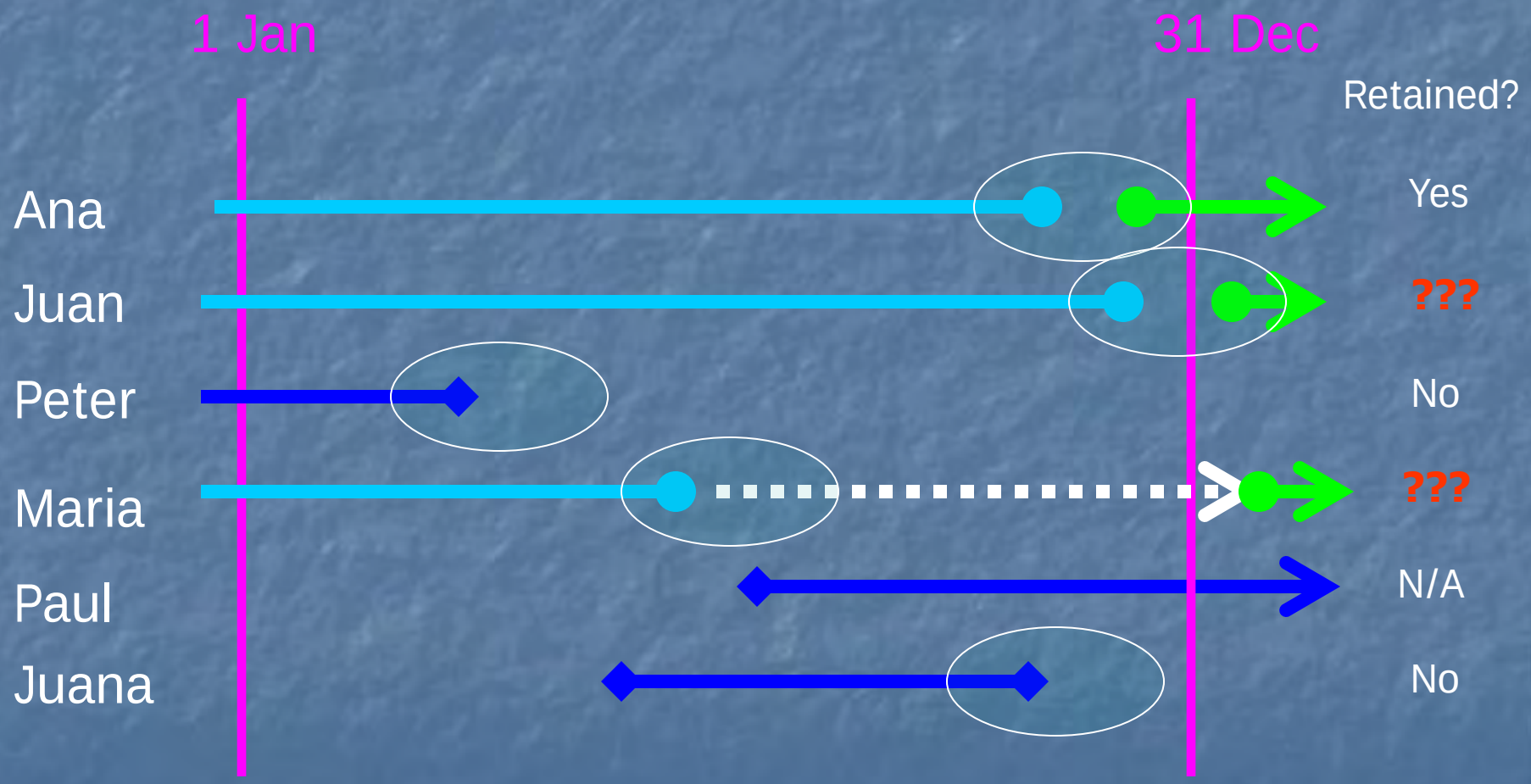


$$\text{Retention} = \frac{\text{End Clients} - \text{New Clients}}{\text{Begin Clients}} = \frac{4 - 2}{4} = 50\%$$

An Alternative Approach: Tracking Loan Renewals (the Microfin formula)

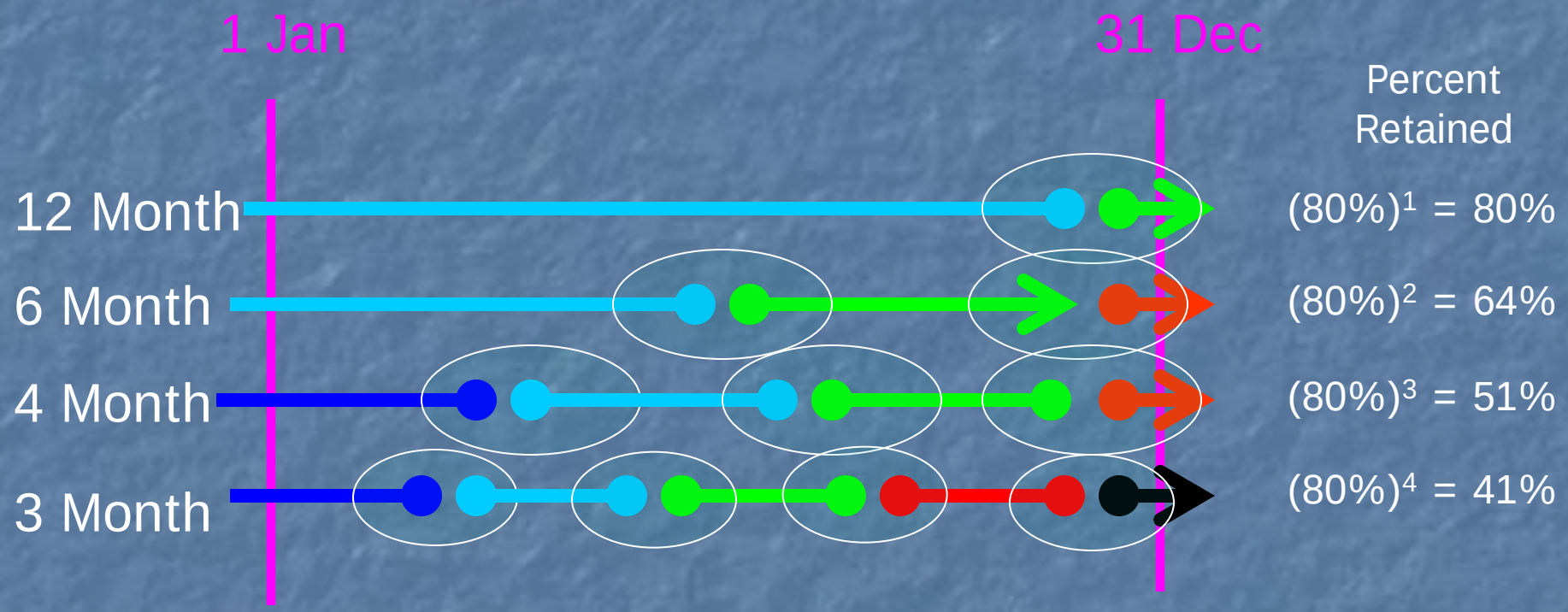
- Strictly speaking, we are interested in knowing if a client buys our product again when they have used up their previous purchase, i.e., when they have reached a "decision point".
- In other words, when they finish paying one loan, do they request and receive a second loan?
- If 100 clients pay off their loan and 80 of them receive a follow-up loan, our retention rate is 80% (80 / 100) (This is what Microfin uses)
- Can things really be this easy? Unfortunately, no.

Microfin Formula
Problem 1: Cutoff Dates



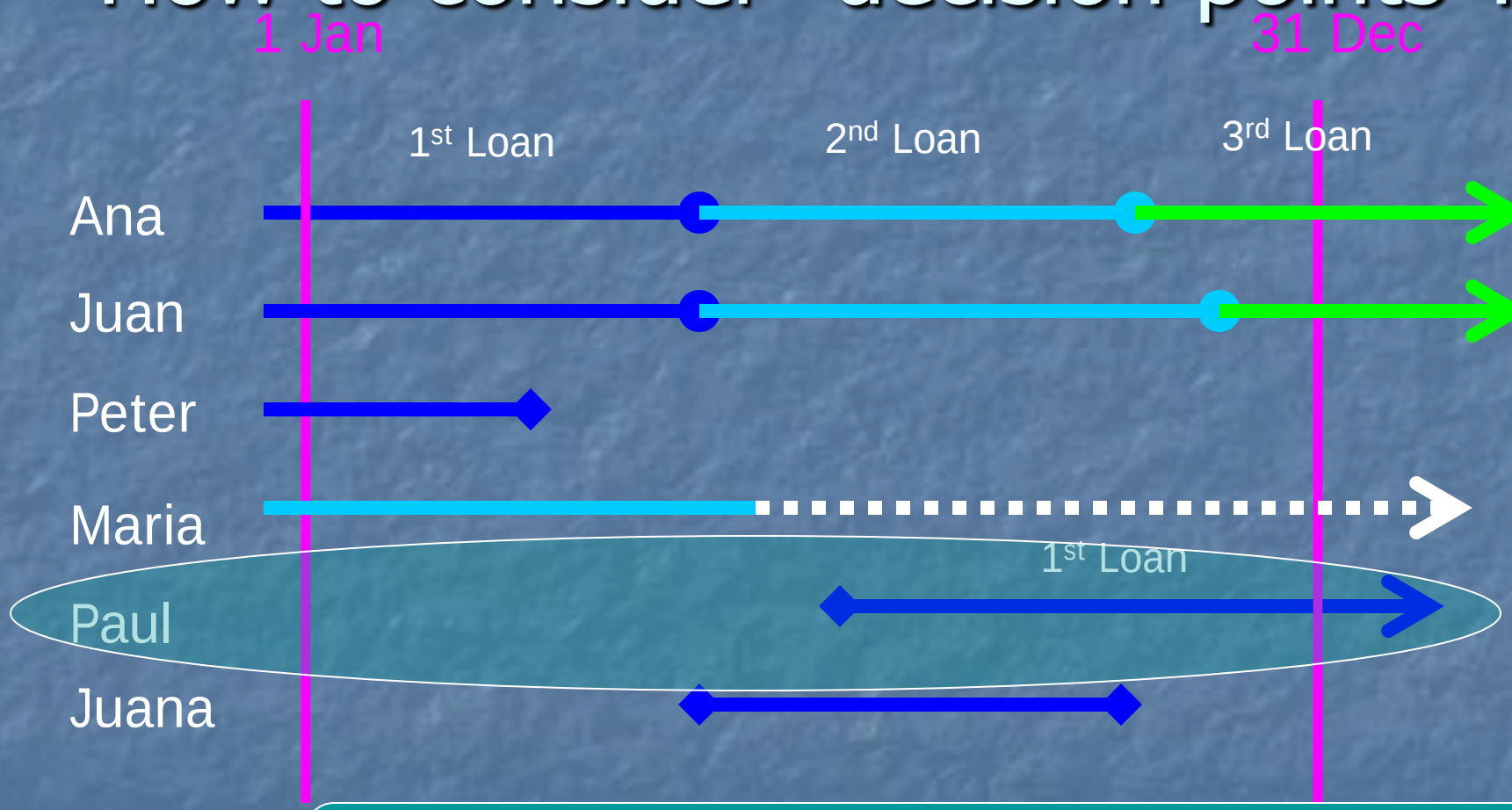
Retention would be 3 of 5 (60%) but depending on our measurement system we may only measure 1 of 5 (20%).

Microfin Formula
Problem 2: Loan Term



An 80% Retention Rate "per cycle" will result in very different number of clients remaining after one year, i.e. the "Annualized Retention Rate".
A 12-month loan term will have 80 clients left after one year; a 3-month loan term will have only 41 clients.

A problem with the Timeline: How to consider "decision points"?



Wait! Paul is still on his first loan and has not had a chance to leave. He really shouldn't be included in our retention formula! Nor, in fact, anyone else who did not have a decision point during the measuring period, i.e., clients who start and end the period on the same loan.

So now we have a real mess…

- The "old" industry formula distorts results in several ways, and our "new" formula-under-development" also doesn't work
- The margin of error increases if:
  - The loan term (i.e., the clients first opportunity to leave) is long relative to the measuring period
  - The institution is growing, with many clients still on their first loan

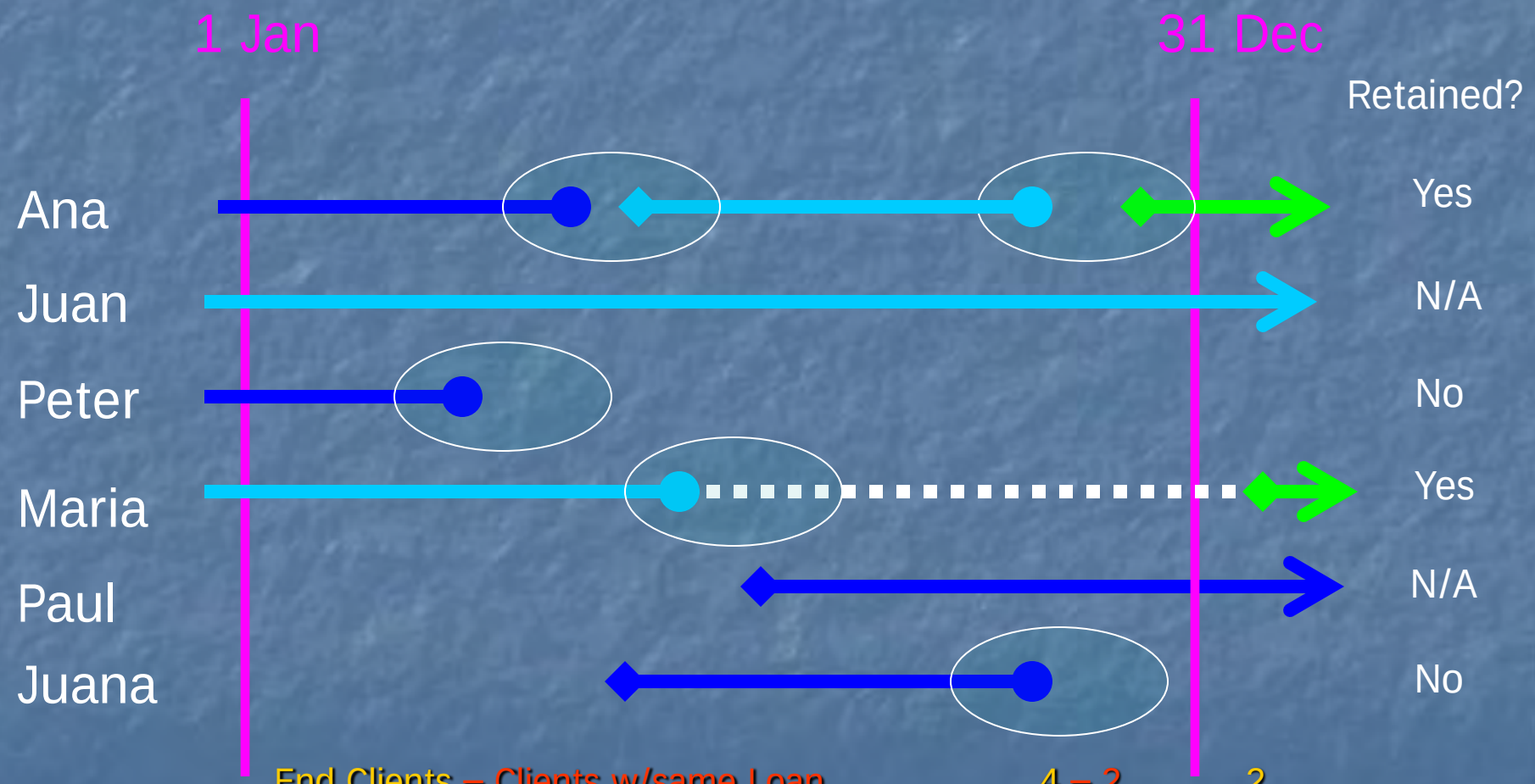
Is there a way out?

1) Can we adapt our formula to exclude clients who are still on their first loan?
2) Can we quantify how many clients are on their same loan, who haven't reached a "decision point"?

Yes! We can use the following formula:

$$\text{Retention} = \frac{\text{End Clients} - \text{Clients on same loan}}{\text{Begin Clients} + \text{New Clients} - \text{Clients on same loan}}$$

Measuring Loan Renewals: Identifying Decision Points



$$\text{Retention} = \frac{\text{End Clients} - \text{Clients w/same Loan}}{\text{Begin Clients} + \text{New Clients} - \text{Clients w/same Loan}} = \frac{4 - 2}{4 + 2 - 2} = \frac{2}{4} = 50\%$$

Conclusion

- It now appears there may be a way that we can measure Retention of "Active Clients"
  - We need to define and track Active Clients distinct from Active Loans
  - We can come close with the formula:

$$\text{Retention} = \frac{\text{End Clients}}{\text{Begin Clients} + \text{New Clients}}$$

  - If we can quantify "active first loans" at the end of the reporting period we can have a precise measure with the formula:

$$\text{Retention} = \frac{\text{End Clients} - \text{Active First Loans}}{\text{Begin Clients} + \text{New Clients} - \text{Active First Loans}}$$