SUSTAINABLE BUSINESS MODELS AND SETTING UP A BUSINESS

Pedram Mokrian, Ph.D. | April 2025

1 | Business Model Architecture

THE OPPORTUNITY ASSESSMENT FRAMEWORK

- HOW DO YOU PROVIDE VALUE?
- HOW DO YOU MAKE MONEY?

DEFINITION

BUSINESS MODEL

The overarching framework that describes how a company creates, delivers, and captures value.

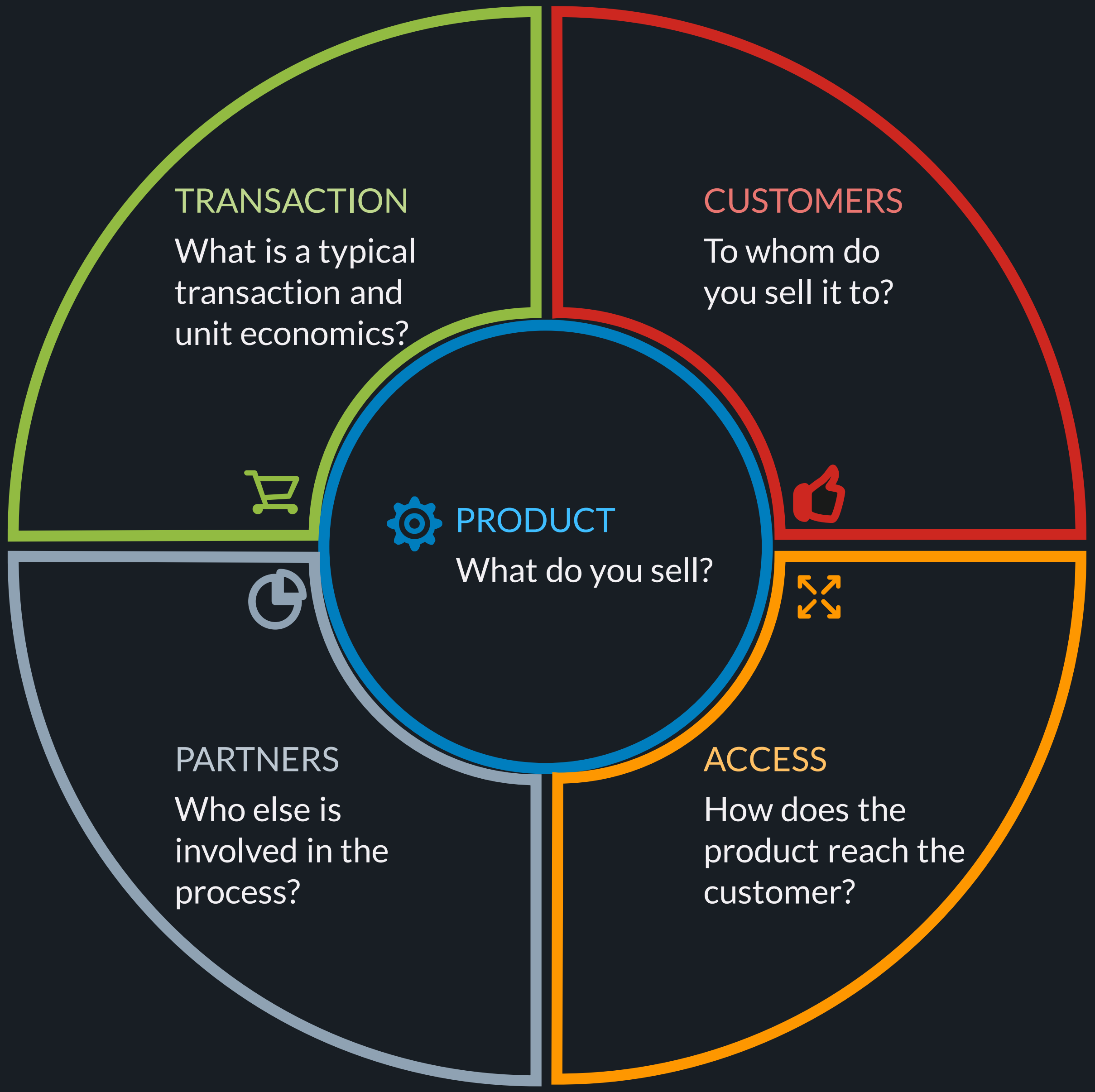
THE FOCUS IS ON THE "HOW"

Value Creation: How a business generates value for customers (e.g., manufacturing, aggregating, or innovating).

Value Delivery: How it reaches and serves customers (e.g., direct sales, online marketplaces, or physical stores).

Value Capture: How revenue and profits are generated (e.g., one-time sales, subscriptions, licensing fees).

BUSINESS MODEL ARCHITECTURE



BUSINESS MODEL ARCHITECTURE

PRODUCT/SOLUTION:

1. PIPE
2. PLATFORM

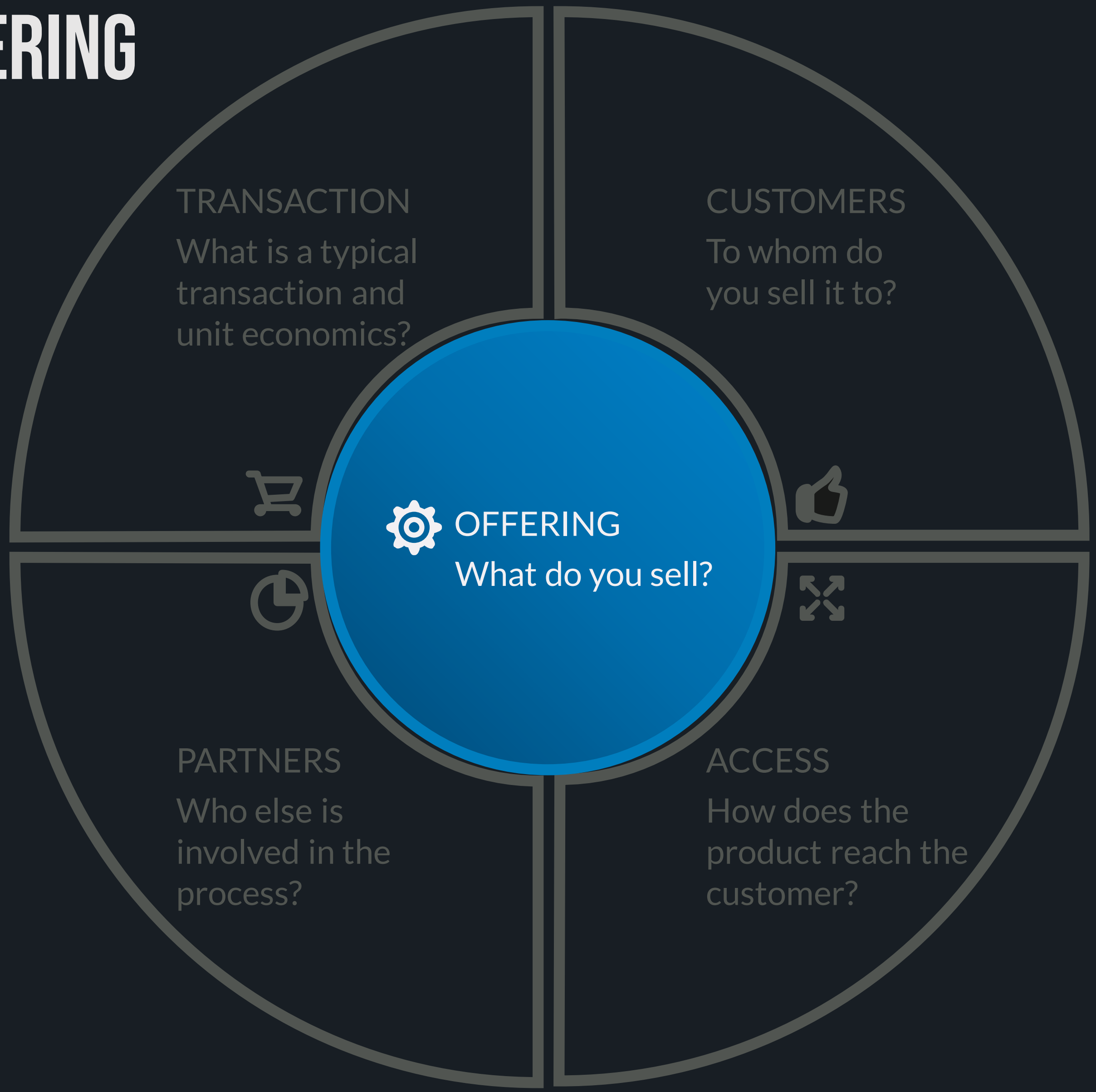
TRANSACTION:

1. FEE FOR SERVICE
2. MARKET – RESELL
3. LICENSING
4. SUBSCRIPTION
5. PRODUCTION – UNIT SALES
6. COMMISSION
7. ADVERTISING
8. RENTAL

CUSTOMERS:

1. B2C
2. B2B - SME
3. B2B - E
4. B2G

1 - OFFERING



TYPE OF BUSINESS

A combination of company structure and output, that defines the core value creation mechanism for the business.

Establishes the conditions around which all other interactions and decisions will be based on.

BLUEPRINT REPRESENTATION:

BLUE BOX

2 - CUSTOMERS

THE END USERS

The end users of your product or service that realize the value created, and make the utilization, consumption, or purchase decision.

These are the stakeholders that determine product-market-fit

BLUEPRINT REPRESENTATION:

RED BOX

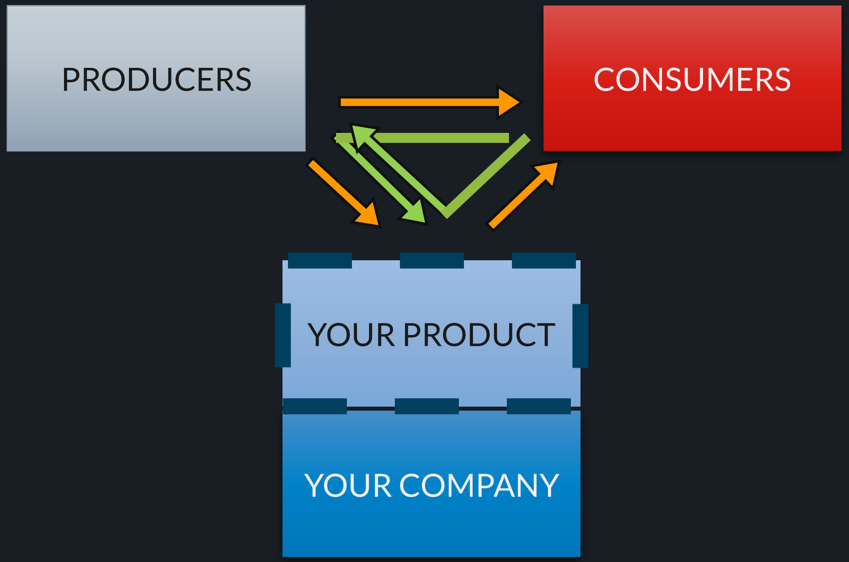
COMPANY STRUCTURE: PIPES & PLATFORMS

PIPES

A linear business where value is produced upstream and consumed downstream.

PLATFORM

A business where producers <u>create</u> value and access consumers across the product.



PLATFORM FACTORS

NETWORK EFFECTS
Driven by market liquidity. Best strategy is to take on a local or niche market first, and then expand market by market

DISINTERMEDIATION RISK
Often neglected, this is the critical element driving long term value and user retention on the platform. Influenced by security (trust), network effects, low platform fees, and user generated content.

COMMUNITY
A community and overall trust is required if emotional connection (Etsy, Baby sitting) focus on simple quality reviews if highly transactional (Uber)

TRANSACTION SIZE
Inversely proportional to frequency of use

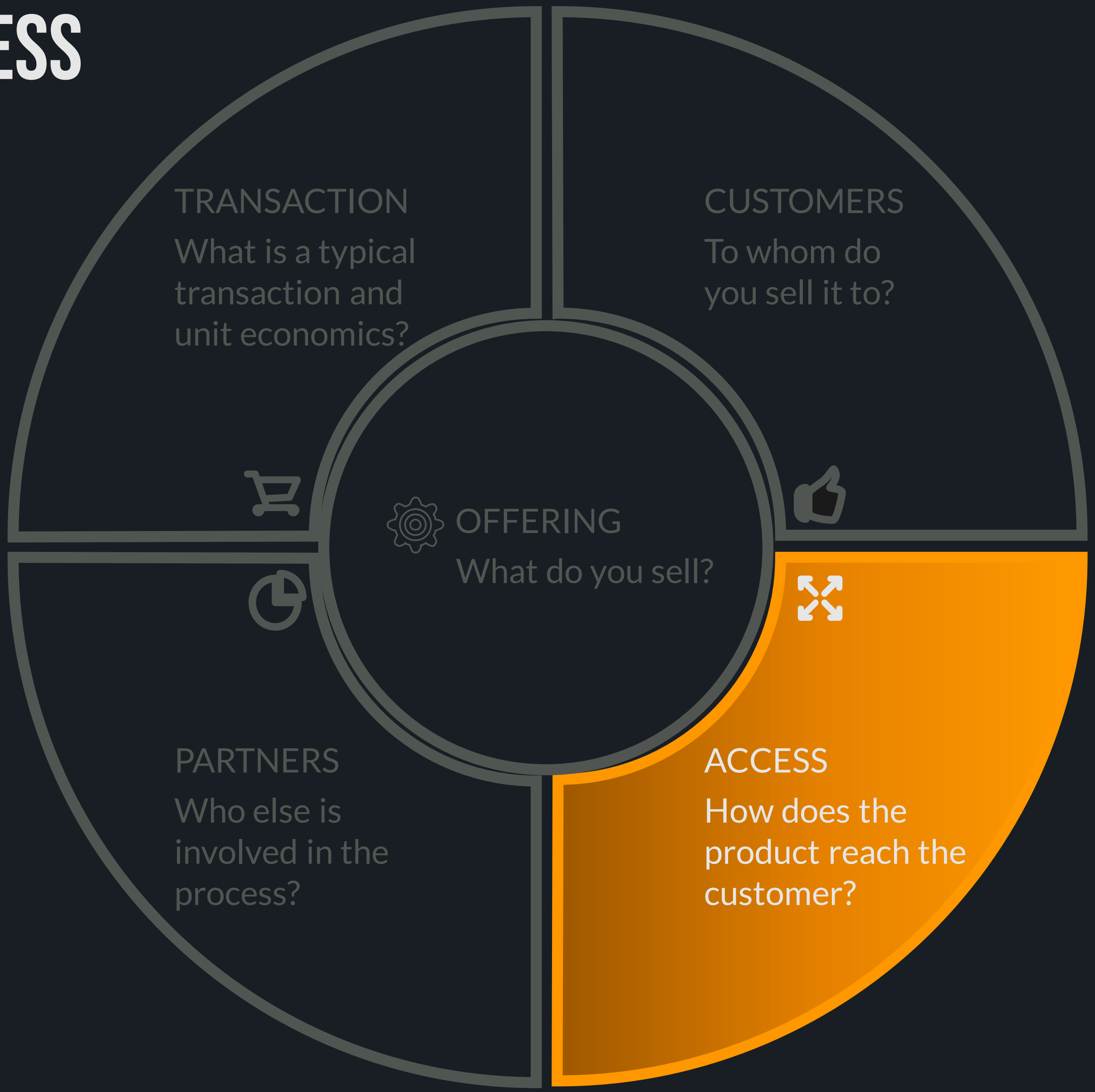
TRANSACTION COMPLEXITY
Simplicity drives high frequency usage; Product elegance, content and discovery is needed otherwise

STRENGTH OF NEED
The gap in satisfaction between existing solutions and yours

FREQUENCY OF USE
The primary driver for understanding retention rates and customer acquisition. How do you remain 'top of mind?'

BUSINESS STRUCTURE
Platforms are great to pursue, but vertical integration is needed if service quality and product delivery complexity are factors

3 - ACCESS



CUSTOMER ACQUISITION

The methods used to reach, acquire, and maintain customers, that define the objectives for marketing, and market positioning.

Establishes the basic mechanisms for the customer touchpoints around how customers learn about the product, acquire it, and experience the value creation.

BLUEPRINT REPRESENTATION:

ALL OF THE TOUCHPOINTS TO YOUR CUSTOMERS

LEARN

The methods used to describe your offering to your audience

REACH

How your customers interface with you

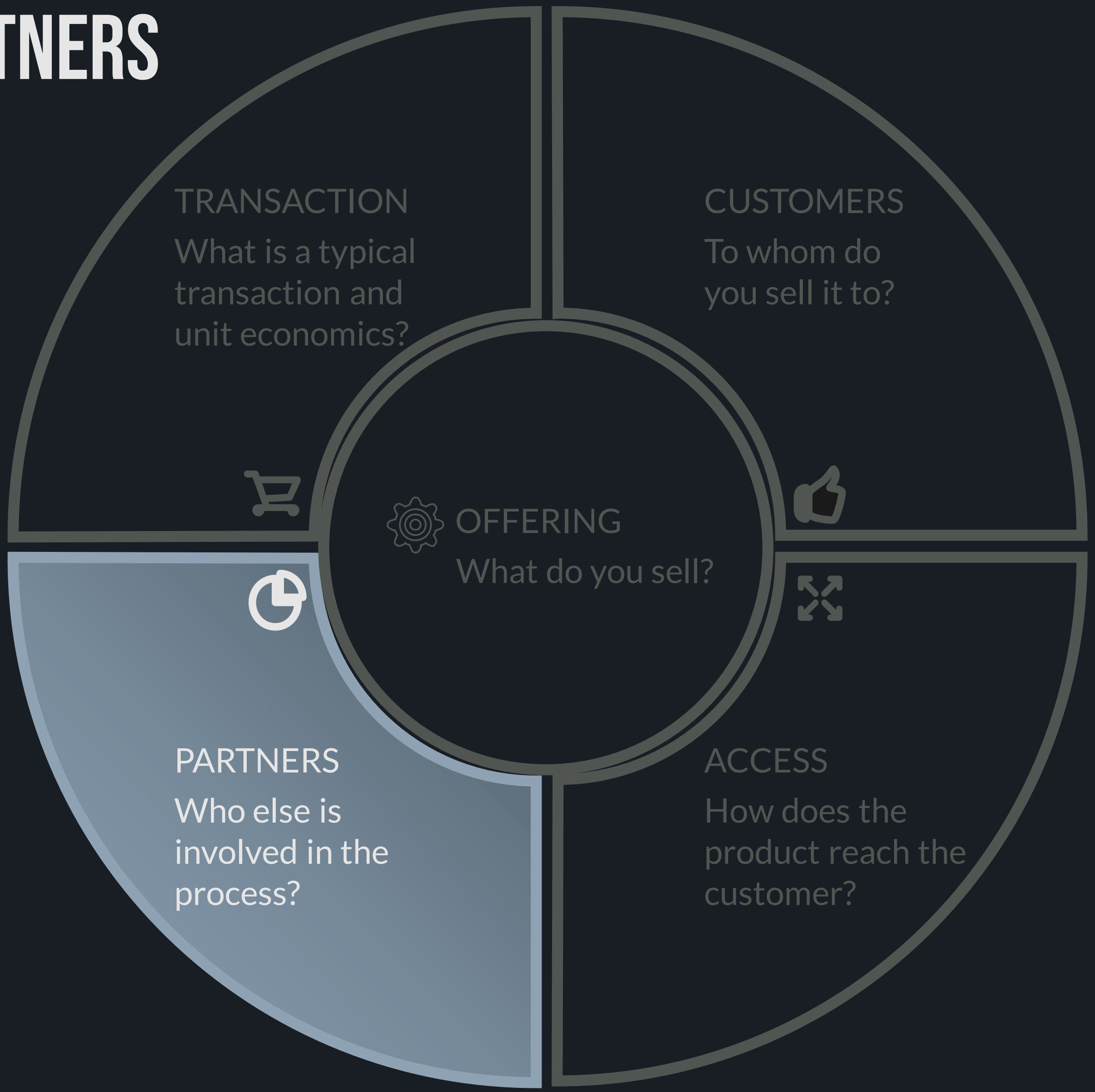
ACQUIRE

The initial transaction

MAINTAIN

The ongoing relationship and continued transactions

4 - PARTNERS



ALL STAKEHOLDERS THAT IMPACT THE BUSINESS

The set of all entities that are directly involved with the value creation mechanism and customer touchpoints.

These include channels, manufacturers, regulators, market influencers, system integrators, resellers, etc...

BLUEPRINT REPRESENTATION:

GREY BOX

KEY PARTNERS

SUPPLY
- Complete the solution
- Cost sharing
- Risk Mitigation
- Access to unique technologies

DEVELOPMENT
- Faster time-to-market
- Enable focus on core competencies
- Competitive advantage
- Reduce costs

DISTRIBUTION
- Sales efficiency
- Faster time to market
- Brand credibility

INFLUENCE
- Brand establishment and amplification
- Credibility and market access
- Marketing cost reduction

CAPITAL
- Provide operating leverage
- Enable sales acceleration
- Growth

REGULATORY
- Freedom to operate
- Market Access
- Competitive Leverage

PARTNER VALUE ALIGNMENT

5 - TRANSACTION

REVENUE MODEL

The clear plan that defines how to sell the product or service in order to generate revenues.

Establishes the specific method(s) by which a business creates cashflows, the sources of cash generation, and the margin structure for each individual transaction

BLUEPRINT REPRESENTATION:

FOUNDATIONAL REVENUE MODELS

- FEE FOR SERVICE
- MARKUP / RESELLING
- LICENSING MODEL
- SUBSCRIPTION
- PRODUCTION / UNIT SALES
- COMMISSION
- ADVERTISING
- RENTAL OR PAY PER USE

FOUNDATIONAL REVENUE MODELS

FEE FOR SERVICE

Fee-for-Service (Professional Services)

Definition: Charging per project, per hour, or per outcome for specialized services.

Examples: Consulting firms, law firms, creative agencies, freelance professionals.

Pros

- Flexible Pricing: You can tailor fees to complexity or scope of work.
- Immediate Revenue: Payment is closely tied to hours worked or project completion.
- Expertise-Based Premiums: Specialized skills can command higher fees and margins.

Cons

- Limited Scalability: Growth often requires more staff/hours; revenue is tied to time or project capacity.
- Unpredictable Workflow: Project-based income can vary significantly month to month.
- Customer Acquisition & Retention: Must continuously find new clients or upsell existing ones.

FOUNDATIONAL REVENUE MODELS

MARKUP / RESELLING

Markup / Reselling

Definition: Buying goods at a lower cost (wholesale) and selling them at a higher price (retail), keeping the difference as margin.

Examples: Traditional retail stores, distributors, some e-commerce drop-shippers.

Pros

- Simplicity of Execution: Relies on straightforward buy-low, sell-high logic.
- Variety of Suppliers: Can switch or expand product lines relatively easily if you find better margins.
- Potential for Quick Turnover: With the right demand and marketing, inventory can move fast.

Cons

- Inventory Management: Ties up capital in stock and risks obsolescence or spoilage.
- Margin Pressure: Competitive markets can push down prices or require promotional discounts.
- Reliance on Suppliers: Supply chain issues or inconsistent quality affect your brand and cash flow.

FOUNDATIONAL REVENUE MODELS

LICENSING MODEL

Licensing / Royalty

Definition: Selling the rights to use or reproduce intellectual property (IP), technology, or content.

Examples: Software licensing (enterprise software), franchising fees (fast-food chains), patent licensing.

Pros

- Recurring Income: Ongoing royalties can build steady revenue over time without additional production costs.
- Low Operating Costs: Once IP is developed, the marginal cost to license it is minimal.
- Scalable: Multiple licensees can expand geographic or market reach simultaneously.

Cons

- Dependency on Licensees: Royalty revenue depends on the licensees' success and sales volume.
- IP Protection: Requires legal and enforcement costs to prevent unauthorized use.
- Upfront R&D: High costs to develop valuable IP before licensing.

FOUNDATIONAL REVENUE MODELS

SUBSCRIPTION

Subscription

Definition: Recurring payments (monthly, yearly) for ongoing access to a product or service.

Examples: Streaming services (Netflix), SaaS solutions (Salesforce), membership models (gyms).

Pros

- Recurring Revenue: Predictable income stream from repeat billing.
- Higher Customer Lifetime Value (CLV): Long-term relationships can yield more revenue over time.
- Easier Budgeting: Forecasting and capacity planning are simpler with steady cash flow.

Cons

- Churn Risk: If customers cancel, the revenue loss is immediate and can be hard to recover.
- Acquisition Costs: Often higher upfront marketing and onboarding costs to build a subscriber base.
- Ongoing Service Obligations: Must continuously deliver value or risk cancellations.

FOUNDATIONAL REVENUE MODELS

Production / Unit Sales

Definition: customers pay a set price in exchange for a specific item or product at the time of purchase.

Examples: Manufacturing, restaurants, books, single purchase apps, mining. Insurance and financial products can also be included

PRODUCTION / UNIT SALES

Pros

- Immediate Cash Flow: You get paid right away for each sale, which can help with liquidity.
- Simplicity: Easier accounting—one payment per transaction.
- Scalability: Straightforward to expand by increasing production or distribution.

Cons

- Unpredictable Revenue: Demand can fluctuate (seasonal trends, market cycles), making cash flow less stable.
- Pressure on Margins: Intense competition or fluctuating costs of goods sold can eat into profit margins.
- Customer Retention: Must continually attract new buyers or encourage repeat purchases to sustain revenue.

FOUNDATIONAL REVENUE MODELS

Commission / Brokerage

Definition: Earning a fee or percentage for facilitating transactions between two or more parties.

Examples: Real estate agents, stock brokerages, marketplace platforms (eBay, Etsy).

COMMISSION

Pros

- Low Inventory Risk: You don’t hold stock or own the product/service you’re selling.
- Scalable: Earning potential grows as the volume or value of transactions increases.
- Diverse Income Streams: Commissions can come from multiple partners or providers.

Cons

- Dependency on Partners: If suppliers or partners leave or underperform, revenue can drop.
- Thin Margins: Competitive markets can drive down commission rates.
- High Volume Needed: Often requires a large transaction flow to generate substantial income.

FOUNDATIONAL REVENUE MODELS

Advertising

Definition: Monetizing user attention or platform traffic by selling ad placements, sponsorships, or brand partnerships.

Examples: Ad-based apps, online media/news sites, social media platforms.

ADVERTISING

Pros

- Low (or Zero) Direct Cost to Users: Can attract a large user base by offering free content/services.
- High Margins: Once the audience is established, revenue from advertisers can be very profitable.
- Scalability: Ad revenue can grow quickly with audience size, especially in digital platforms.

Cons

- Revenue Volatility: Ad rates fluctuate with market conditions, and advertisers often control budgets.
- User Experience vs. Revenue Conflict: Too many ads can drive away the audience, reducing long-term value.
- Concentration Risk: Heavy dependence on a few major advertisers or ad networks can be risky.

FOUNDATIONAL REVENUE MODELS

Rental / Leasing

Definition: Granting temporary access or usage rights to assets or property for a fee (rather than transferring ownership).

Examples: Equipment rentals, real estate leases, vehicle rentals.

Pros

- Steady Cash Flow: Regular payments (weekly, monthly) for the duration of the lease.
- Asset Retention: You retain ownership of the asset, which may appreciate or be leased again.
- Long-Term Agreements: Can provide predictable revenue if contracts are set for extended periods.

Cons

- Asset Maintenance & Depreciation: The owner must cover upkeep, repairs, or replacement.
- Occupancy / Utilization Risk: If assets go unused, they still incur costs without generating revenue.
- Capital Intensive: Significant upfront investment to acquire assets for leasing.

RENTAL OR PAY PER USE

FOUNDATIONAL REVENUE MODELS

- FEE FOR SERVICE
- MARKUP / RESELLING
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- SUBSCRIPTION
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- COMMISSION
- ADVERTISING
- RENTAL OR PAY PER USE

3 | Sustainable Success

Think about how you would launch a new business

SUSTAINABLE SUCCESS

1 Insight – Positioning

2 Alpha – Breakout Value

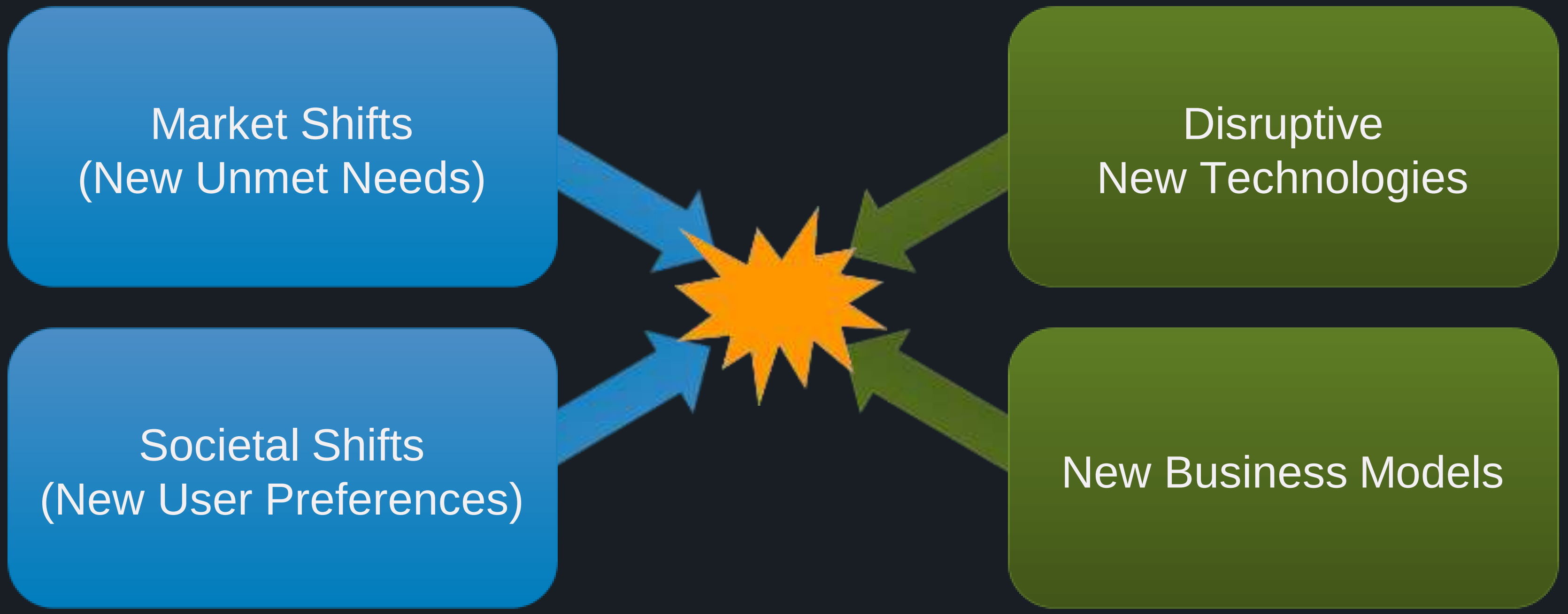
3 Moat – Sustainable Advantage

SUSTAINABLE SUCCESS

1 Insight – Positioning

1 – INSIGHT: POSITIONING

Customer Motivation addressed by Market Disruption



Inspired by David Skok: http://www.forentrepreneurs.com/startup-ideation/

SUSTAINABLE SUCCESS

1 Insight – Positioning

2 Alpha – Breakout Value

2 - ALPHA

A term used in investing to describe a strategy's ability to beat the market, or it's "edge."

It is often associated with “excess return” or “abnormal rate of return,” beyond how the rest of the market is performing.

TYPES OF ALPHA

The organization's distinct advantage to break into the market and succeed.

ASSETS

Valuable physical, digital, or intangible assets that are hard to replicate or replace.

Why It's an Advantage: These assets enable cost advantages, scalability, or market dominance.

INTELLECTUAL PROPERTY (IP)

Unique innovations, patents, or trade secrets that provide a competitive edge.

Why It's an Advantage: Competitors cannot replicate or access the technology without significant investment or legal challenges.

DATA

Exclusive access to large, high-quality, or proprietary datasets that drive better decision-making and products.

Why It's an Advantage: Enables superior customer insights, operational efficiencies, and competitive barriers.

TALENT

Exceptional teams, leadership, and a culture of innovation that drives execution and creativity.

Why It's an Advantage: Talent and culture fuel sustained innovation, adaptability, and long-term competitive strength.


TALENT... THE KEY DRIVER OF
INNOVATION

ENTERING A MARKET

1 Insight – Positioning

2 Alpha – Breakout Value

3 Moat – Sustainable Advantage

3 - MOAT

A 'moat' is a company's competitive advantage that protects it from competition and allows it to maintain profitability over an extended period.

TYPES OF MOATS

Creating long-term sustainable revenue and profit opportunities

ECONOMIES OF SCALE

A cost advantage moat is achieved when a company can produce a product or service at a lower cost than its competitors, allowing it to undercut prices and maintain profitability.

NETWORK EFFECT

A network effect moat occurs when the value of a product or service increases as more people use it, creating a feedback loop that makes it difficult for competitors to gain traction.

INTANGIBLE ASSET

An intangible asset moat is created by intellectual property, talent access, or regulatory licenses that make it difficult for competitors to enter the market.

LOYALTY AND SWITCHING

Strong brand recognition and customer satisfaction keeps customers loyal, while becoming entrenched within an organization often lead to very high switching costs

NETWORK EFFECTS

A network effect (also called network externality) is the effect that one user of a good or service has on the value of that product to other people.

When a network effect is present, the value of a product or service is dependent on the number of others using it.

FACTORS TO CONSIDER

Direct network effects occur when the value of a product or service increases directly with the number of users. The more people use the product, the more valuable it becomes to each user

Examples: Fax machine, telephone, online games, social media

Indirect network effects occur when the value of a product or service increases due to the growth of a complementary product or service. The network's value depends on the interaction between two or more groups of users.

Examples: Shopping malls and marketplaces in general such as Uber, Google, AirBnB, charging stations.

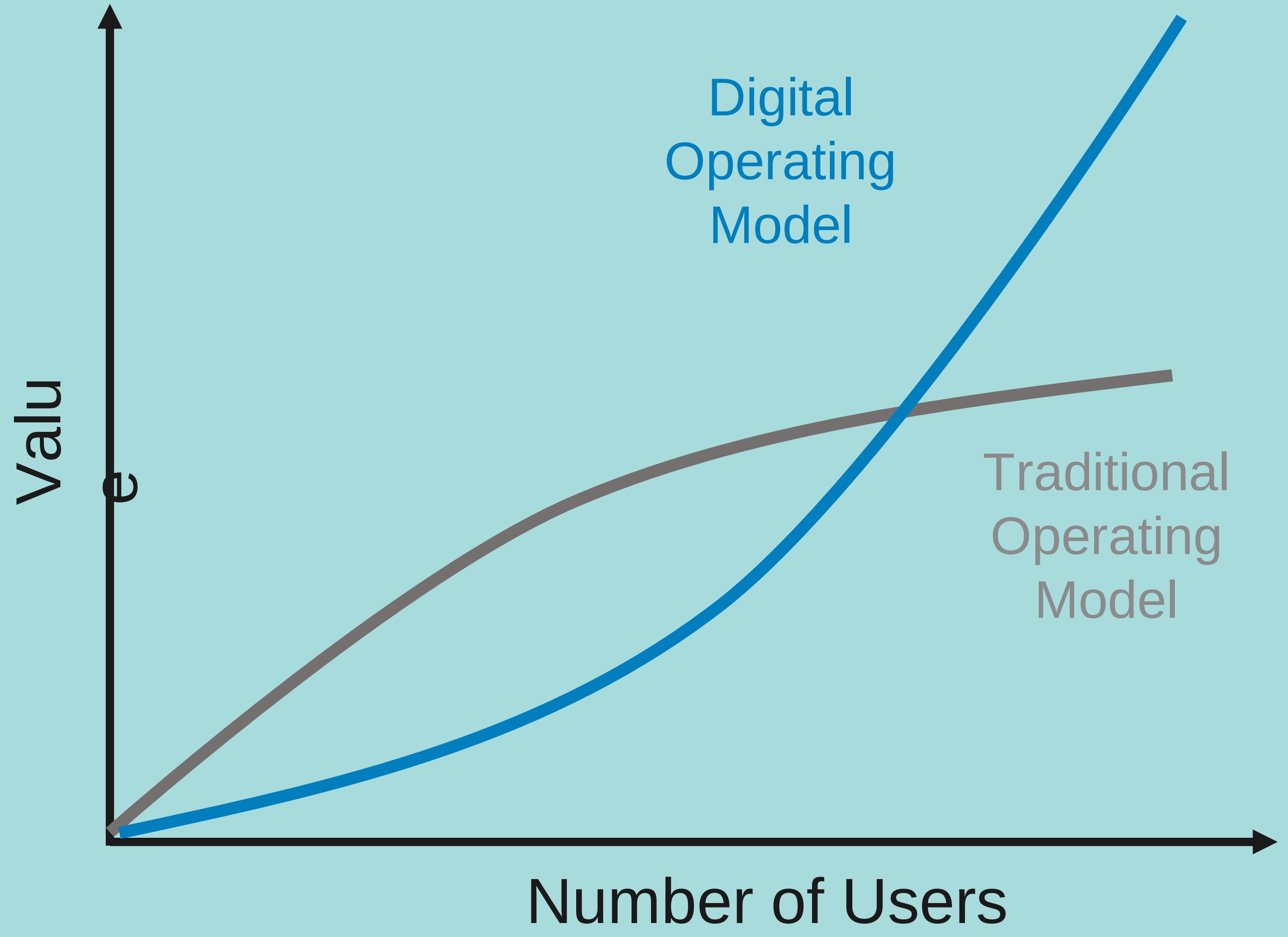
ECONOMIES OF SCALE

Explains the behavior of the rate of increase in output (production) relative to the associated increase in the inputs (the factors of production).

If output increases by more than that proportional change in inputs, there are increasing returns to scale (IRS)

FACTORS TO CONSIDER

1. Physical activity that is more efficient when done at larger scale (e.g. mining, manufacturing)
2. Fixed costs (capital + infrastructure)
3. Process expertise gained by significant specialized experience (international advisory firms)
4. Procurement scale and leverage (Starbucks vs. Coupa)
5. Risk Management (more cost effective to hedge)
6. Brand and customer acquisition costs



From: HBR “Competing in the age of AI” Jan-Feb 2020

ENTERING A MARKET

1 Insight – Positioning

2 Alpha – Breakout Value

3 Moat – Sustainable Advantage

4 | Market Entry Through MVP + MVS


DON’T BITE OFF MORE
THAN YOU CAN CHEW

THE MINIMUM VIABLE PRODUCT

MVP

Simply put – this is a prototype

- It demonstrates enough future benefit to retain early adopters
- It provides a feedback loop to guide future development

MINIMUM

The most pared down version of a product that can still be released

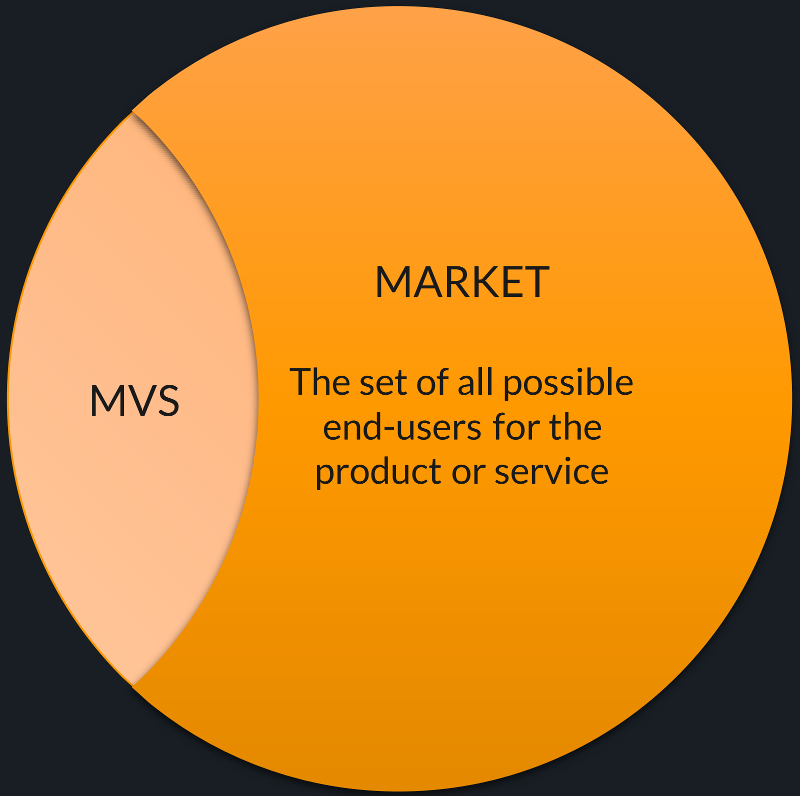
VIABLE

It has enough value that people are willing to use it or buy it initially

PRODUCT

An actual solution, not just a concept

THE MINIMUM VIABLE SEGMENT



MVS

Simply put – this is the ‘beach-head’ market

- This is the segment of the market that are early adopters
- Interconnected segment leading to strong reference customers

MINIMUM

Smallest subset of a given market that can be reached and dominated

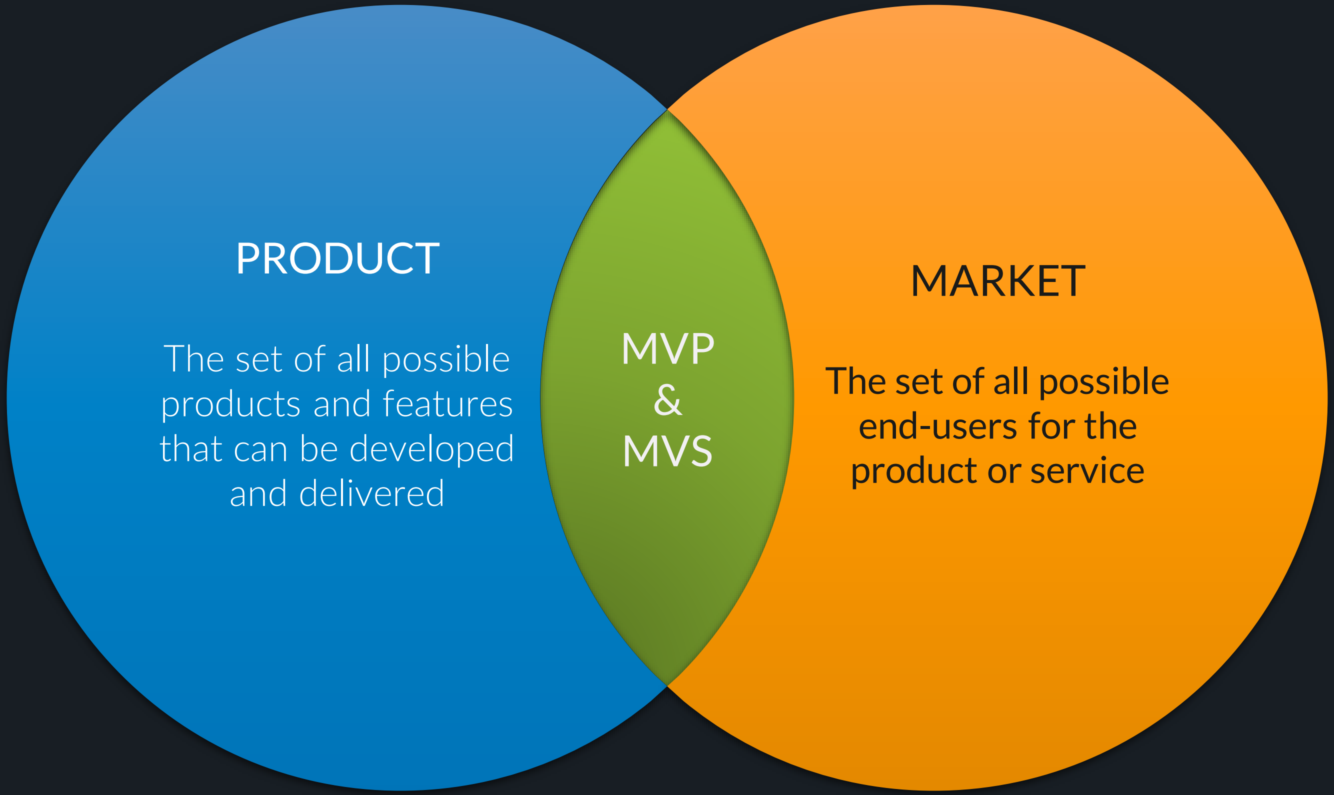
VIABLE

The customer value hypothesis around the MVP can be validated

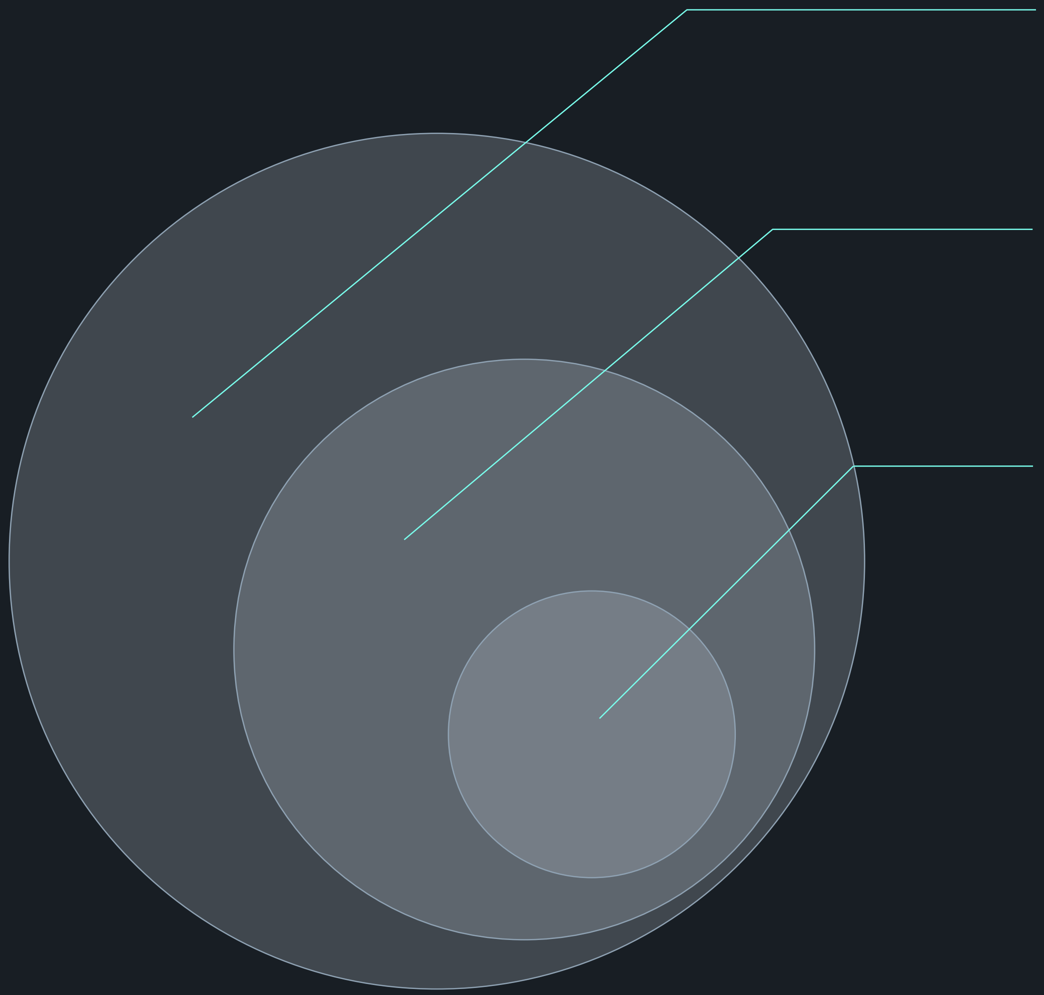
SEGMENT

A set of customers with the same need

COMBINING THE MVP & MVS



TRADITIONAL MARKET SIZING APPROACH



TOTAL AVAILABLE MARKET (TAM)

Global revenue opportunity around your product or service

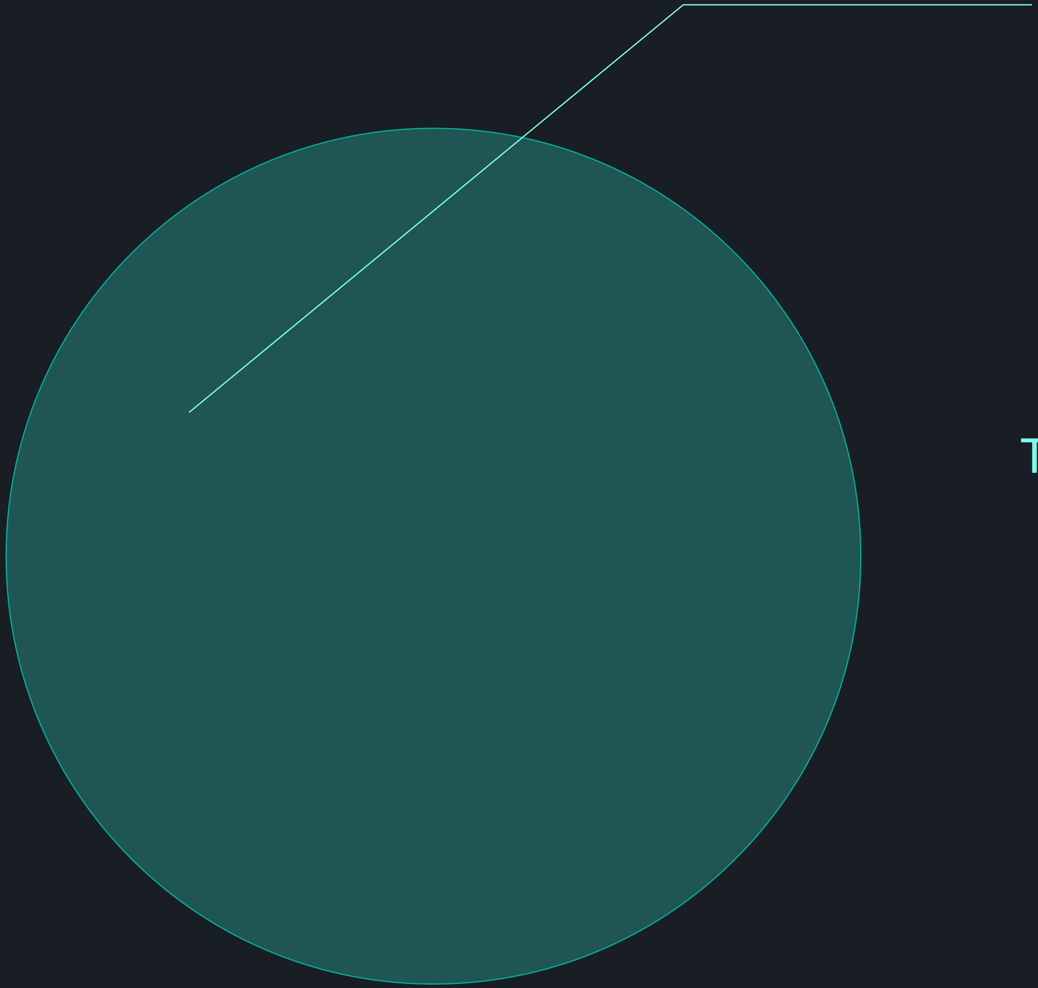
SERVED ADDRESSABLE MARKET (SAM)

The actual market size that you can address

TARGET MARKET (TM)

The actual total market size that you will market to

THREE STEP MARKET SIZING:
STEP 1 - TAM



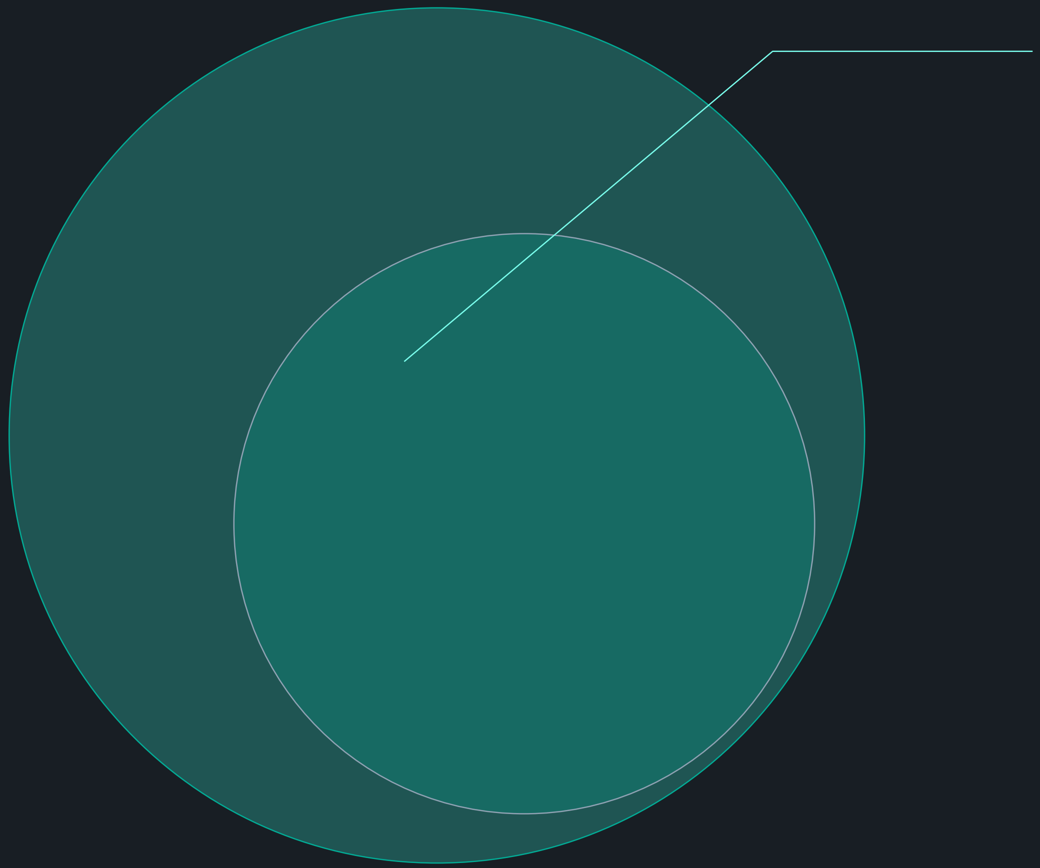
TOTAL AVAILABLE MARKET (TAM)

A Reflection of the size of the market (in $'s) if very single one of the potential customers bought your product

TAM = CUSTOMER BASE X MONETIZATION

Number of customers that could want/need the product X Average transaction value X Number of transactions per year

THREE STEP MARKET SIZING:
STEP 2 - TM



TARGET MARKET (TM)

The segmented portion of the market that will be targeted for sales in the initial years (we **suggest 3 years**)

Segmentation may be based around:

- Geography
- Customer size
- Customer primary market
- Specific demographics
- Acquisition and channel touchpoints
- Use or adoption of complementary or enabling products

Target Market should be bounded by sales and marketing efforts and time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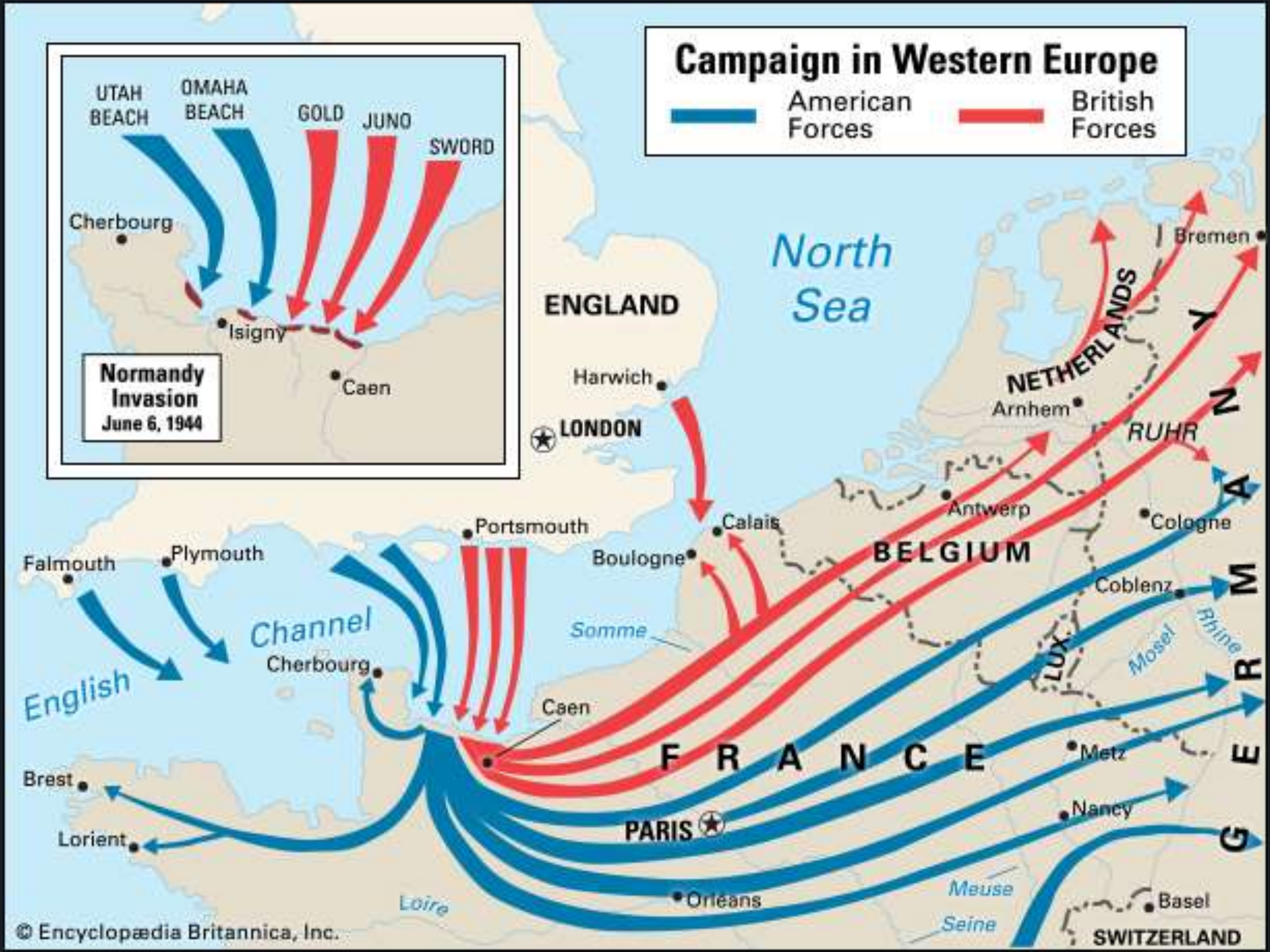
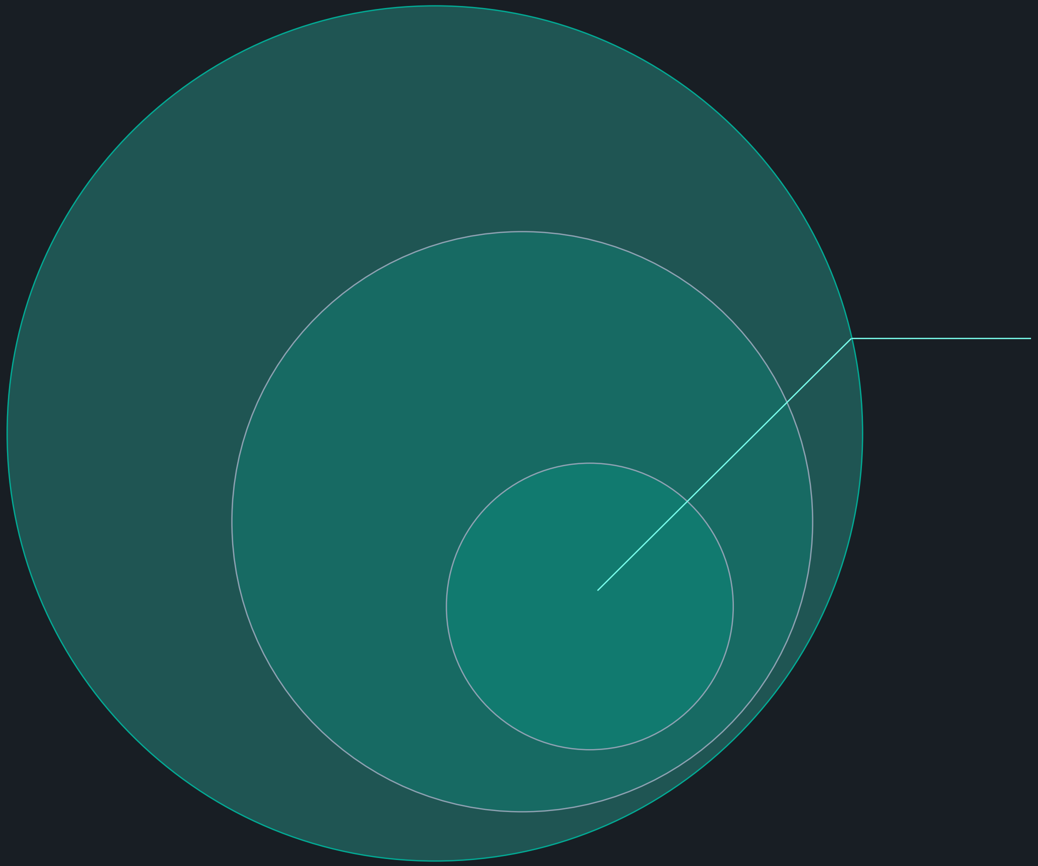


https://kids.britannica.com/students/assembly/view/166716

THREE STEP MARKET SIZING:
STEP 3 – BEACH-HEAD



BEACH-HEAD MARKET

A sub-segment of the Target Market that a company can enter and begin expanding in the first 12-18 months of sales.

This is the same as the MVS.

MARKET SIZING FORMULAS

TOP DOWN MARKET SIZING:

EXISTING MARKET SIZE X SHARE OF OWNERSHIP

Dollar value of spend in a given market (or number of target users) X Percentage share of the market that you will control (%)

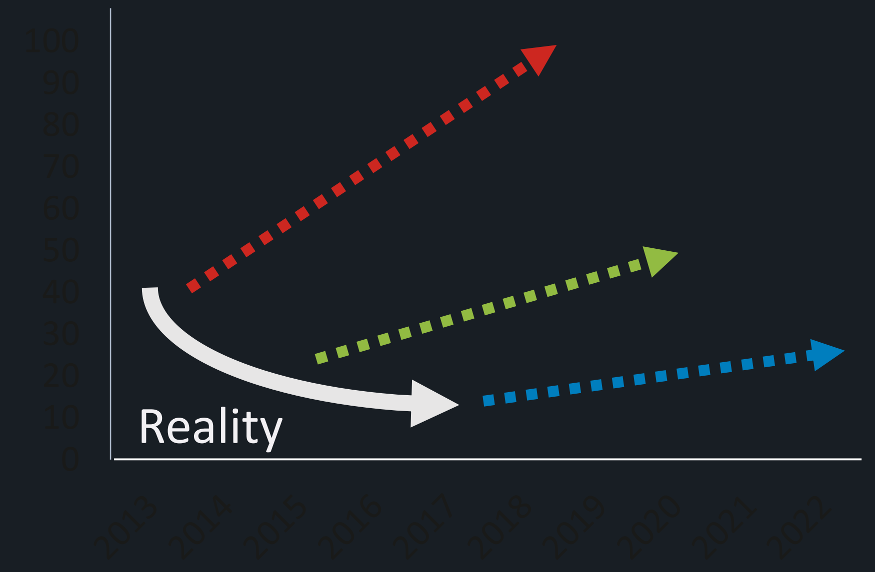
BOTTOMS UP MARKET SIZING:

CUSTOMER BASE X MONETIZATION

Number of customers that <u>could</u> want/need the product X Average transaction value X Number of transactions per year

Impact of business model shifts: The global WiFi market

- "Global Wi-Fi Market Worth $93.23 Billion By 2018"
  - June 2013 – Markets and Markets
  - The global Market revenue is forecasted to reach $93.23 billion in 2018 from $40.13 billion in 2013, at an estimated CAGR of 15.08% during this period.
- "Global Wi-Fi Market Worth $33.6 Billion By 2020"
  - July 2015 – Markets and Markets
  - The Wi-Fi Market size is expected to grow from USD 14.8 Billion in 2015 to USD 33.6 Billion by 2020, at an estimated CAGR of 17.8% from 2015 to 2020.
- "Global Wi-Fi Market Worth $15.6 Billion By 2022"
  - March 2018 – Markets and Markets
  - The Wi-Fi market is expected to grow from USD 5.96 Billion in 2017 to USD 15.60 Billion by 2022, at a CAGR of 21.2% during the forecast period. The proliferation of mobile devices and rapidly growing adoption of BYOD and IoT within enterprises are some of the major factors expected to drive the growth of the Wi-Fi market.



4 | The Magic Ratio

DEFINITION

Customer Acquisition Cost (CAC)

$$CAC = \frac{\sum \text{All Sales \& Marketing Expenses}}{\text{Number of New Customers Added}}$$

DEFINITION

Customer Lifetime Value (CLV)*

$$\text{CLV} = \frac{ARPA \;*\; \text{Gross Margin \%}}{\text{Customer Churn Rate}}$$

*Also referred to as simply Lifetime Value (LTV)

DEFINITION

Average Revenue Per Account:
The total revenue generated from each unit of sales, whether an individual user (referred to as ARPU in direct to consumer) or enterprise sales account, in a given period of time.

Gross Margin %:
The percentage of the total revenue that remains after direct costs are removed. This is the amount of cash that a company retains to spend on operations, product development, sales and marketing and earnings.

$$\mathrm{CLV} = \frac{ARPA \; * \mathrm{Gross\ Margin\ \%}}{\mathrm{Customer\ Churn\ Rate}}$$

Customer Churn Rate:
Churn refers to the percentage of customers that are lost (or no longer subscribe to a product or service) in a given period of time (e.g. month). The inverse of churn rate represents the average customer lifetime measured in the same units of time

MAGIC RATIO

CLV:CAC

3:1