

Lecture 6 Customer Analytics – CLV (Contractual)

Questions received via email

1. [Noa];

Slide 15 - CLV calculations; you rewrite the summation into the following

$$= m \sum_{n=0}^{\infty} \left(\frac{p}{1+d} \right)^n = m \left(1 + \frac{mp}{1+d} + \frac{mp^2}{(1+d)^2} + \dots \right) \quad \text{Geometric series}$$

(Handwritten note: $\sum_{n=0}^{\infty} k^n = \frac{1}{1-k}$)

However, as we already have m outside of the brackets, should $mp/(1+d)$ not simply be $p/(1+d)$ as we replace n by 1 we end up with just the part between the brackets?

2. Slide 36 - Period 1 for blue model; you say the retention rate is 80%. Which is calculated by $r(1)$ on the slide, right? But why do we set t equal to 1? Is that because we are interested in 1 additional period or is there another reason?
3. Slide 43 - RLV under BG model; for the RLV we have to divide by how long people have been a customer for. But why do we only divide for the RLV and not for the CLV? And should we always divide by $S(1)$? Does it matter whether your point of view is just after renewal or just before renewal in this case as well?