

Guess Estimate \Rightarrow PI

- ① \Rightarrow Clarify
- ② \Rightarrow Analyse
- ③ \Rightarrow Break it down
- ④ \Rightarrow Calculate
- ⑤ \Rightarrow Validate

Case Study \Rightarrow

- ⑥ \Rightarrow Games

Company has 2 types of games

- (i) \Rightarrow Free / Paid
- (ii) \Rightarrow Upgrade
- (iii) \Rightarrow Ads
- (iv) \Rightarrow Promotions
- (v) \Rightarrow Operation \Rightarrow Server Cost
- (vi) \Rightarrow Maintenance

Arcade Mode (free)

- \Rightarrow No entry fee
- \Rightarrow No Prize
- \Rightarrow Practice
- \Rightarrow Upgrade (not free)

Tournament Mode (Paid)

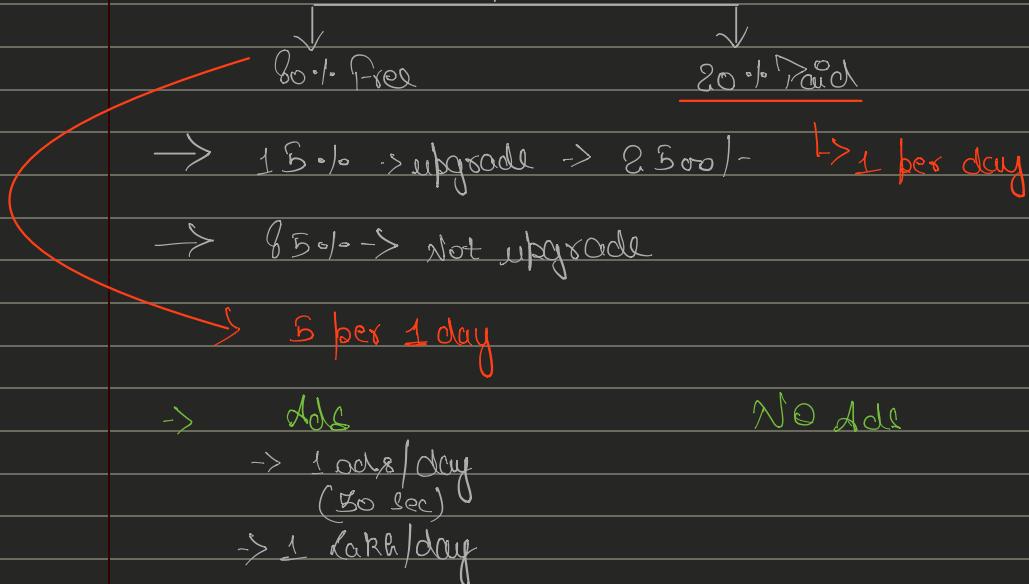
Income

- ① \rightarrow ads
- ② \rightarrow Entry fee
- ③ \rightarrow Upgrade

Expenditure

- \rightarrow Promotion
- \rightarrow celeb
- \rightarrow youtube
- \rightarrow Prize for winners
- \rightarrow Maintenance
- \rightarrow operations
- \hookrightarrow servers

\rightarrow New Game \rightarrow 10,000 active user (Assuming)



Budget for Promotion

$$\hookrightarrow 10k/day \approx 4.5L/M \rightarrow \text{youtube}$$

$\rightarrow 5L \rightarrow$ one time cost

Budget for Maintenance & Services

\rightarrow 5L/M \rightarrow Maintenance
 \rightarrow 5L/M \rightarrow Services

Incoming Cash flow \rightarrow

Active Users \rightarrow 5K

No of Paid Users \rightarrow 1K
(Paid) 4K
(Free)

Revenue from Paid Users \rightarrow

Rev (₹) = No of Paid Users

\times
No of Tournament

\times
Entry Prize

\times
No of Days

$$\text{Rev (₹)} = 1000$$

$$\begin{array}{rcl} \times & = & \$0000 \\ 1 & & \\ \times & & \\ \times & & \\ \times & & \\ 30 & & \end{array}$$

Revenue from Upgrade

$$\text{Rev (₹)} = 15\% \text{ of } 5k * 2500$$

$$= 1250 * 2500 = 31250 \text{ Lakh}$$

Revenue from Ads

$$\text{Rev (ads)} = 1 \text{ lakh} * 50 = 50 \text{ lakh}$$

$$\begin{aligned}\text{Total Revenue} &= \text{Rev}(P) + \text{Rev}(U) + \text{Rev}(\text{ads}) \\ &\uparrow \\ &= 30 \text{ k} + 18.75 + 30 \\ &= 30 \text{ k} + 48.75 \text{ k}\end{aligned}$$

Expense ->

$$\begin{aligned}E(\text{price}) &= 1.5L \times 50 = 45L \\ E(\text{celebs \& promotion}) &= 4.5L + 5L = 9.5L \\ E(\text{dancer + M}) &= 5 + 5 = 8L \\ &\quad \downarrow \\ &\quad \text{MC Series}\end{aligned}$$

$$\text{Total Expense} = 45 + 9.5 + 8 = 62.5L$$

$$80 \text{ k} + 48.75 \text{ L} = 62.5 \text{ L}$$

$$80 \text{ k} = 8.75 \text{ L}$$

$$\alpha = \frac{13,75,000}{30,000} = 46 \text{ (approx)}$$

$$\alpha = 46 + 4 \rightarrow \text{Profit} = 50$$

$$4 \times 50 \text{ k} = 120 \text{ k}$$

$$P(\text{winning by 1 user}) = \frac{1}{1000} = 0.001$$

Q2) Popular Game \rightarrow Establish Game \rightarrow

Active Users \rightarrow 25k
1

\downarrow \downarrow
45% (Free) 25% (Paid)

\Rightarrow 10% of Total \times 2500

No of Tournament = $\frac{1}{2} \times$ Paid
(1.5 L)

10% Free

1 game

1 match

\rightarrow Maintenance \rightarrow 15 L/M

\rightarrow Server \rightarrow 25 L/M

\rightarrow 5k / day \rightarrow YouTube

25k
 \checkmark
6. 25k user
(25%)

\rightarrow Rev =	No of Paid User	6. 25
	x	x
	No of Tour	5
	x	x
	Entry	x
	x	x
	Winnings	50

$$R(\text{Entry}) = 562.5 \text{ kx}$$

$$R(\text{upgrades}) = 10\% \text{ of } 25 \text{ k} \times 2500$$

$$= 62.5 \text{ L}$$

$$R(\text{Sale}) = l \times 20 = 20L$$

$$[R = 92.5l + 562.5 \text{ kx}]$$

$$\begin{aligned} \text{Expense} &= 25 + 15 + \underbrace{80 \times 3 \times 1.5L}_{\substack{\downarrow \\ \text{Serves}}} + \underbrace{50 \times 30}_{\substack{\downarrow \\ \text{Finance}}} + \underbrace{50 \times 30}_{\substack{\downarrow \\ \text{Incentive Money}}} + \underbrace{50 \times 30}_{\substack{\downarrow \\ \text{Promotion}}} \\ &= 40 + 15.5L + 10.5L \\ \text{Total} &= 176.5L \end{aligned}$$

$$\begin{aligned} \text{Revenue} &= \text{Expense} \quad [\text{Base Min}] \\ 562.5 &+ 92.5 = 176.5 \end{aligned}$$

$$562.5x + 92.5 = 176.5$$

$$x = \frac{84,00,000}{562.500}$$

$$x = 15 \rightarrow 55 (55 - 15 = 20)$$

$$P(\text{Winning}) = \frac{1}{6000} = 0.00016$$

Profit

B C G →

↳ Estimate how much can a website make using adSense

① → Click Through Rate (CTR)

$$CTR = \frac{5}{100} \rightarrow \text{No of people clicked on it} \\ 100 - \text{ad seen by } 100$$

$$CTR = 0.05$$

② → Cost Per Click (CPC) → expense

$$\begin{aligned} \text{Ad Cost} &\rightarrow 100 \\ \text{No of click} &\rightarrow 5 \end{aligned} \rightarrow 1 \text{ click} \rightarrow 20Rs$$

③ → Cost Per Mille (CPM) → Impression

→ for Brand Awareness

$$CPM = \frac{10,000}{1000} = 10$$

$$CPM = \frac{\text{Ad Spend}}{\text{Impression}} \times 1000$$

Classification →

① → only for Blog/website

② → Google + Publisher

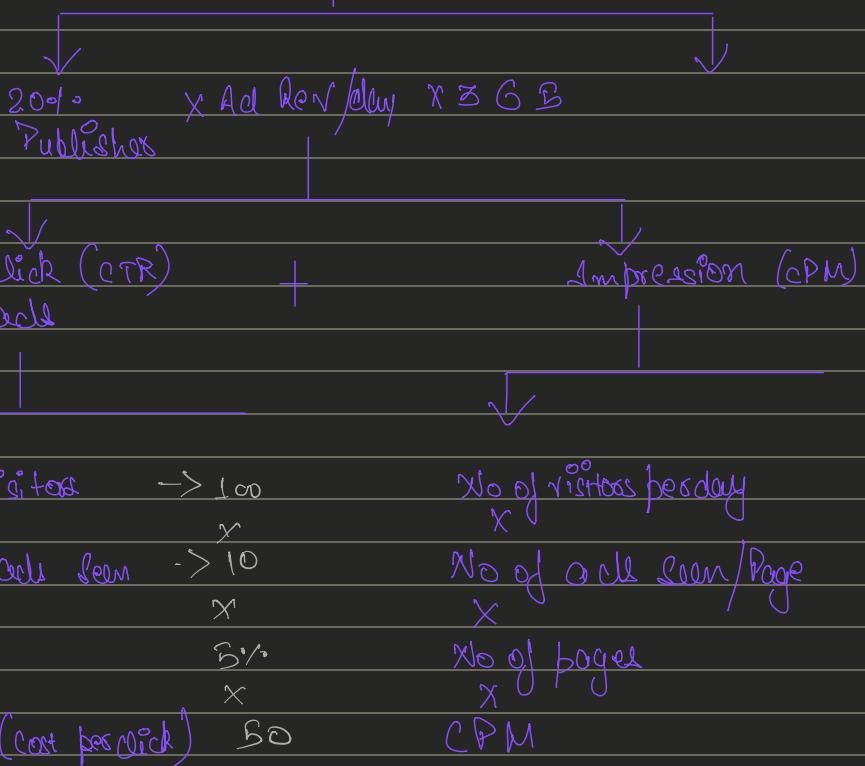
③ → Bidding for space

(ii) Estimation for a year

→ 80% 80% as Publisher of Revenue

→ 80% Google Revenue for 1 year comes from 20% publishers

80% Google Rev 1 year



$$100 \times 10 \times 5 \times 50 = 2500 \text{ Rs} / 100 \text{ visitors}$$

100 people visit & 5 click on ads

then you make → 2500 Rs/day

(B02) BM \rightarrow Daily visitors

25 ads (at least)

0.5% \rightarrow CTR

5m \times 25 \times 0.5 \times \$0.5
 $\frac{1}{100}$

\$ 0.2 \rightarrow CPC
↳ 40Rs per click

Impressions

5m visitors
Add \rightarrow 5
Page \rightarrow 5
CPM \rightarrow \$1/1000

\Rightarrow $5m \times 5 \times 5 \times \frac{1}{1000} \$$
 $\Rightarrow 0.125 m$

Total \rightarrow 0.8 + 0.125 = 0.9 (approx) per day

Per Year \rightarrow 20 \times 0.9 \times 365 \approx 2.9 B\$