

Session 4

The Fundamental Skills:

Entrepreneurship in Business Analytics
Market Sizing + Assumptions



November 28th

Discussion of Session 3

★ What advice did you find most valuable?

What is *Entrepreneurship?*

★ **Change & Impact**

Entrepreneurship is the process of creating and growing a new venture by identifying opportunities and building solutions around them.

★ **Risk & Value**

It involves taking risks, innovating, and turning ideas into products or services with real value.

Entrepreneurship in Business Analytics

★ Market Sizing

Identifying the total addressable market (**TAM**), the serviceable addressable market (**SAM**), and the serviceable obtainable market (**SOM**).

★ Assumptions

Making reasonable and logical **assumptions without reliable data** that act as a starting point for projects or strategies.

★ Top-Down VS. Bottom Up

Using both approaches to completing tasks, **top-down** starts with the *big picture*. **Bottom-up** is the opposite; it starts with the specifics and gradually expands.

★ Feasibility

Forming a realistic business model and minimum viable product (**MVP**), while outlining profitability and value proposition differentiation.

Market Sizing & Dynamics

★ **Total Addressable Market**

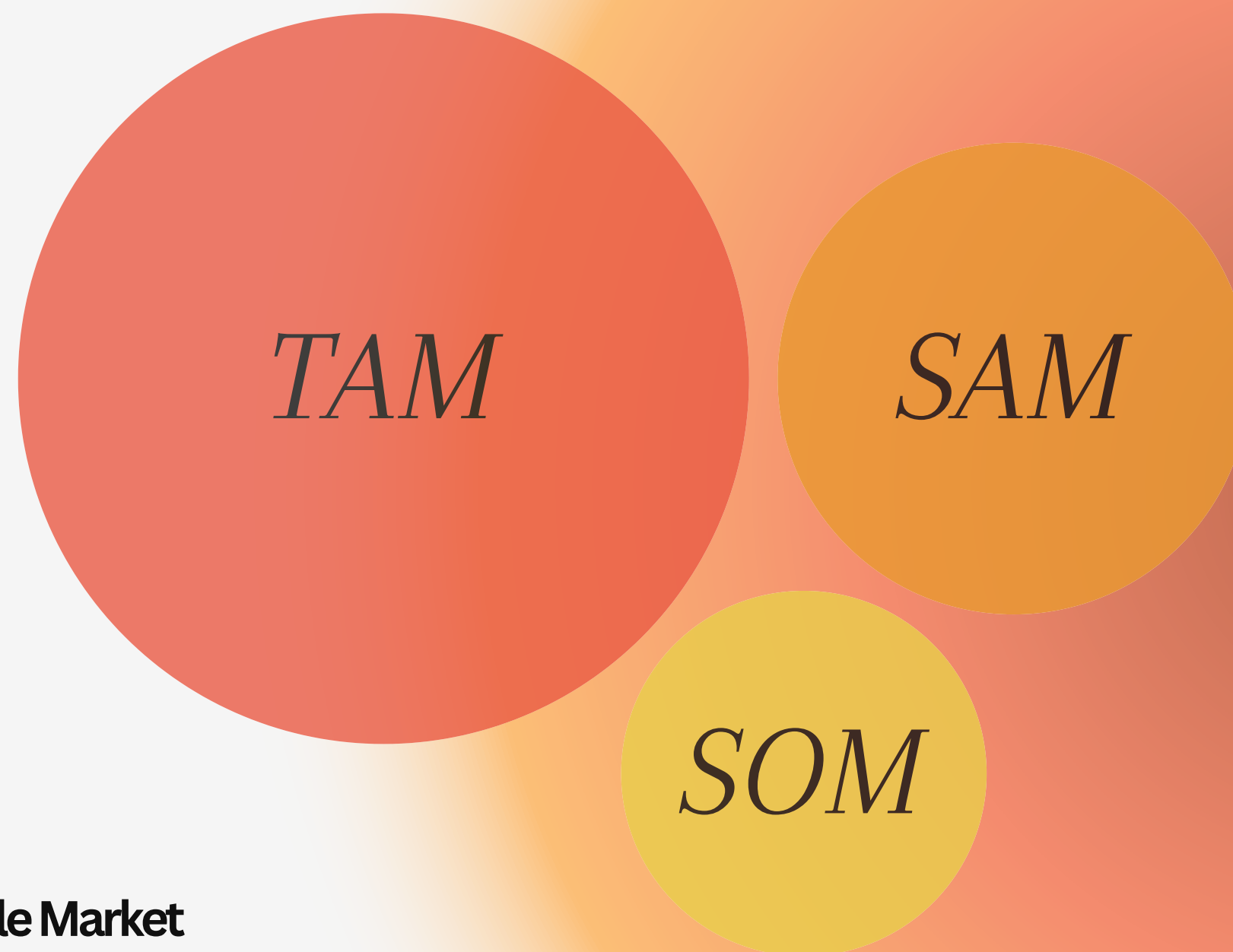
The maximum revenue opportunity for a product or service, assuming a company achieves 100% market share.

★ **Serviceable Addressable Market**

The portion of the total market demand for a product or service that a business can target and serve.

★ **Serviceable Obtainable Market**

The portion of the market a company can realistically capture with its current resources, capabilities, and competitive landscape.



Assumptions

Entrepreneurs operate under uncertainty and need to make assumptions that will act as a true shortcut to streamline projects.

★ **Forecasting**

Assumptions allow for early decision-making and looking ahead. Example: growth metrics and financial projections (5% sales growth, 2% revenue increase)

★ **Validation**

Assumptions reveal what might need validation. Example: customer behaviours towards product (will this new feature actually be used?)

Top-Down vs. Bottom-Up Approach

★ Purpose

Both approaches are used to complete projects or tasks as efficiently as possible. Using a top-down strategy, you look at the big picture first and narrow each step. Bottom-up is the opposite.

★ Example Uses

Establishing a whole plan, the final product, then breaking it down into different tasks for completion.

Start by making the core features, then build it up into a full product.

Feasibility

Determining if a business model is profitable and can be realistically implemented into a market.

★ Validating the Idea

Shows whether the problem trying to be solved is real and possible. Determines if customers would actually pay for the product.

★ Minimum Viable Product (MVP)

Develops an outline on how the product will be built and sold. Shows which features matter most to customers.

Practice

Example: Global BioTech Company

★ Market Sizing

All adults worldwide who could benefit from early cancer screening: 1.5 billion adults globally × \$200 test = \$300B TAM.

Adults in countries where the company can legally operate and where advanced diagnostic labs exist: 300 million adults in North America + EU × \$200 test = \$60B SAM.

~5% of SAM = 15 million tests × \$200 = \$3B SOM.

★ Assumptions

Forecasts: Adoption Rate: 5% of the SAM will adopt in the first 3-5 years. Market growth: Screening demand grows 3–5% annually as awareness increases. Requires Validation: Clinical performance and reliability.

★ Approach

Bottom-up: Biotech companies depend heavily on regulations and approvals, which are factors that need to be addressed before looking from a broader perspective.

★ Feasibility

Somewhat feasible, although dependent on a time-consuming validation and regulatory process. MVP: Gives accurate diagnostics and is accessible worldwide

Case Study

In groups of 2, prepare a 1-2 minute role-play presentation based on one of the provided cases.

Option 1 is more technical, and option 2 requires more creativity.

The judge will give you a grade out of 100, which will determine your likelihood of receiving a prize.

★ Option 1: AI Tech Startup

You and your partner are launching an AI that automatically organizes your life across all apps: email, calendar, notes, documents, tasks that predict what you need, and prioritize your day without you touching anything. Your task: determine if the idea is feasible, define your assumptions, size the market, and present your MVP.

★ Option 2: Startup From Scratch

You and your partner are launching a startup. Your job is to explain your concept and pitch your plan in under two minutes. In your pitch, describe your idea, explain if it seems possible, state two assumptions, estimate your market using a simple bottom-up approach, and outline your MVP. End with a quick statement about whether you think the idea is actually doable.

See You December 11th