

The Build-Measure-Learn (BML) feedback loop is a model for improvement that focuses on measurement. It emphasizes that speed and measurement are critical to product development.

The model takes us through a process to develop ideas and turn them into products by measuring customer's reactions and behaviors. The technique is built around the importance of the ability to rapidly decide whether to persevere (continue) to realize an idea or pivot (discard it and pursue another hypothesis), based on validated learning. Validated learning comes from metrics obtained by fast feedback from the real usage of a product.

The process starts with building a Minimum Viable Product (MVP). This is a version of the product that enables a full turn of the BML feedback loop with a minimum amount of effort and the least amount of development time. The loop can be repeated any number of times, allowing teams to find the best path towards product and market fit. Note: It does not have to be a product that is built. It may also be a process change.

### Prerequisites

- Agree on an MVP to test.
- Everyone involved must understand that the aim is to measure and optimize the end-to-end speed of the BML feedback loop rather than the efficiency of any one area of expertise.

### Implementation

#### How to complete the first turn of the BML feedback loop:

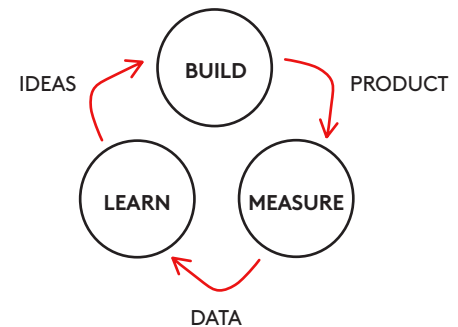
Start with a question you want to answer (e.g. if your idea was to launch a website allowing customers to order products online, your first question would be 'will the customer buy this product online?').

#### 1. Build the MVP:

- Build a prototype of your product, or pilot of your process (e.g. start with no product inventory and fulfil orders by going to a store, buying the product then shipping it to the customer – although this is not viable long-term, it is a quick and easy way to gauge your customers interest in the idea).
- Make a hypothesis of your results (e.g. the hypothesis of this turn is 'the customer is willing to buy the product online').
- Release the MVP to the potential customer. This will provide you with baseline data (e.g. conversion rates, sign-up rates, trial rates, customer lifetime value, etc).

#### 2. Measure its effectiveness:

- Use the baseline data generated during the Build stage to define leading indicators and gauge if you are moving the product into the desired position during development (e.g. a customer's satisfaction of a products usage is a leading indicator of the most recent release as it highlights a level of satisfaction on the usage of the current product).
- Do the leading indicators support your hypothesis?



### 3. Learn from the experiment:

- Use leading indicators to decide whether to change strategy and pivot or whether to persevere with the idea.
- Assess progress accurately and objectively to ensure that there is enough evidence to support a decision to persevere. It is common for companies to avoid changing direction once they have invested in an idea and subsequently deter from the decision to pivot. This may mean that some feedback from the customer has been rejected which will inhibit the success of the product.
- Have you achieved validated learning in this turn? Write down what you have learned based on the results. Decide whether to persevere (continue) or pivot (discard it and pursue another hypothesis) in your next turn of the BML feedback loop.

### How to complete the following turns of the BML feedback loop:

Start by asking a new question to develop your product.

#### 1. Build the MVP:

- If the results from the last turn of the BML feedback loop challenged your hypothesis then adjust your MVP accordingly. If your hypothesis was proven then use this loop to develop the product.
- Make a hypothesis of your results.
- Release the MVP to your customer or take the necessary steps to test your question.

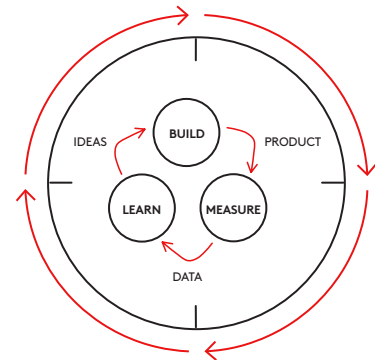
#### 2. Measure its effectiveness:

- Assess the leading indicators. Do they support your hypothesis?

**Note:** The importance of the model is not in the numbers themselves, but the direction and the degree of progress you are making.

#### 3. Learn from the experiment:

- Positive change in quantitative metrics is the validation that your learning is real and a sign of genuine progress.
- Decide whether to persevere or pivot in your next turn of the BML feedback loop.
- The aim from here on is to minimise the total time through each feedback loop with every further iteration. This will allow you to optimize the effectiveness of your product as quickly as possible.



### Potential pitfalls

- It is challenging to determine whether product development efforts are leading to real progress – will the customer want the product or change? Leading or lagging metrics will help here.
- Some may focus on vanity metrics (the metrics that present the most positive results). These should not be viewed as the baseline metric to evaluate progress. Instead, focus on actionable metrics to judge your business and learning milestones.

If you want to learn more, consider reading:  
The Lean Start Up by Eric Ries