Market Size Estimation of a Gig marketplace

Market Size Estimation (US Market): I am performing market sizing by analyzing both demand and supply perspectives, ensuring calculation accuracy through cross-validation of these viewpoints.

Demand Perspective:

No. of services/SME * total no. of SMEs * Average cost/service + No. of services/Individual * total no. of individuals * Average cost/service + No. of services/Enterprise * total no. of enterprises * Average cost/service = Takeaway market size of the professional gig marketplace.

Baseline assumptions:

- Population distribution of Customer: 85% SMEs, 17% individuals, and 3% large enterprises.
- Since Average order value is of \$75, individual ticket size would be \$70, \$20 and \$400 corresponding to SMEs, individuals and enterprises, respectively, as per the customer base distribution.

Reverse Caluclation (\$70 × 0.85 + \$20 × 0.17 + \$400 × 0.03 ~ \$75, AOV)

1. SME Segment:

Total number of SMEs = 30 million

1.1 Average Services Per SME, considering the Web Development and Design as the majority of services being availed:

Using the weighted average calculation:

Weighted Average of Number of Services = (Web Development Weight * No of total Services) + (Design Weight * No. of total Services),

Assumptions:

Design requirement is four times more than the development requirements

Total number of services being availed by SMEs is 5 (Though, as reported Average order per customer (lifetime): 1.75)

Weighted Average = (0.15 * 5) + (0.6 * 5) = 3.75 services per SME

1.2 Market Size Calculation for SMEs:

Average charge per gig = \$75

Market Size for SMEs = Total SMEs * Average Services per SME * Average Charge per Gig Market Size for SMEs = 30,000,000 * 3.75 * 70 = \$7.875 billion

2. Individual Segment:

For the individual segment, let's retain the assumptions from before:

2.1 Assumption for Individual Segment:

Total individuals = 300 million

2.2 Market Size Calculation for Individuals:

Market Size for Individuals = Total Individuals * Average Services per Individual * Average Charge per Gig

Assumptions: Average services per individual per year = 1/10 of the total services availed by the SMEs (assuming a more occasional need, and hence $5 \times 1/10 = 0.5$)

Weighted Count = (0.15 * 0.5) + (0.6 * 0.5) = 0.375

Market Size for Individuals = 300,000,000 * 0.375 * 20 = \$2.25 billion

3. Enterprise Segment:

Let's retain the assumptions for the enterprise segment from before:

3.1 Assumption for Enterprise Segment:

Total number of enterprises = 20000

Average Services per Enterprise per year = Half of the total services availed by the SMEs (and hence $5 \times 1/2 = 2.5$, since they usually have a dedicated tech team)

Weighted Count = (0.15 * 2.5) + (0.6 * 2.5) = 1.875

3.2 Market Size Calculation for Enterprises:

Market Size for Enterprises = Total Enterprises * Average Services per Enterprise * Average Charge per Gig

Market Size for Enterprises = 20000 * 1.875 * 400 = \$15 million = \$.015 Billion

Total Market Size/Total Addressable Market:

Total Market Size = Market Size for SMEs + Market Size for Individuals + Market Size for Enterprises

Total Market Size = \$7.875 billion + \$2.25 billion + \$0.015 Billion ~ \$10 billion.

Supply Perspective:

Market Size of the concerned Gig economy = Number of concerned freelancers (Software + Design professional) * Number of Gigs completed by an average concerned freelancer in a Year * Avg. Charge per gig

A thing to note that number of Design professionals are 1.5x of Software professional and Design projects are 3 times with respect to the software development projects, and weights were taken accordingly

1. The number of concerned freelancers (Software + Design professional):

Number of concerned freelancers = Total freelancers * Share of Software and design freelancers

Assumption: Total Freelancers = 10% of total workforce

Total Workforce: India: 550 Mn US: 150 Mn Europe: 280 Mn Canada: 20M

Therefore, Total Workforce = 1 Bn, and hence total freelancer (1 Bn x 10%) = 100 Mn

Now, Share of Software and design freelancers = Share of Professional Services * (Sum of proportion of Graphic and Software Service provider) = 0.12(0.2 + 0.3) = 0.06 or 6%.

Assumption/References: 12% of the total freelances caters the professional services and 50% of the professional services comprises software and design professionals, 20% and 30%, respectively.

Therefore, Number of the concerned freelancers = 6 Mil. (100 * 0.06)

2. Number of Gigs completed:

Number of gigs completed = 360 (i.e. Number of days in a year) /Avg gig delivery time (in days) Average Gig delivery time = Weighted average of delivery time (Web development, Shopify store development, logo design, UX design) = 2 weeks = 15 days

Therefore, number of gigs completed by an average concerned freelancer = 24 gigs (360/15)

3. Avg. Charge per gig

Avg. Charge per gig = \$75 (Given)

Thus, the **Total Market Size** = $6 \times 24 \times 75 = $10800 \text{ Million} = 10.8 Billion (Cross reference done)

Serviceable Addressable Market (SAM):

For SAM, we'll apply penetration rates to the Total Addressable Market (TAM) based on the different customer segments (SMEs, individuals, enterprises).

Assumptions for Penetration Rates:

SMEs: 25% Individuals: 20% Enterprises: 15%

SAM for SMEs: TAM for SMEs * Penetration Rate for SMEs

SAM SMEs = \$7.875 billion * 0.25 = \$1.97125 billion

SAM for Individuals: TAM for Individuals * Penetration Rate for Individuals SAM Individuals = \$2.25 billion * 0.20 = \$0.45 billion

SAM for Enterprises: TAM for Enterprises * Penetration Rate for Enterprises SAM Enterprises = \$0.015 billion * 0.15 = \$0.00225 billion

Total SAM = SAM SMEs + SAM Individuals + SAM Enterprises
Total SAM = \$1.97125 billion + \$0.45 billion + \$0.00225 billion = \$2.421 billion

Serviceable Obtainable Market (SOM):

SOM is a subset of SAM and considers factors like competition, market constraints, and other limitations.

Assumptions for SOM and the corresponding Market Capture Rates:

SMEs: 70% of SAM Individuals: 60% of SAM Enterprises: 20% of SAM

Calculations for SOM:

SOM for SMEs: SAM for SMEs * Portion for SMEs SOM SMEs = \$1.96875 billion * 0.70 = \$1.378125 billion

SOM for Individuals: SAM for Individuals * Portion for Individuals SOM Individuals = \$0.45 billion * 0.60 = \$0.27 billion

SOM for Enterprises: SAM for Enterprises * Portion for Enterprises SOM Enterprises = \$0.00225 billion * 0.20 = \$0.00045 billion

Total SOM = SOM SMEs + SOM Individuals + SOM Enterprises
Total SOM = \$1.378125 billion + \$0.27 billion + \$0.00045 billion = \$1.648575 billion

Unit Economics of a Gig Marketplace:

1. LTV:

Lifetime Value (LTV) is the total value (in \$) an average user of the service generates for the company.

It can be calculated on either the seller or the buyer but shouldn't be done for both — since the value generated on the platform is based on completed transactions with both a buyer and a seller. We have the customer (buyer) information and hence we'll go with that:

LTV = Average order value * Average order per customer (lifetime) = 75 * 1.75 = 131.25 USD

2. <u>CAC</u>

Interestingly, for the Gig marketplace, we have to account for both of the Sellers and Buyers

Here for the sake of simplicity I have assumed, there are 80 freelancers against the 410 customers (given), maintaining the standard marketplace liquidity ratio of 1:5

Two-sided CAC = Buyer CAC + Marketplace ratio * Freelancer's CAC

Buyer/Client CAC:

Major cost component: Advertising costs + Cost of the in-house marketing team.

Paid marketing cost = Cost per Click * Number of Clicks = 10000\$ (through Google, Facebook, and LinkedIn), to acquire 300 customers with a total of 4000 clicks and conversion rates of 8%, 4%, and 10%, through FB, Google, and LinkedIn, respectively.

Marketing Payroll = 2000, to bring the additional 100 customers, and 10 came through naturally. 410 = 300 + 100 + 10

Total Cost = 10000 + 2000 = 12000\$

CAC of Buyer = 12000/4000 = 30\$

Seller/Freelancers CAC:

Assumption: On a similar manner out of 80, 60 freelancers have been onboarded through paid advertising and marketing, and the remaining 20 have joined the platform naturally.

Paid marketing cost = Cost per Click * Number of Clicks = 4800\$(through Google, Facebook, and LinkedIn), to acquire the 40 customers with a total of 2000 clicks and conversion rates of 2%, 1%, and 2.5%, through FB, Google, and LinkedIn, respectively.

Assumption: Freelancers are generally more expensive to acquire because of significantly more targeted digital acquisition strategies, and hence they have one-fourth of the conversion rate of the customers.

Marketing Payroll = 400, to bring the additional 20 customers, and 20 came through naturally.

Total Cost = 4800 + 400 = \$5200

CAC of Seller = 5200/60 = \$86.67

Two-sided CAC = Buyer CAC + Marketplace ratio * Freelancer CAC = 30 + (1/5)(86.67) = 47.33

Therefore, LTV/CAC = $131.25/47.33 = 2.77 \sim 3$