UNIVERSITÀ DEGLI STUDI DI BERGAMO
Dipartimento di Ingegneria Gestionale, dell'Informazione e della Produzione

PBL 4
Concept Selection and Testing

Laboratory Digital Innovation and Management (DIM)

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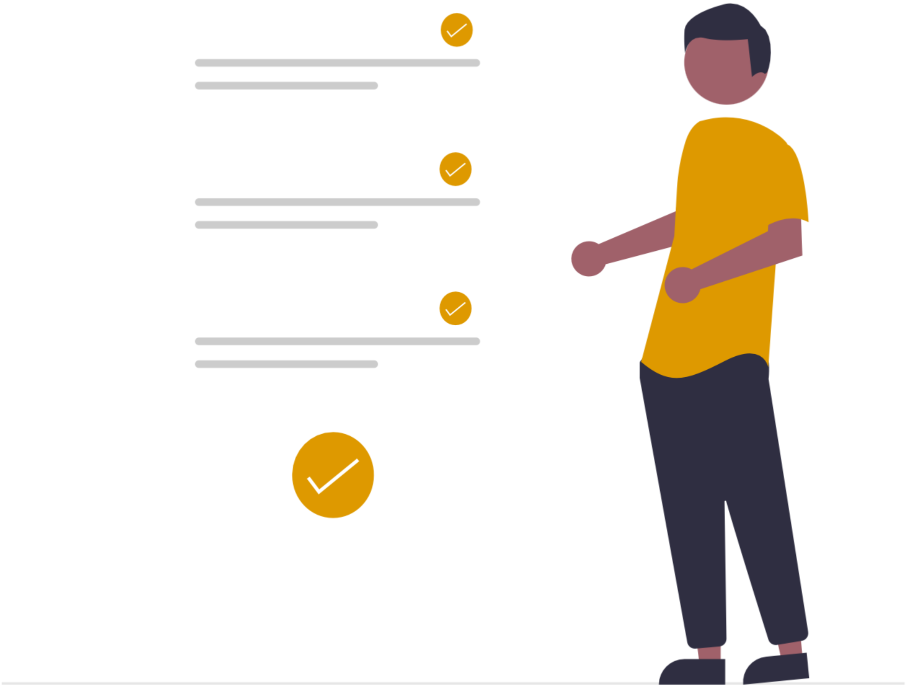
Agenda

1. Concept Selection
2. Concept Screening
3. Concept Scoring
4. Concept Testing
5. Prototyping
6. MVP



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1. Concept Selection

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New Product Development (NPD) Process

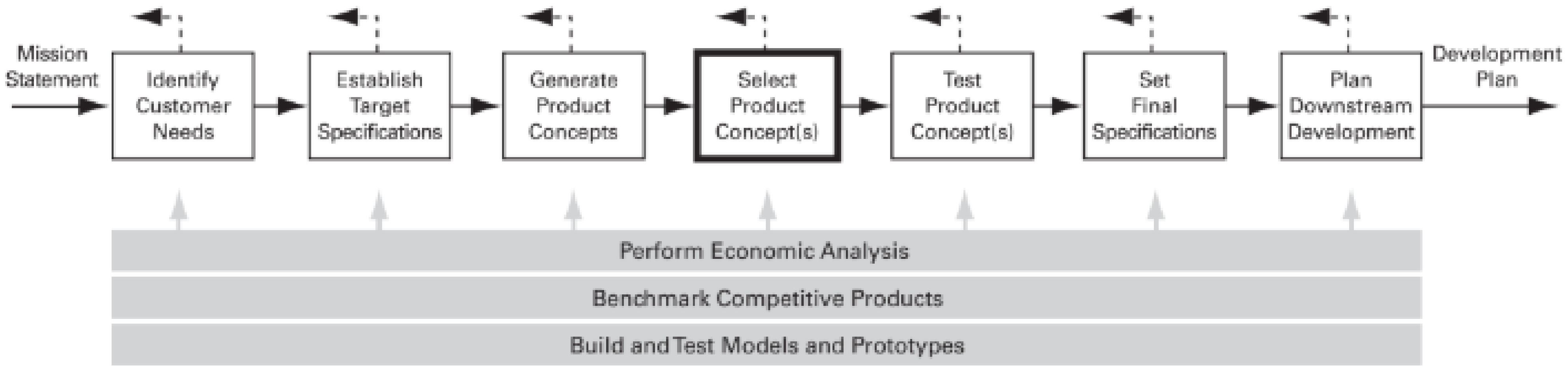
The **New Product Development (NPD) process** refers to the series of steps or stages an organization follows to create a new product, service, or solution from the initial idea through to its market launch.

This process is typically structured to ensure that all aspects of the development are carefully planned, tested, and optimized.

Concept Selection

Concept selection is the process of evaluating ideas based on **customer needs** and other criteria, comparing the strengths and weaknesses of each, and selecting one or more ideas for further investigation, testing, or development.

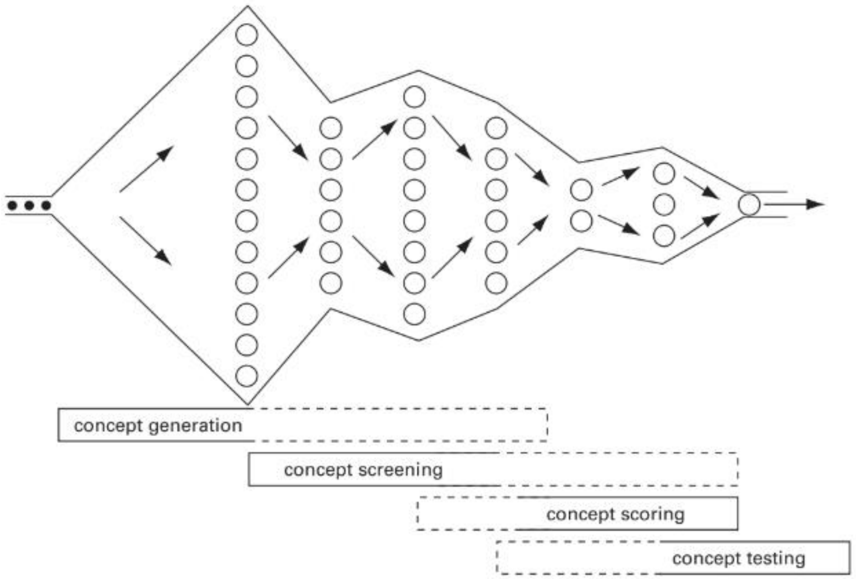
It is a **phase of NPD process**:



Concept Selection: an Iterative Process

Concept selection narrows down alternatives in the development process. Though convergent, it is **iterative** and may not yield a dominant concept immediately.

A **large set is reduced**, but concepts can be refined and combined, temporarily expanding options. Through iterations, a final concept emerges:



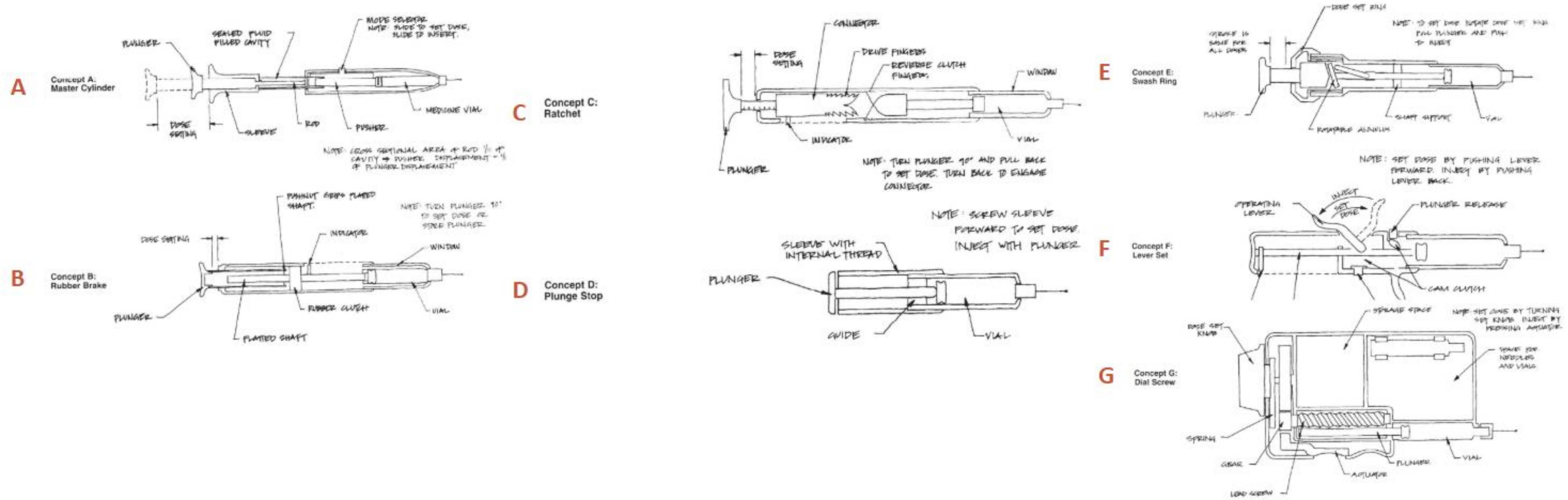
Methods for Choosing a Concept

EXTERNAL DECISION	concepts are turned over to the customer/other external entities for the selection
PRODUCT CHAMPION	An influent NPD team member select the concept based on his preference
INTUITION	concept is chosen by the perception of being better
MULTI-VOTING	each NPD team members vote several concepts. The most voted one is chosen
WEB-BASED SURVEYS	each concept is rated by many people through online surveys
PROS & CONS	concept is chosen by the list of pros & cons the NPD team makes
PROTOTYPE & TEST	concept selection is made upon data obtained through prototypes and tests
DECISION MATRICES	team rates each concepts based on some prespecified weighted criteria

Example: Reusable Syringe

A medical supply company wants to develop a **reusable syringe with precise dosage control for outpatient use**.

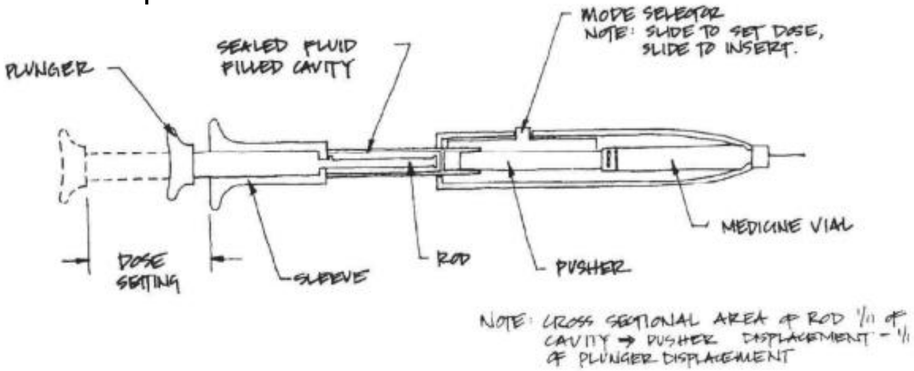
The NPD team has created 7 sketches to describe the basic characteristics of the product, and they want to **choose the best one** for further design, refinement and production.



Example: Reusable Syringe - concepts

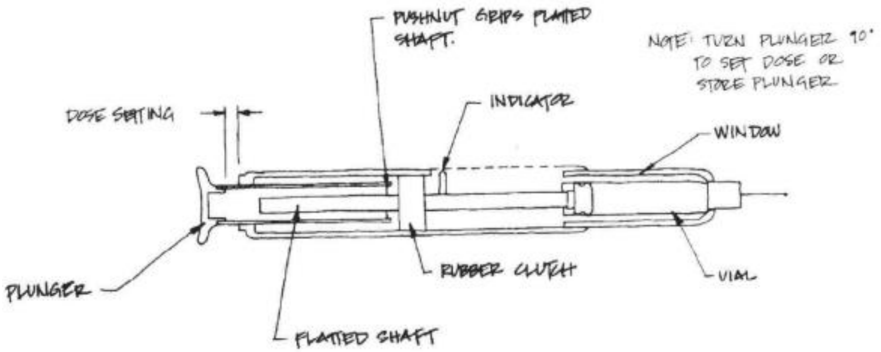
Concept A: Master Cylinder

Fluid displacement sets the dose



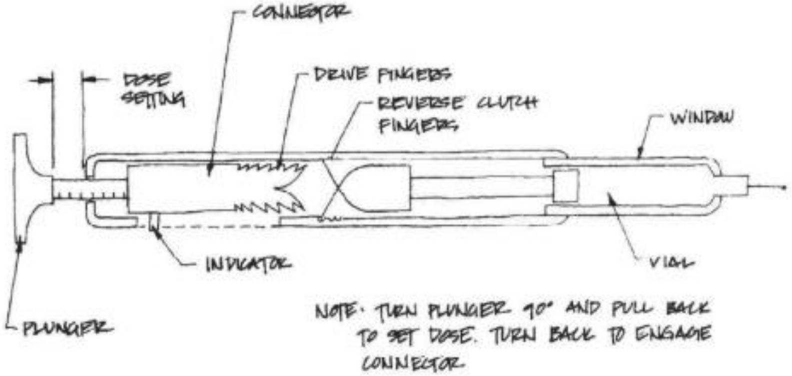
Concept B: Rubber Brake

Dose set by twisting a plunger, while the rubber holds the position during the injection



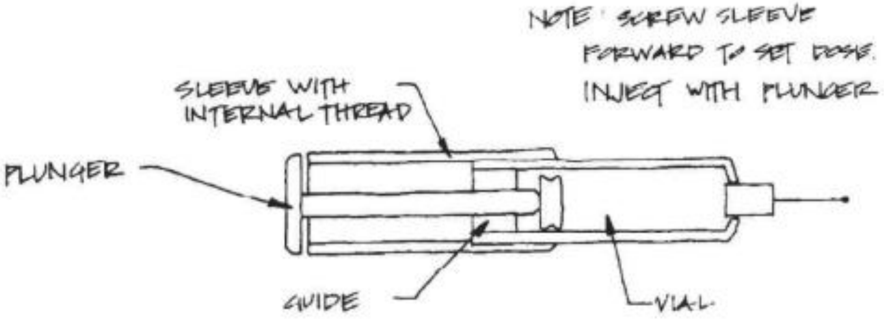
Concept C: Ratchet

Dose set by pulling a plunger, that is then locked in place by the ratchet



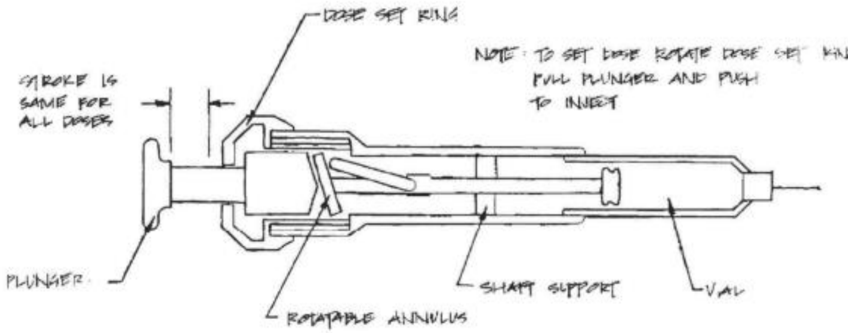
Concept D: Plunge Stop

Dose set by screwing the sleeve forward

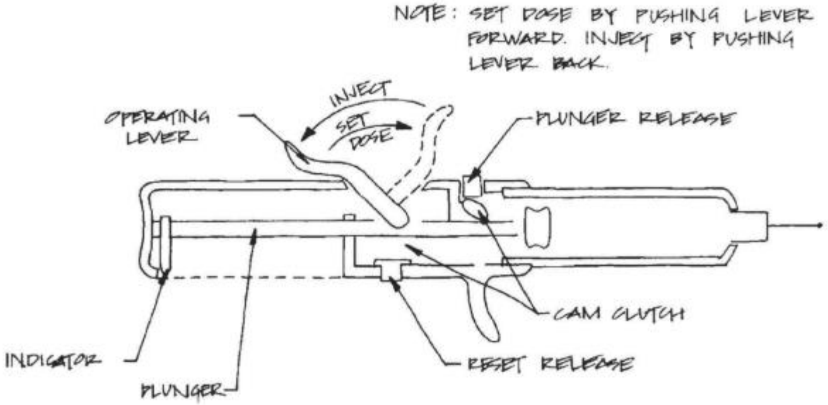


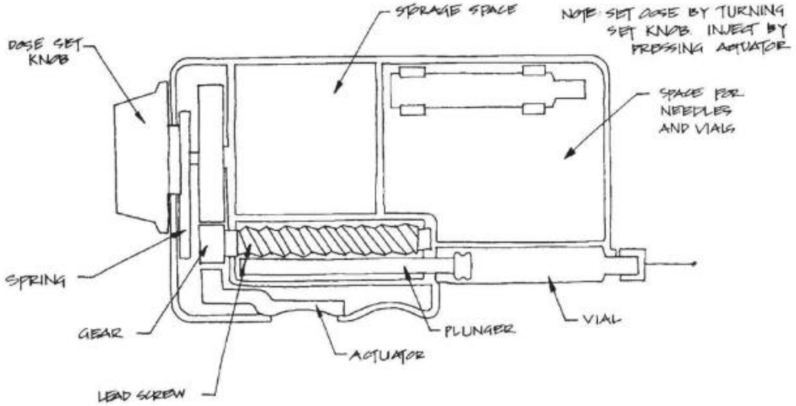
Example: Reusable Syringe - concepts

Concept E: Swash Ring
Dose set via rotating a "dose set ring"



Concept F: Lever Set
Dose set by pushing the lever forward, and the pulling it back to inject





Concept G: Dial Screw
Dose set by turning a knob via the use of gear and spring

Example: Reusable Syringe

The method used for selecting the best design is the **Decision Matrix**.

The team establishes **7 prespecified weighted criteria** to summarize the needs of its client and end-users:

1. Ease of handling
2. Ease of use
3. Readability of dose settings
4. Dose metering accuracy
5. Durability
6. Ease of manufacture
7. Portability

Pros of a Structured Concept Selection

CUSTOMER-FOCUSED PRODUCT	concepts selection is based on customer needs
COMPETITIVE DESIGN	benchmarking is aimed at matching or exceeding competitors' performances
BETTER PRODUCT-PROCESS COORDINATION	product manufacturability matches better with company's process capabilities
REDUCED TIME TO PRODUCT INTRODUCTION	a structured method is simpler to understand in a common way among all different figures invloved
EFFECTIVE GROUP DECISION MAKING	objective criteria minimize the likelihood that arbitrary/personal factors influence the concept selection
DOCUMENTATION OF THE DECISION PROCESS	recording the rationale behind the concept decisions is useful i.e when the company wants to assess the impact of changes or to hire new team members

Can you think about other pros of a structured concept selection?

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2. Concept Screening

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2.0 - Concept Screening

This is a method used in product development to **evaluate and compare different ideas** to identify the most promising ones.

The process typically follow six phases:

1. **Prepare the selection matrix**
2. **Rate the concepts**
3. **Rank the concepts**
4. **Combine and improve concepts**
5. **Select concepts**
6. **Review and Adjust**

2.1 - Prepare the selection matrix

The development team sets the **criteria** on two perspectives:

- **Customer needs** (usability, effectiveness, quality, etc)
- **Company needs** (reliability, low production costs, etc)

Then, its necessary to choose a **reference concept** to use as benchmark for all the other concepts that we are evaluating. And then we put everything in the matrix below:

Syringe example, the **7 selection criteria** are: →

	Concepts						
Selection Criteria	**A Master Cylinder**	**B Rubber Brake**	**C Ratchet**	**D (Reference) Plunge Stop**	**E Swash Ring**	**F Lever Set**	**G Dial Screw**
Ease of handling							
Ease of use							
Readability of settings							
Dose metering accuracy							
Durability							
Ease of manufacture							
Portability							

2.2 - Rate the concepts

Now, the development team proceeds with the concept rating, comparing the concept with the benchmark according to the chosen **criteria** following these rules:

- **+** for "***better than***"
- **0** for "***same as***"
- **-** for "***worse than***".

	Concepts						
Selection Criteria	**A Master Cylinder**	**B Rubber Brake**	**C Ratchet**	**D (Reference) Plunge Stop**	**E Swash Ring**	**F Lever Set**	**G Dial Screw**
Ease of handling	0	0	–	0	0	–	–
Ease of use	0	–	–	0	0	+	0
Readability of settings	0	0	+	0	+	0	+
Dose metering accuracy	0	0	0	0	–	0	0
Durability	0	0	0	0	0	+	0
Ease of manufacture	+	–	–	0	0	–	0
Portability	+	+	0	0	+	0	0

2.3 - Rank the concepts

After the rating, the team do the sum of all the **+, 0, -** to get the **net score for each concept**.

Let's do the math: **Net score** = ∑ + - ∑ -

The higher the net score, the higher will be the ranking position of the concept.

Selection Criteria	A Master Cylinder	B Rubber Brake	C Ratchet	D (Reference) Plunge Stop	E Swash Ring	F Lever Set	G Dial Screw
Ease of handling	0	0	–	0	0	–	–
Ease of use	0	–	–	0	0	+	0
Readability of settings	0	0	+	0	+	0	+
Dose metering accuracy	0	0	0	0	–	0	0
Durability	0	0	0	0	0	+	0
Ease of manufacture	+	–	–	0	0	–	0
Portability	+	+	0	0	+	0	0
Sum +'s	2	1	1	0	2	2	1
Sum 0's	5	4	3	7	4	3	5
Sum –'s	0	2	3	0	1	2	1
Net Score	2	–1	–2	0	1	0	0
Rank	1	6	7	3	2	3	3

2.4 - Combine and improve concepts

The NPD team now should verify the reliability of the obtained results and evaluate ways to combine and improve certain concepts.

Issues that the team must consider are:

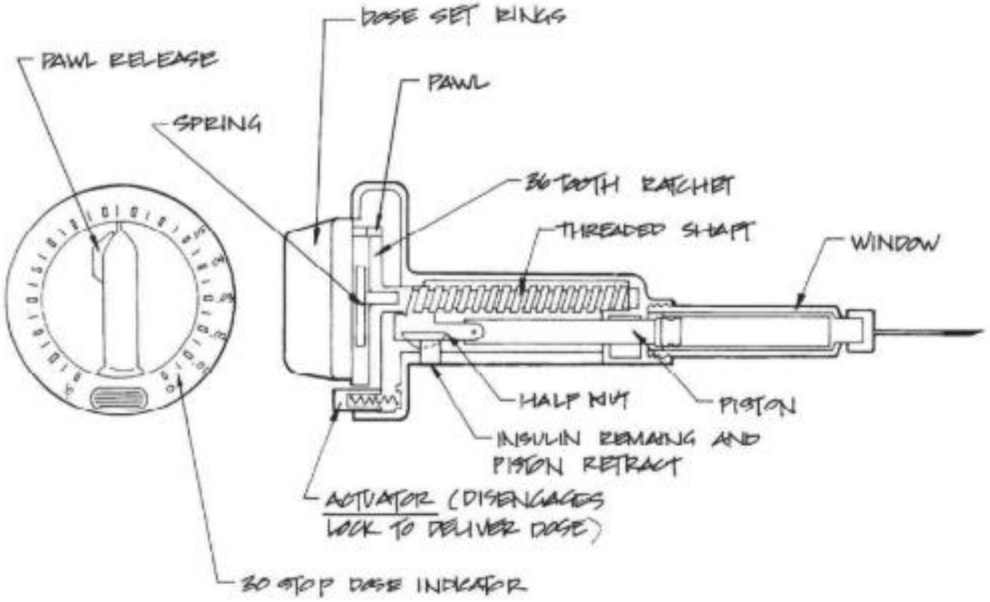
Identify potential **weaknesses** in strong concepts

Explore **synergies** between concepts

After the decision of combining or improving concepts, the team **puts them into the matrix**, **rate and rank them again**.

2.4.1 – Identify potential weaknesses in strong concepts

Concept G+: revised version of concept G that improves all its characteristics.

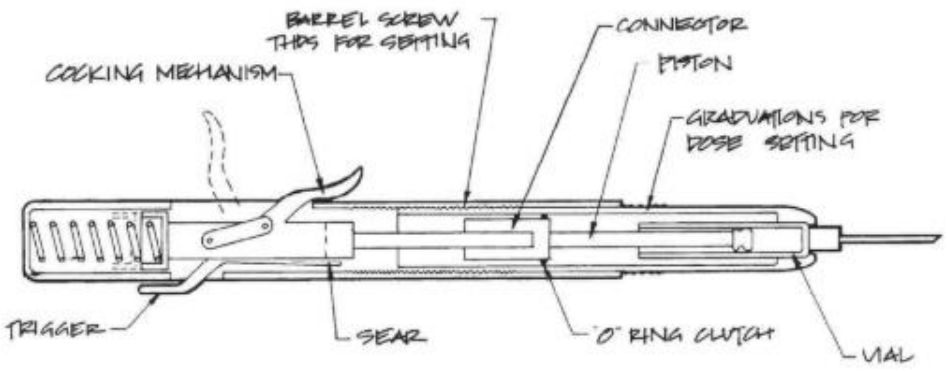


Selection Criteria	A Master Cylinder	B Rubber Brake	C Ratchet	D (Reference) Plunge Stop	E Swash Ring	F Lever Set	G Dial Screw
Ease of handling	0	0	–	0	0	–	–
Ease of use	0	–	–	0	0	+	0
Readability of settings	0	0	+	0	+	0	+
Dose metering accuracy	0	0	0	0	–	0	0
Durability	0	0	0	0	0	+	0
Ease of manufacture	+	–	–	0	0	–	0
Portability	+	+	0	0	+	0	0
Sum +'s	2	1	1	0	2	2	1
Sum 0's	5	4	3	7	4	3	5
Sum –'s	0	2	3	0	1	2	1
Net Score	2	–1	–2	0	1	0	0
Rank	1	6	7	3	2	3	3
Continue?	Yes	No	No	Combine	Yes	Combine	Revise

The initial rating suggested that a review was needed

2.4.2 – Explore synergies between concepts

Concept DF: combination of the concepts D and F, that improves the mechanism and its ease of use



		Concept							
		A (Reference) Master Cylinder		DF Lever Stop		E Swash Ring		G+ Dial Screw+	
Selection Criteria	**Weight**	**Rating**	**Weighted Score**	**Rating**	**Weighted Score**	**Rating**	**Weighted Score**	**Rating**	**Weighted Score**
Ease of handling	5%	**3**	0.15	3	0.15	4	0.2	4	0.2
Ease of use	15%	**3**	0.45	4	0.6	4	0.6	3	0.45
Readability of settings	10%	2	0.2	**3**	0.3	5	0.5	5	0.5
Dose metering accuracy	25%	**3**	0.75	3	0.75	2	0.5	3	0.75
Durability	15%	2	0.3	5	0.75	4	0.6	**3**	0.45
Ease of manufacture	20%	**3**	0.6	3	0.6	2	0.4	2	0.4
Portability	10%	**3**	0.3	3	0.3	3	0.3	3	0.3
	Total Score	2.75		3.45		3.10		3.05	
	Rank	4		1		2		3	

Combining the two made DF be ranked 1

2.5 - Select concepts

The team selects the concepts for further refinement and analysis, considering resource constraints such as:

Personnel | **Budget** | **Time**

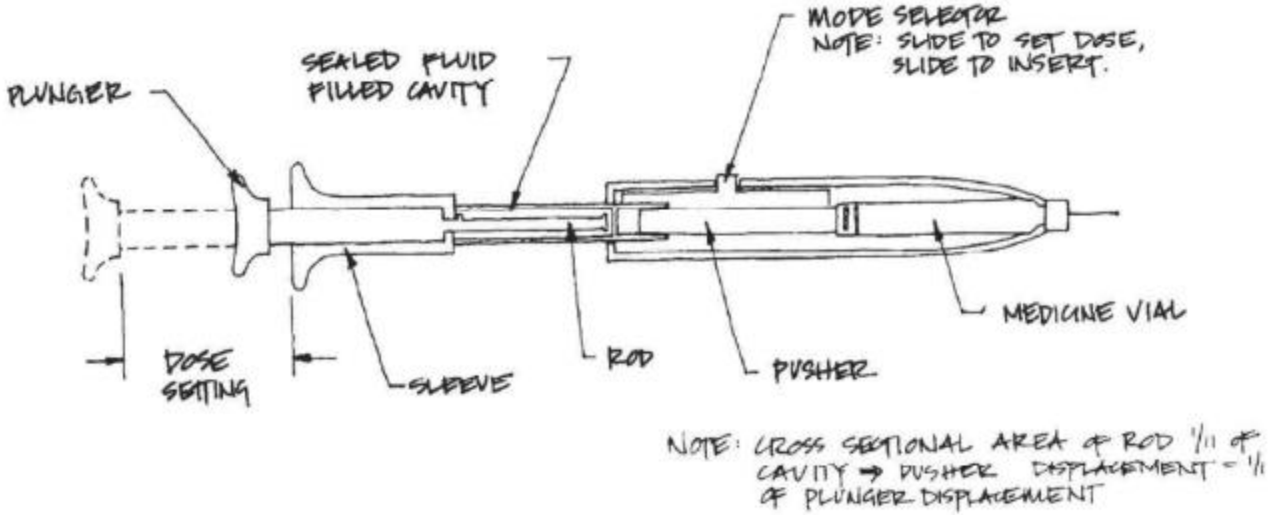
In this case, the team has chosen:

- Concept A
- Concept E
- The revised Concept G (renamed G+)
- The new Concept DF (resulting from the combination of Concepts D and F)

2.5.1 - Chosen concepts

Concept A: Master Cylinder

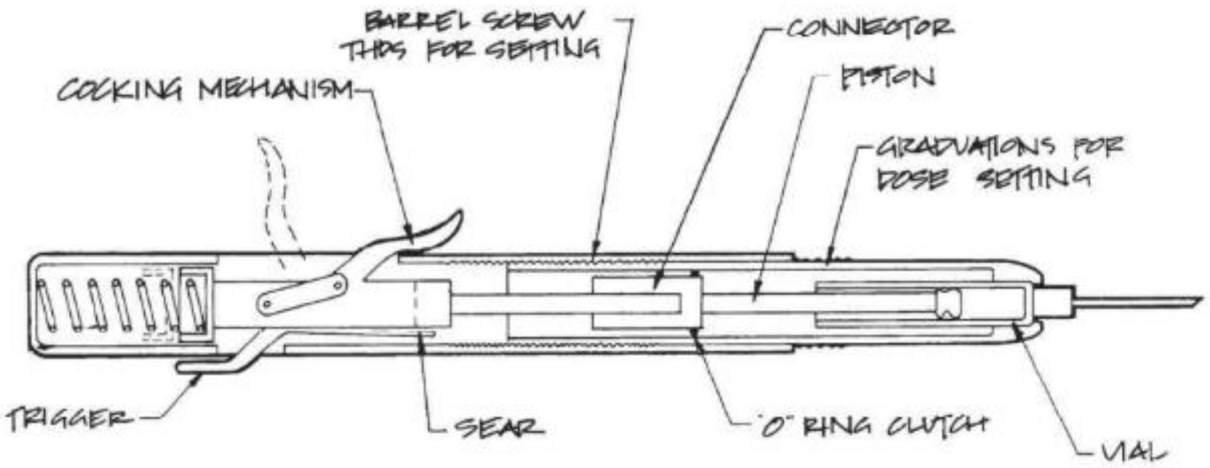
Concept A:
Master Cylinder



2.5.2 - Chosen concepts

Concept DF: Lever Stop

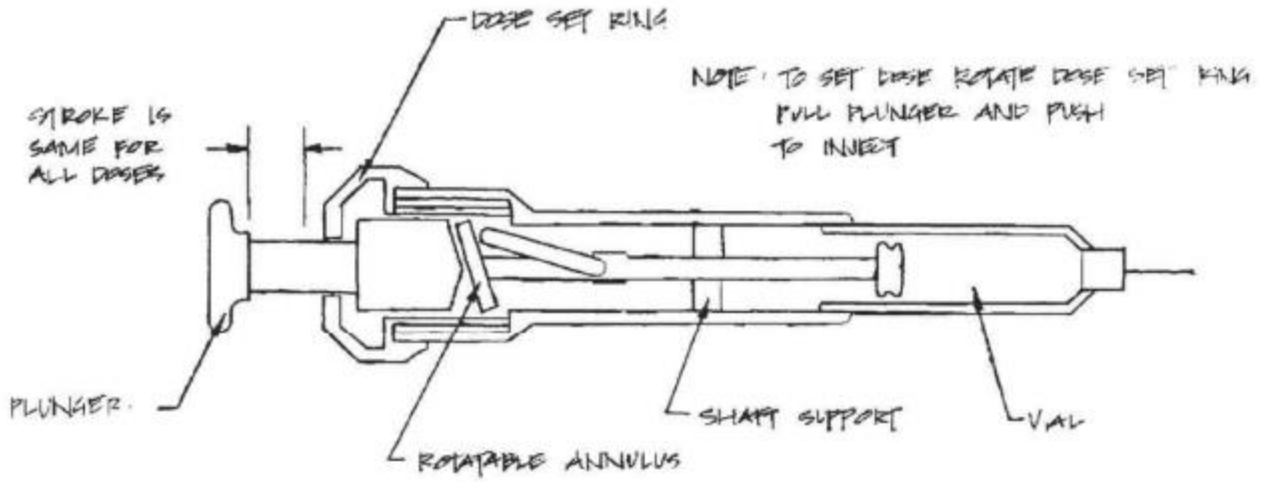
Concept DF:
Lever Stop



2.5.3 - Chosen concepts

Concept E: Swash Ring

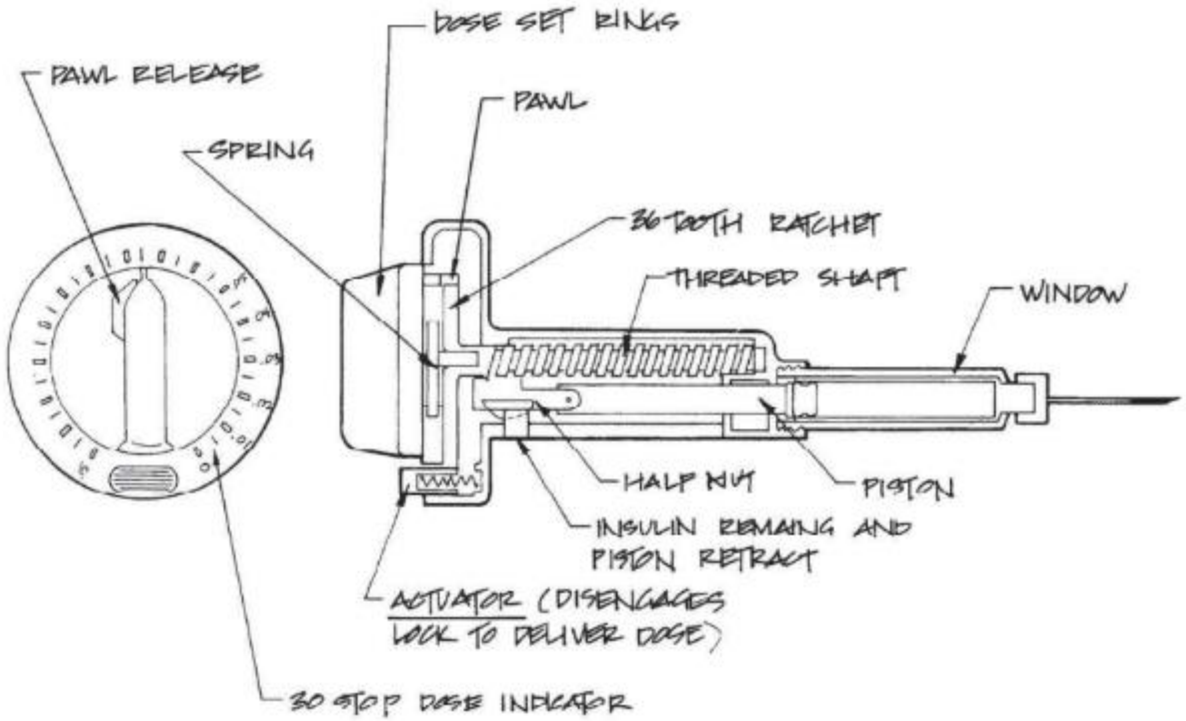
Concept E:
Swash Ring



2.5.4 - Chosen concepts

Concept G+: Dial Screw+

Concept G+:
Dial Screw+



2.6 - Review and Adjust

All development team members should **fully agree** with the outcome.

Explicitly ensuring that the results make sense to everyone:

- Reduces the risk of errors.
- Strengthens team commitment to the next development phases.

Other advantages?

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3. Concept Scoring

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3.0 – Concept Scoring

Concept scoring is a decision-making process used to evaluate and compare multiple design concepts based on weighted criteria.

It follows an initial **concept screening** phase and provides a more detailed, quantitative assessment by following the same six phases:

1. **Prepare the selection matrix**
2. **Rate the concepts**
3. **Rank the concepts**
4. **Combine and improve concepts**
5. **Select concepts**
6. **Review and Adjust**

3.1 - Prepare the selection matrix

The team defines selection criteria and chooses a **different** reference concept **for each** criteria.

Is necessary to have more detailed concepts and criteria are **refined hierarchically**.

In concept scoring, **weighted importance** is assigned based on customer data or expert judgment.

More details:

Ease of loading
Ease of injection
Ease of cleaning

Low cost materials
Low complexity
Few assembly steps

		Concept							
		A (Reference) Master Cylinder		DF Lever Stop		E Swash Ring		G+ Dial Screw+	
Selection Criteria	Weight	Rating	Weighted Score	Rating	Weighted Score	Rating	Weighted Score	Rating	Weighted Score
Ease of handling	5%								
Ease of use	15%								
Readability of settings	10%								
Dose metering accuracy	25%								
Durability	15%								
Ease of manufacture	20%								
Portability	10%								

3.2 - Rate the concepts

The dev team **rates the concepts**, considering one criteria one by one.

A **finer scale** is introduced (5 or 9-point scale):

Relative Performance	Rating
Much worse than reference	1
Worse than reference	2
Same as reference	3
Better than reference	4
Much better than reference	5

		Concept							
		A (Reference) Master Cylinder		DF Lever Stop		E Swash Ring		G+ Dial Screw+	
Selection Criteria	Weight	Rating	Weighted Score	Rating	Weighted Score	Rating	Weighted Score	Rating	Weighted Score
Ease of handling	5%	**3**		3		4		4	
Ease of use	15%	**3**		4		4		3	
Readability of settings	10%	2		**3**		5		5	
Dose metering accuracy	25%	**3**		3		2		3	
Durability	15%	2		5		4		**3**	
Ease of manufacture	20%	**3**		3		2		2	
Portability	10%	**3**		3		3		3	

3.3 - Rank the concepts

Now the dev team calculates the **weighted score:** $s_{ij} = r_{ij} \cdot w_i$, then get **the total score**: $S_j = \sum_{i=1}^{n} r_{ij} w_i$

		Concept							
		A (Reference) Master Cylinder		DF Lever Stop		E Swash Ring		G+ Dial Screw+	
Selection Criteria	**Weight**	**Rating**	**Weighted Score**	**Rating**	**Weighted Score**	**Rating**	**Weighted Score**	**Rating**	**Weighted Score**
Ease of handling	5%	**3**	0.15	3	0.15	4	0.2	4	0.2
Ease of use	15%	**3**	0.45	4	0.6	4	0.6	3	0.45
Readability of settings	10%	2	0.2	**3**	0.3	5	0.5	5	0.5
Dose metering accuracy	25%	**3**	0.75	3	0.75	2	0.5	3	0.75
Durability	15%	2	0.3	5	0.75	4	0.6	**3**	0.45
Ease of manufacture	20%	**3**	0.6	3	0.6	2	0.4	2	0.4
Portability	10%	**3**	0.3	3	0.3	3	0.3	3	0.3
	Total Score	2.75		3.45		3.10		3.05	
	Rank	4		1		2		3	

And finally rank the concepts again.

3.4 - Combine and improve concepts

During this phase, the strengths and weaknesses of various concepts become evident. While concept generation precedes selection, the team explores modifications and combinations to enhance the concepts.

3.5 - Select concepts

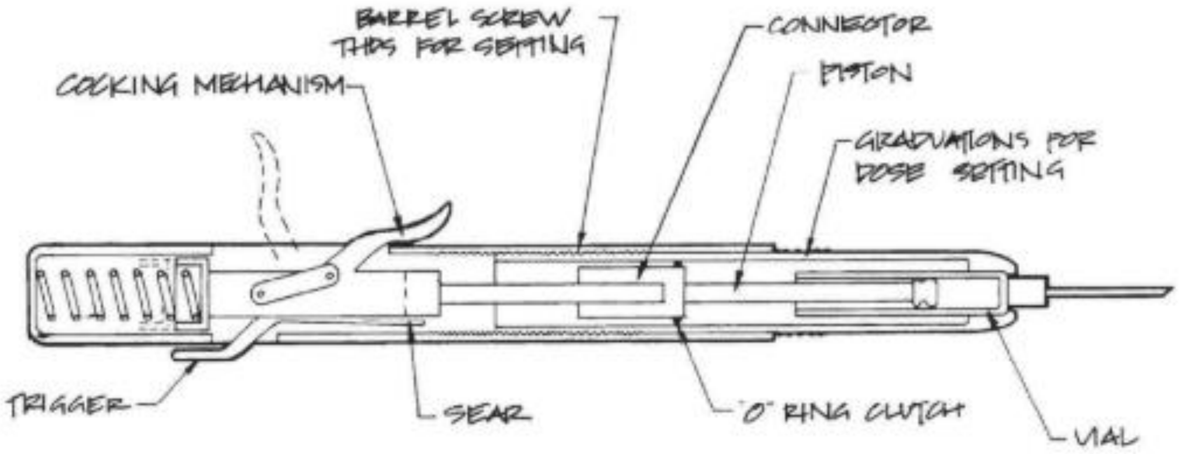
- Highest score
- Lowest uncertainty in sensitivity analysis (on ratings and weights)
- Develop, prototype, and test multiple concepts with customers
- Use multiple scoring matrices with different weightings for various segments

3.6 - Review and Adjust

Each rejected concept must lack any useful feature that could be integrated into others. The whole team should agree that the selected concepts provide the best balance of cost and customer satisfaction. The organization benefits from reflecting on the concept selection process itself.

3.5.1 - Conclusion : final selected concept

In our case study, the team agreed that **concept DF** was the most promising and the most likely to result in a successful product



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4. Concept Testing

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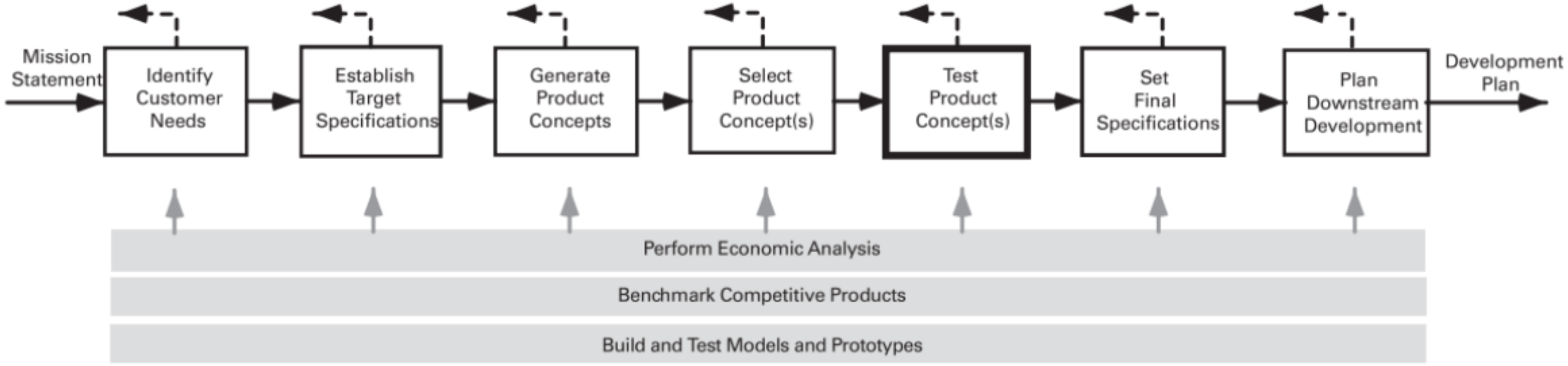
Concept Testing

The concept testing phase is the stage where **potential customers** evaluate a concept before it goes into full development. This process helps determine the concept's appeal, feasibility, and potential market success.



Concept Testing follows the concept selection phase because a team cannot feasibily test more than few concepts directly with potential customers.

Concept Testing

Key output of concept testing:

To estimate how many units of the product the company is likely to sell.
This forecast is a key element in the **economic analysis** of the product.

When to avoid concept testing:

A) The **time** required is relatively large compared to product lifecycle
B) It is **too expensive** relative to cost of launch

Concept Testing

Concept testing has 7 steps:

1. **Define the purpose of concept test**
2. **Choose a survey population**
3. **Choose a survey format**
4. **Communicate the concept**
5. **Measure customer response**
6. **Interpret the results**
7. **Reflect on the results and the process**

Step 1: Define the Purpose of Concept Test

The team articulates a list of questions the members wish to answer with the test.

Typical questions are like:

- **Wich alternative concept should be pursued?**
- **How many units we want to sell?**
- **How can the concept meet customer needs?**
- **Should development be continued?**

Step 2: Choose a Survey Population

The survey population must be selected in such a way that the results are not biased. The target audience for the product should be the same as the surveyed group to avoid incorrect inferences.

For this reason, create some **screener questions** to ensure that the respondent belongs to the target market.

The **sample size** is also important and varies based on the type of product and the questions we want to answer.

Other influencing factors: development **stage**, **survey cost**, and **product development cost**.

Step 3: Choose a Survey Format

The most popular survey formats are:

Face to Face
Interviews pre-arranged by phone

Phone
Cold calls on specific individuals

Postal Mail
The surveyed must return a compiled form

eMail
Risky method due to spam identification

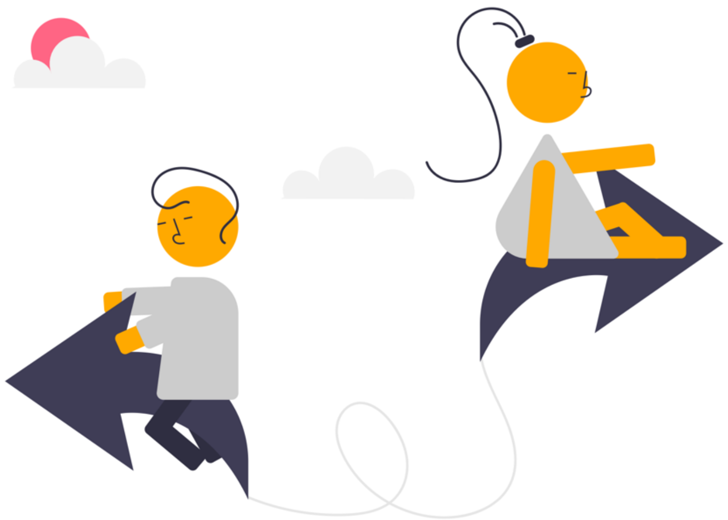
Internet
Concept-testing websites that can provide feedback

Each format carries a risk of sample bias. The team should choose the most suitable option based on the target segment and the survey's objective.

Step 4: Communicate the concept

The choice of survey format is closely linked to how the concept is communicated. To enhance understanding, the concept can be communicated in several ways:

- Verbal description
- Sketch
- Photos and renderings
- Storyboard
- Video
- Simulation
- Interactive Multimedia
- Physical appearance models
- Working prototypes



Aligning survey with concept communication

There is a **high correlation** between survey format and the way the concept is communicated.

	Telephone	Electronic Mail	Postal Mail	Internet	Face-to-Face
Verbal description	•	•	•	•	•
Sketch		•	•	•	•
Photo or rendering		•	•	•	•
Storyboard		•	•	•	•
Video				•	•
Simulation				•	•
Interactive multimedia				•	•
Physical appearance model					•
Working prototype					•

Your opinion

« Which are the issues in communicating the concept to the market? «

Issues in communicating the Concept

When communicating a concept:

Promotion strategy

Decide how aggressively to market the product and its benefits.

Customer perspective

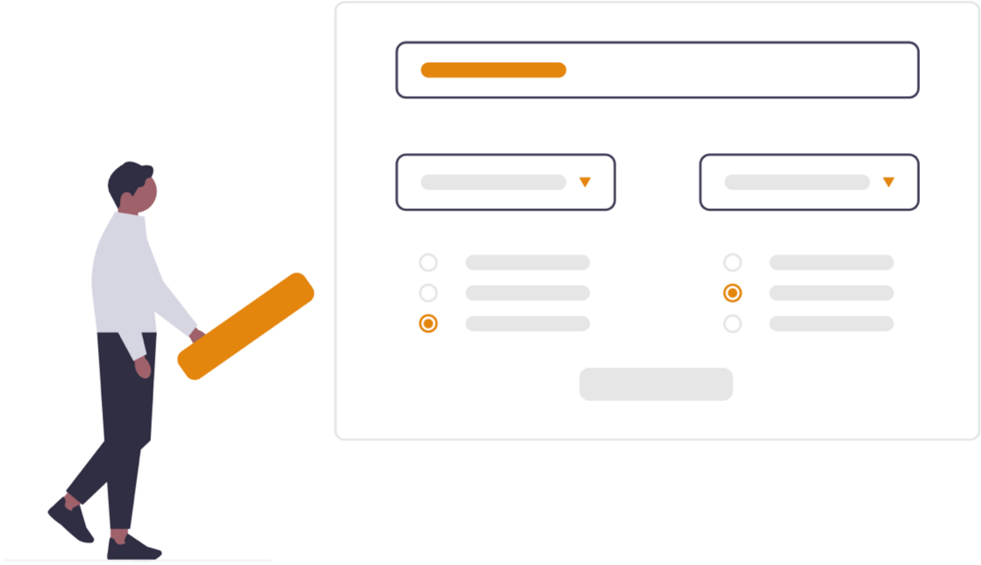
Concept description should reflect key customer purchase factors.

Pricing consideration: Price strongly influences customer response.

- Omit pricing unless it is expected to be significantly higher or lower than competitors.
- Alternatively, ask respondents for their expected price.
- If their expectation differs greatly from the actual price, reconsider the concept or retest with price as a stated attribute.

Step 5: Measure Customer Response

Most concept test surveys present the product first, then measure response, often through choice among alternatives in early development.



Concept is used to measure the purchase willingness through this scale:

1. Definitely would buy
2. Probably would buy
3. Might or might not buy
4. Probably would not buy
5. Definitely would not buy

Step 6: Interpretation of results

The results can lead to different outcomes:

Clear winner

One concept dominates, making the choice straightforward.

Inconclusive results

The team may choose by cost, other factors, or offer multiple versions.

Based on the outcomes the development team will make its considerations.

Estimating product demand and Forecasting Model

The team often estimates post-launch demand for durables.

Durables: long-lasting products with minimal repeat purchases

Forecasting formula:

$$Q = N \times A \times P$$

Q = expected product sales during a period.
N = potential customers in the target market.
A = fraction of N aware of the product and have access to it.
P = probability of purchase if the product is available and known.

Be careful: forecasting models, however, carry significant uncertainty and high error rates.

Estimating product demand and Forecasting Model

P is estimated by:

$$P = C_{\text{definitely}} \times F_{\text{definitely}} + C_{\text{probably}} \times F_{\text{probably}}$$

- $F_{definitely}$: Fraction of survey respondents who definitely intend to purchase.
- $F_{probably}$: Fraction of survey respondents who probably intend to purchase.
- $C_{definitely}$: Calibration constant based on past company experience ($0.10 < C_{definitely} < 0.50$)
- $C_{probably}$: Calibration constant based on past company experience ($0 < C_{probably} < 0.25$)

Example: Scooter sold to college students P1

Hypothesis:

New Category

To estimate N, consider the number of students who travel between one and three miles for commuting or school activities.

N ≅ 2mln

Assumption 1

Assume that we sample this group of students, and we obtain:

$$F_{definitely}=0.10$$

$$F_{probably}=0.05$$

Assumption 2

Plan to sell scooters in bicycle stores near campus and advertise in campus newspapers at the 100 largest U.S. universities.

Expectation: 30% of target market, making A = 0.30.

Example: Scooter sold to college students P2

Assuming $C_{definitely} = 0.4$ and $C_{probably} = 0.2$:

$$P = 0.10 \times 0.4 + 0.05 \times 0.2 = 0.05$$

and so:

$$Q = 2{,}000{,}000 \times 0.3 \times 0.05 = 30{,}000 \text{ units}$$

This result should be interpreted cautiously, as various factors may affect the prediction:

- Importance of word-of-mouth
- Fidelity of concept description
- Pricing
- Level of promotion

Step 7: Review and Adjust

The main benefit of concept testing is **gathering feedback from real potential customers**. When conducted early, discussions with respondents can be the most valuable outcome. Additionally, the team gains insights into three key forecasting variables:

- Market size
- Product availability and awareness
- Likelihood of customer purchase

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5. Prototyping

Laboratory Digital Innovation and Management (DIM)

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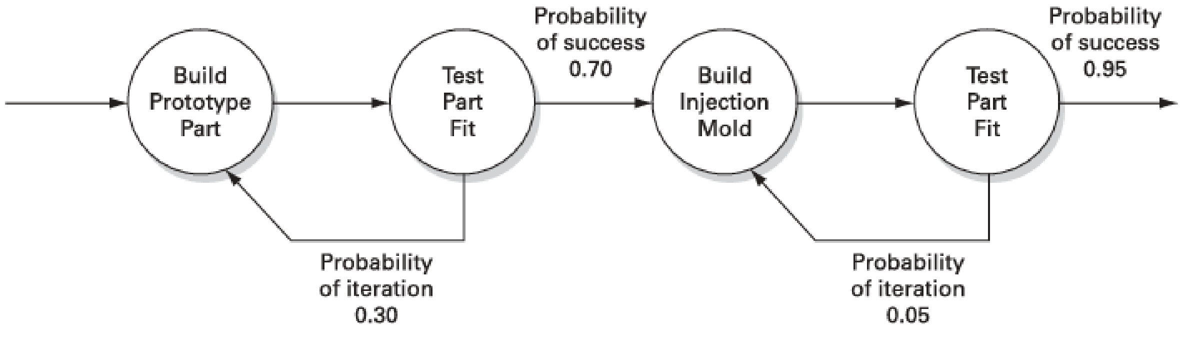
Prototyping

A **prototype** approximates a product or service used to test and/or refine it quickly and at a low cost.

- **Prototyping** is the process of creating a prototype -

Prototypes enables you to “fail quickly and fail cheaply”, to accelerate the development of process.



Process with Prototyping

Prototyping is an **iterative process**, as very often a single prototype isn’t enough to go from the concept of the product to its final execution.

Main uses of prototyping

Learning: Will it work? Will it meet customer needs?

- Used to learn about the characteristics of the product itself, and to understand its market potential

Communicating: to enrich the communication with top management, vendors, partners and investors.

- It's easier to communicate a product by showing a visual or physical representation rather than just by describing it verbally

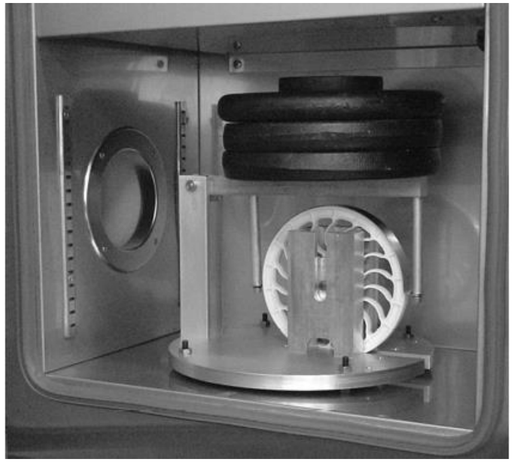
Integrating: to ensure that component and sub-systems of the products work together without issues.

Milestones: especially later during the project, a prototype can show whether the product has achieved the desired level of functionality or not. In many cases, prototypes must pass "qualification tests".

Types of prototyping – classification

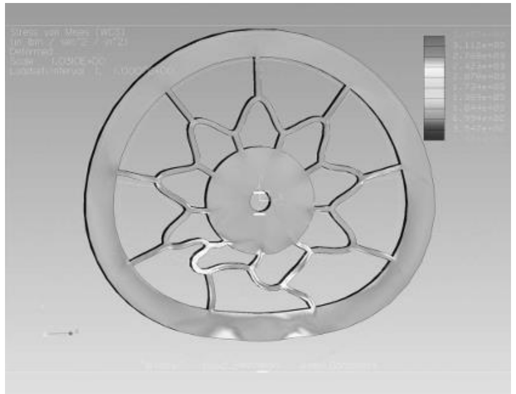
Physical

- Tangible object built for testing and experimenting
- Required to detect unanticipated phenomena
- Used to fine-tune or confirm the design



Digital

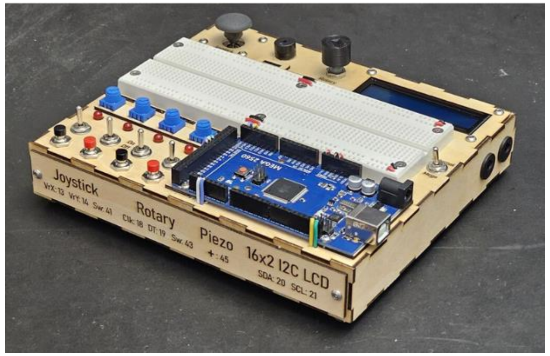
- Mathematical or visual approximation of the product
- Ability to modify parameters to vary the design
- Used to narrow the range of feasible parameters



Types of prototyping – classification

Comprehensive

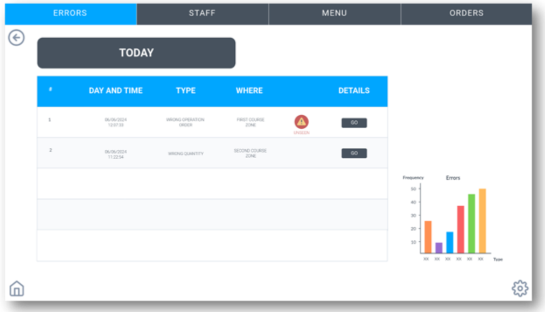
- Implements most, or all, of the attributes of the product
- Full-scale, fully operational version of the product
- Can be given to customers to identify remaining flaws before production



Comprehensive prototype of an Arduino box

Focused

- Implements only one, or few, of the attributes of the product
- “Look-like” prototype to explore the form (ex: foam model)
- “Works-like” prototype to explore the performances (ex: circuit board)



Focused prototype for the UI of a website

A. Rapid prototyping

Practiced by most development companies, allows to test an early version of the product quickly and at a low cost, to determine if you have a solution to a problem **before** investing resources

Main features:

- **Wide range and low detail:** they tend to cover a lot of aspects but not in a detailed way
- **Market validation:** focuses on the value created for the final user rather than the technical challenges
- **Quick and cheap:** made with very few resources and with little time due to constraints

Typically created with Free-Form fabrication, like additive or subtractive manufacturing.

B. Early prototyping

General and/or **low-fidelity** prototype to explore concepts during the early phases of production

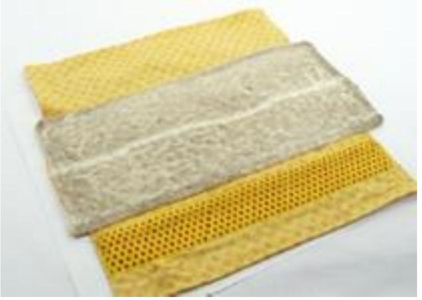
Done with **tools** that allows for speed and low costs, for example:

- **Drawings:** quick sketch or renderings to exhibit your thoughts. Use of symbols and quick captions
- **Storyboard:** a series of sketches that are combined to demonstrate the use of the concept. Use of post-it notes and slides
- **Wireframe:** specialized storyboard for websites and digital applications
- **CAD:** used when precise pictures of 2D or 3D designs are needed
- **Physical models:** created with commonly found objects to test and interact with your idea

Example of early prototyping

Marlene Dysert developed a reusable mopping pad to clean and dry surfaces, completely washable, that she sold online via Etsy

In the first step she was satisfied with the durability of her product, but the cleaning performance wasn't satisfying



On the second iteration she improved the performance of the pad, and combined a mopping side with a drying side, separating them via a layer of batting

This allows the final customer to swap the dry and wet sides according to their needs

C. Later prototyping

Responds and include the feedback received from earlier prototypes, they examine specifical characteristics of the product via the use of more complex tools

They can be divided into four main categories :

- **Technical:** prototypes testing technical issues, tends to be very focused on specific problems
- **Workflow or integration:** same wide aspects coverage as earlier versions, but more in depth into specific functions
- **Layout, displays and placement:** focused on physical and visual placement of the parts and features of the product
- **Difficult, controversial and critical parts:** they extract key aspects that would cause the product to derail in the market, reducing risks and increasing probability of success

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6. MVP

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What is an MVP

An MVP is the simplest version of a product used to test fundamental assumptions:

Minimal functional product

Target: early adopters

Goal: learning with minimal effort

Theoretical concepts

The concept of MVP originates within the lean startup paradigm.

- Iterative validation
- Structured experiments
- Empirical learning

Approach: Build → Measure → Learn

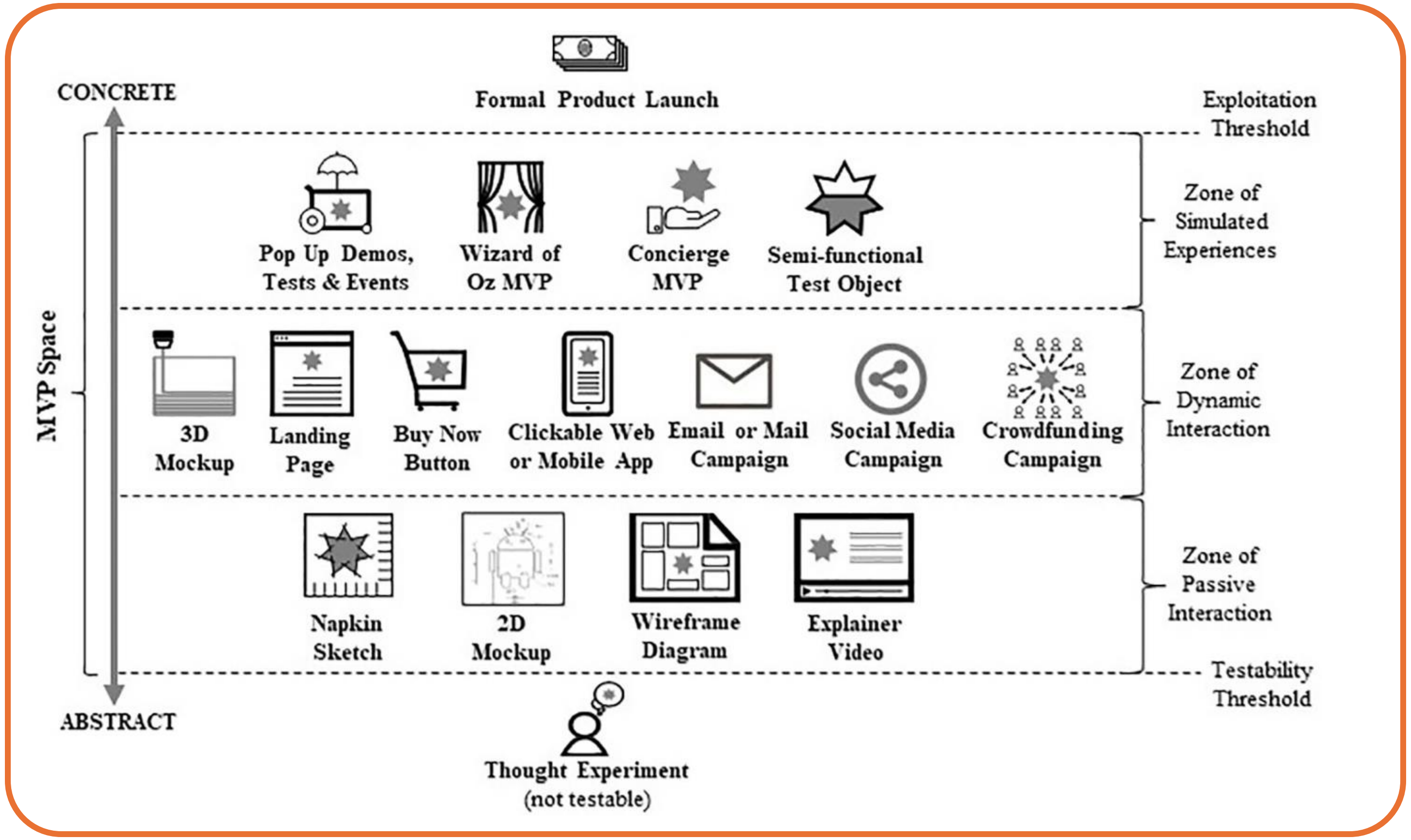
What is NOT an MVP

Many companies misunderstand the concept.

- It isn't a generic prototype.
- It isn't an incomplete product "to be sold."
- It isn't aimed at the mass market.

MVP Archetypes

Not all MVPs are the same. The paper identifies three main types:



1 - Fake-it MVP
Functionality is manually simulated

2 - Build-it MVP
Basic but fully functional version

3 - Pre-sell MVP
Market testing without actual development

Objectives and Challenges

Objectives

The MVP is used to validate critical hypotheses before investing resources.

- Validation of the key assumption
- Collection of real data
- Informed decision: continue, pivot, or stop

Challenges

The correct use of the MVP requires discipline and internal clarity.

- Pressure to “impress”
- MVPs developed without testable hypotheses
- Failure to collect useful feedback

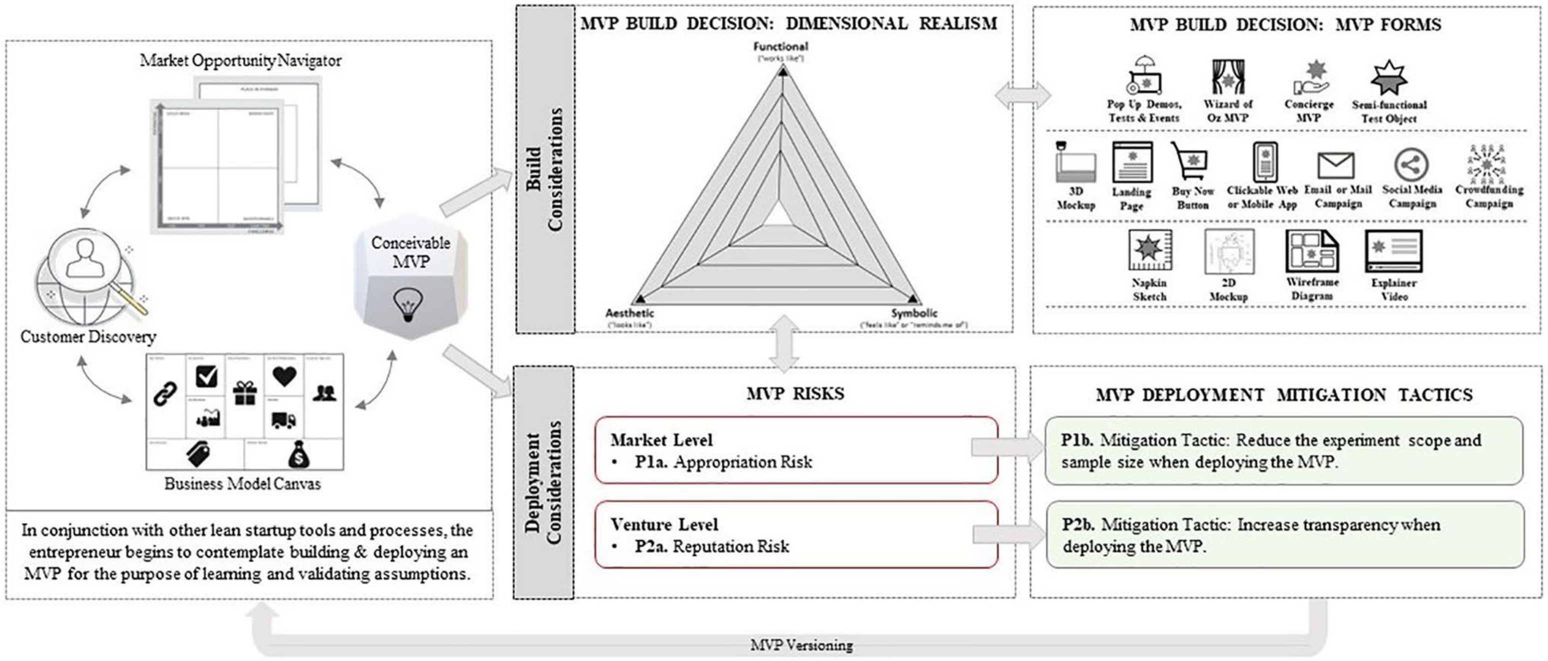
Your opinion

« What are the possible risks and strategic costs of an MVP? «

Examples and Approaches

Case studies show how MVPs are used with different levels of rigor.

- Some MVPs are just “facades”
- Others gather valid insights with minimal resources



Conclusions

MVP requires a shift in mindset within companies.

- **Clarity** on what to test
- Alignment between teams and stakeholders
- **Evaluation based on learning**, not commercial outcomes

The MVP is a tool for rapid learning. It must be used precisely, avoiding shortcuts.

- It is **not a shortcut** to development
- It helps make **decisions based on evidence**
- It requires an experimental culture

Now it's your turn!