

ITU-TRCSL Training on ICTs for promoting Innovation & Entrepreneurship

The Lean Startup Methodology

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Agenda

- What is a start-up ?
- What is The Lean Start-up
- Why use it ?
- Why start-ups fail ?
- The 5 rules of start-ups
- Vision
- Steer
- M.V.P
- The feedback loop
- Pivoting
- Accelerate





What is a Startup ?

- A **startup company** (**startup** or **start-up**) is an entrepreneurial venture which is typically a newly emerged, fast-growing business that aims to meet a marketplace need by developing a viable business model around innovative product, service, process or a platform. A startup is usually a company such as a small business, a partnership or an organization designed to effectively develop and validate a scalable business model.





What is The Lean Startup ?

- The Lean Startup provides a scientific approach to creating and managing startups and get a desired product to customers' hands faster. The Lean Startup method teaches you how to drive a startup- how to steer, when to turn, and when to persevere- and grow a business with maximum acceleration. It is a principled approach to new product development.





- **The Lean Startup asks people to start measuring their productivity differently. Because startups often accidentally build something nobody wants, it doesn't matter much if they do it on time and on budget. The goal of a startup is to figure out the right thing to build—the thing customers want and will pay for—as quickly as possible. In other words, the Lean Startup is a new way of looking at the development of innovative new products that emphasizes fast iteration and customer insight, a huge vision, and great ambition, all at the same time.**





Why use The Lean Startup ?

- **Entrepreneurship is a kind of management. We have wildly divergent associations with these two words, entrepreneurship and management. Lately, it seems that one is cool, innovative, and exciting and the other is dull, serious, and bland. It is time to look past these preconceptions.**
- **For a very long time, people have been working incredibly hard on products that ultimately failed in the marketplace. The business and marketing functions of a startup should be considered as important as engineering and product development and therefore deserve an equally rigorous methodology to guide them.**





Why do startups fail ?

- The first problem is the allure of a good plan, a solid strategy, and thorough market research.
- In earlier eras, these things were indicators of likely success.
- The overwhelming temptation is to apply them to startups too, but this doesn't work, because startups operate with too much uncertainty.
- Startups do not yet know who their customer is or what their product should be.
- As the world becomes more uncertain, it gets harder and harder to predict the future.
- The old management methods are not up to the task. Planning and forecasting are only accurate when based on a long, stable operating history and a relatively static environment. Startups have neither.

FAIL





Secondly...

- The second problem is that after seeing traditional management fail to solve this problem, some entrepreneurs and investors have thrown up their hands and adopted the “Just Do It” school of startups. This school believes that if management is the problem, chaos is the answer.

chaos





The five principles of the Lean Startup

- 1. Entrepreneurs are everywhere.**
- 2. Entrepreneurship is management.**
- 3. Validated learning.**
- 4. Build-Measure-Learn.**
- 5. Innovation accounting.**





Vision, Steer and Accelerate

- Eric Ries, the creator of this method divides it in 3 main steps : VISION, STEER AND ACCELERATE. As these 3 steps are very important to the methodology because they are interdependent.





VISION -> 1. Start

- Building a startup is an exercise in institution building; thus, it necessarily involves management. This often comes as a surprise to aspiring entrepreneurs, because their associations with these two words are so diametrically opposed. Entrepreneurs are rightly wary of implementing traditional management practices early on in a startup, afraid that they will invite bureaucracy or stifle creativity.





Don't just do it...

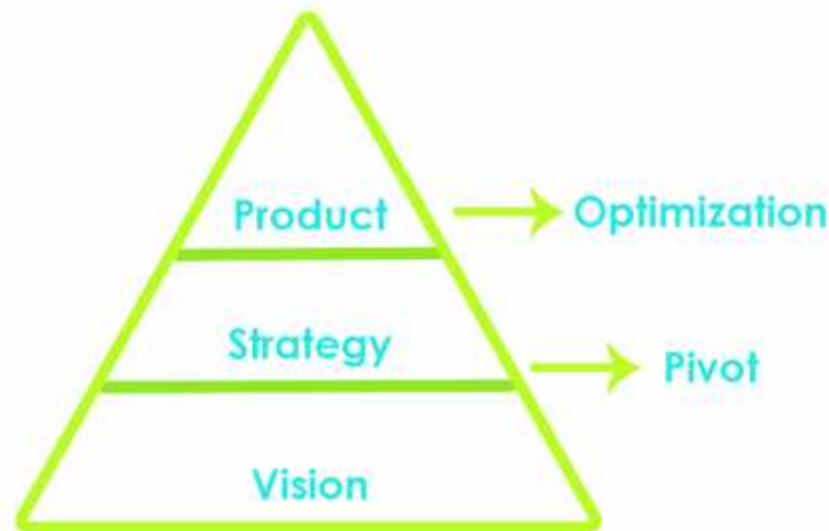
- Entrepreneurs have been trying to fit the square peg of their unique problems into the round hole of general management for decades. As a result, many entrepreneurs take a “just do it” attitude, avoiding all forms of management, process, and discipline. Unfortunately, this approach leads to chaos more often than it does to success.

JUST DO IT.





- Startups also have a true north, a destination in mind: creating a thriving and world-changing business. They are called that a startup's *vision*. To achieve that vision, startups employ a *strategy*, which includes a business model, a product road map, a point of view about partners and competitors, and ideas about who the customer will be. The *product* is the end result of this strategy





2. Define

- Often entrepreneurs lose sight of the fact that a startup is not just about a product, a technological breakthrough, or even a brilliant idea. A startup is greater than the sum of its parts; it is an acutely human enterprise. Most tools from general management are not designed to flourish in the harsh soil of extreme uncertainty in which startups thrive. The future is unpredictable, customers face a growing array of alternatives, and the pace of change is ever increasing.





3. Learn

- The Lean Startup model is rehabilitating learning with a concept called *validated learning*. Validated learning is not after-the-fact rationalization or a good story designed to hide failure. It is a rigorous method for demonstrating progress when one is embedded in the soil of extreme uncertainty in which startups grow. Validated learning is the process of demonstrating empirically that a team has discovered valuable truths about a startup's present and future business prospects. It is more concrete, more accurate, and faster than market forecasting or classical business planning. It is the principal antidote to the lethal problem of achieving failure: successfully executing a plan that leads nowhere.





STEER -> Build



- At its heart, a startup is a catalyst that transforms ideas into products. As customers interact with those products, they generate feedback and data. The feedback is both qualitative (such as what they like and don't like) and quantitative (such as how many people use it and find it valuable). The products a startup builds are really experiments; the learning about how to build a sustainable business is the outcome of those experiments. For startups, that information is much more important than dollars, awards, or mentions in the press, because it can influence and reshape the next set of ideas.





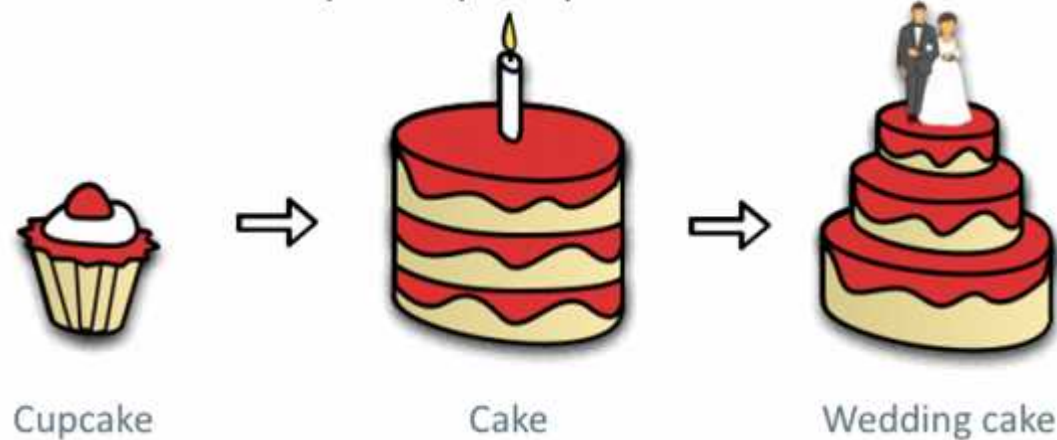
M.V.P. Minimal Viable Product

- The first step is to enter the Build phase as quickly as possible with a minimum viable product (MVP). The MVP is that version of the product that enables a full turn of the Build-Measure-Learn loop with a minimum amount of effort and the least amount of development time.





- . The minimum viable product lacks many features that may prove essential later on. However, in some ways, creating a MVP requires extra work: we must be able to measure its impact. For example, it is inadequate to build a prototype that is evaluated solely for internal quality by engineers and designers. A minimum viable product (MVP) helps entrepreneurs start the process of learning as quickly as possible





What is an M.V.P. good for ?

- Contrary to traditional product development, which usually involves a long, thoughtful incubation period and strives for product perfection, the goal of the MVP is to begin the process of learning, not end it. Unlike a prototype or concept test, an MVP is designed not just to answer product design or technical questions. Its goal is to test fundamental business hypotheses. One of the most vexing aspects of the minimum viable product is the challenge it poses to traditional notions of quality. The best professionals and craftsmen alike aspire to build quality products; it is a point of pride.





- Modern production processes rely on high quality as a way to boost efficiency. They operate using W. Edwards Deming's famous dictum that the customer is the most important part of the production process. This means that we must focus our energies exclusively on producing outcomes that the customer perceives as valuable. MVPs require the courage to put one's assumptions to the test. If customers react the way we expect, we can take that as confirmation that our assumptions are correct. If we release a poorly designed product and customers (even early adopters) cannot figure out how to use it, that will confirm our need to invest in superior design.





Product for the people

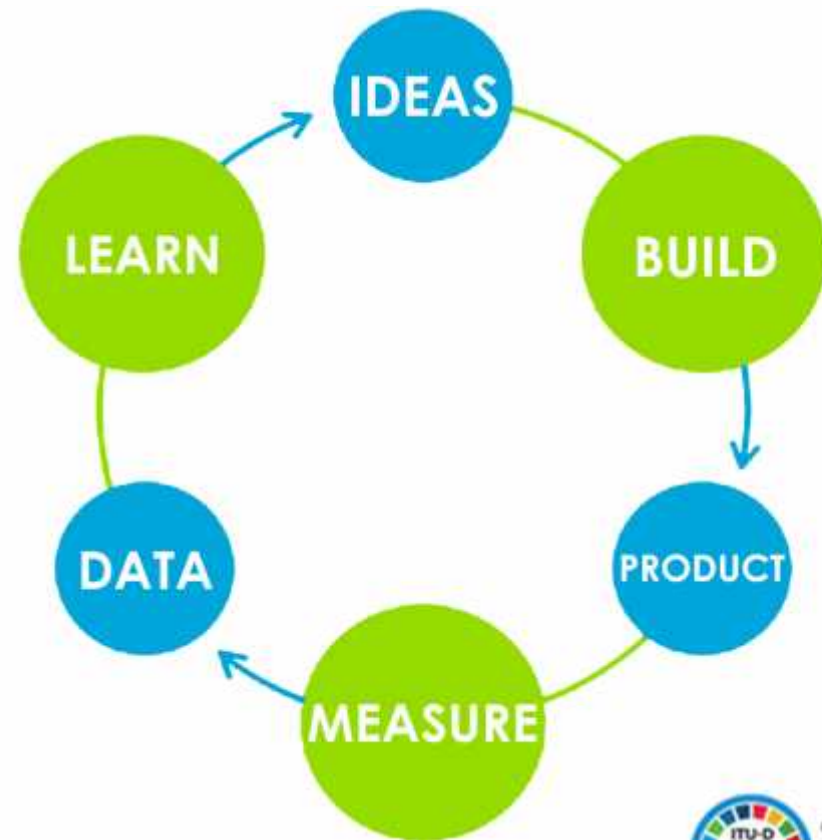
- Metrics are people, too. No matter how many intermediaries lie between a company and its customers, at the end of the day, customers are breathing, thinking, buying individuals. Their behavior is measurable and changeable. Even when one is selling to large institutions, as in a business-to-business model, it helps to remember that those businesses are made up of individuals.





MEASURE

- Many people have professional training that emphasizes one element of this feedback loop. For engineers, it's learning to build things as efficiently as possible. Some managers are experts at strategizing and learning at the whiteboard. Plenty of entrepreneurs focus their energies on the individual nouns: having the best product idea or the best-designed initial product or obsessing over data and metrics. The truth is that none of these activities by itself is of paramount importance. Instead, we need to focus our energies on minimizing the *total* time through this feedback loop.





The 3 learning milestones

1. Establish the baseline

- For example, a startup might create a complete prototype of its product and offer to sell it to real customers through its main marketing channel. This single MVP would test most of the startup's assumptions and establish baseline metrics for each assumption simultaneously. Alternatively, a startup might prefer to build separate MVPs that are aimed at getting feedback on one assumption at a time. Before building the prototype, the company might perform a smoke test with its marketing materials.
- These MVPs provide the first example of a *learning milestone*. An MVP allows a startup to fill in real baseline data in its growth model—conversion rates, sign-up and trial rates, customer lifetime value, and so on—and this is valuable as the foundation for learning about customers and their reactions to a product even if that foundation begins with extremely bad news.





2. Tuning the Engine



- Once the baseline has been established, the startup can work toward the second learning milestone: tuning the engine. Every product development, marketing, or other initiative that a startup undertakes should be targeted at improving one of the drivers of its growth model. For example, a company might spend time improving the design of its product to make it easier for new customers to use. This presupposes that the *activation rate* of new customers is a driver of growth and that its baseline is lower than the company would like. To demonstrate validated learning, the design changes must improve the activation rate of new customers. If they do not, the new design should be judged a failure. This is an important rule: a good design is one that changes customer behavior for the better.





3. Pivot or Persevere

- Over time, a team that is learning its way toward a sustainable business will see the numbers in its model rise from the horrible baseline established by the MVP and converge to something like the ideal one established in the business plan. A startup that fails to do so will see that ideal recede ever farther into the distance. When this is done right, even the most powerful reality distortion field won't be able to cover up this simple fact: if we're not moving the drivers of our business model, we're not making progress. That becomes a sure sign that it's time to pivot.





When to pivot or to persevere ?

- Every entrepreneur eventually faces an overriding challenge in developing a successful product: deciding when to pivot and when to persevere. Everything that has been discussed so far is a prelude to a seemingly simple question: are we making sufficient progress to believe that our original strategic hypothesis is correct, or do we need to make a major change? That change is called a pivot: a structured course correction designed to test a new fundamental hypothesis about the product, strategy, and engine of growth. Failure is a prerequisite to learning. The problem with the notion of shipping a product and then seeing what happens is that you are guaranteed to succeed—at seeing what happens.





Runway of pivots

- . The runway of a startup is defined as the remaining cash in the bank divided by the monthly burn rate, or net drain on that account balance. For example, a startup with \$1 million in the bank that is spending \$100,000 per month has a projected runway of ten months. The true measure of runway is how many pivots a startup has left: the number of opportunities it has to make a fundamental change to its business strategy. Measuring runway through the lens of pivots rather than that of time suggests another way to extend that runway: get to each pivot faster. In other words, the startup has to find ways to achieve the same amount of validated learning at lower cost or in a shorter time.





Types of pivots

- **1. Zoom-in Pivot**
- **2. Zoom-out Pivot**
- **3. Customer Segment Pivot**
- **4. Customer Need Pivot**
- **5. Platform Pivot**





- **6. Business Architecture Pivot**
 - **7. Value Capture Pivot**
- **8. Engine of Growth Pivot**
 - **9. Channel Pivot**
- **10. Technology Pivot**





Accelerate



Accelerate!

-Start your engines-

- Most of the decisions startups face are not clear-cut. How often should you release a product? Is there a reason to release weekly rather than daily or quarterly or annually? Product releases incur overhead, and so from an efficiency point of view, releasing often leaves less time to devote to building the product. However, waiting too long to release can lead to the ultimate waste: making something that nobody wants.
- How much time and energy should companies invest in infrastructure and planning early on *in anticipation* of success? Spend too much and you waste precious time that could have been spent learning. Spend too little and you may fail to take advantage of early success and cede market leadership to a fast follower.





GROW

-The engine of growth-

- The engine of growth is the mechanism that startups use to achieve sustainable growth. The word *sustainable is used* to exclude all one-time activities that generate a surge of customers but have no long-term impact, such as a single advertisement or a publicity stunt that might be used to jump-start growth but could not sustain that growth for the long term.





The rule of growth

- *New customers come from the actions of past customers.*





Four primary ways past customers drive sustainable growth

- **1. Word of mouth.** Embedded in most products is a natural level of growth that is caused by satisfied customers' enthusiasm for the product. For example, when I bought my first TiVo DVR, I couldn't stop telling my friends and family about it. Pretty soon, my entire family was using one.





2. As a side effect of product usage

- Fashion or status, such as luxury goods products, drive awareness of themselves whenever they are used. When you see someone dressed in the latest clothes or driving a certain car, you may be influenced to buy that product. This is also true of so-called viral products such as Facebook and PayPal. When a customer sends money to a friend using PayPal, the friend is exposed automatically to the PayPal product.





3. Through funded advertising

- Most businesses employ advertising to entice new customers to use their products. For this to be a source of sustainable growth, the advertising must be paid for out of revenue, not one-time sources such as investment capital. As long as the cost of acquiring a new customer (the so-called marginal cost) is less than the revenue that customer generates (the marginal revenue), the excess (the marginal profit) can be used to acquire more customers. The more marginal profit, the faster the growth.





4. Through repeat purchase or use

- Some products are designed to be purchased repeatedly either through a subscription plan (a cable company) or through voluntary repurchases (groceries or lightbulbs). By contrast, many products and services are intentionally designed as one-time events, such as wedding planning.





Engines of growth

- These sources of sustainable growth power feedback loops that have been termed *engines of growth*. Each is like a combustion engine, turning over and over. The faster the loop turns, the faster the company will grow. Each engine has an intrinsic set of metrics that determine how fast a company can grow when using it.





1. The Sticky Engine of Growth

- The rules that govern the sticky engine of growth are pretty simple: if the rate of new customer acquisition exceeds the churn rate, the product will grow. The speed of growth is determined by what I call the rate of compounding, which is simply the natural growth rate minus the churn rate. Like a bank account that earns compounding interest, having a high rate of compounding will lead to extremely rapid growth—without advertising, viral growth, or publicity stunts.





2. The Viral Engine of Growth

- Online social networks and Tupperware are examples of products for which customers do the lion's share of the marketing. Awareness of the product spreads rapidly from person to person similarly to the way a virus becomes an epidemic. This is distinct from the simple word-of-mouth growth discussed above. Instead, products that exhibit viral growth depend on person-to-person transmission as a necessary consequence of normal product use. Customers are not intentionally acting as evangelists; they are not necessarily trying to spread the word about the product. Growth happens automatically as a side effect of customers using the product.





3. The Paid Engine of Growth

- Imagine another pair of businesses. The first makes \$1 on each customer it signs up; the second makes \$100,000 from each customer it signs up. To predict which company will grow faster, you need to know only one additional thing: how much it costs to sign up a new customer.

Imagine that the first company uses Google AdWords to find new customers online and pays an average of 80 cents each time a new customer joins. The second company sells heavy goods to large companies. Each sale requires a significant time investment from a salesperson and on-site sales engineering to help install the product; these hard costs total up to \$80,000 per new customer. Both companies will grow at the exact same rate. Each has the same proportion of revenue (20 percent) available to reinvest in new customer acquisition.





ADAPT -THE WISDOM OF THE FIVE WHYS-



To accelerate, Lean Startups need a process that provides a natural feedback loop. When you're going too fast, you cause more problems. Adaptive processes force you to slow down and invest in preventing the kinds of problems that are currently wasting time. As those preventive efforts pay off, you naturally speed up again.

At the root of every seemingly technical problem is a human problem. Five Whys provides an opportunity to discover what that human problem might be. Taiichi Ohno gives the following example:

When confronted with a problem, have you ever stopped and asked *why* five times? It is difficult to do even though it sounds easy.





For example, suppose a machine stopped functioning:

1. Why did the machine stop? (There was an overload and the fuse blew.)
2. Why was there an overload? (The bearing was not sufficiently lubricated.)
3. Why was it not lubricated sufficiently? (The lubrication pump was not pumping sufficiently.)
4. Why was it not pumping sufficiently? (The shaft of the pump was worn and rattling.)
5. Why was the shaft worn out? (There was no strainer attached and metal scrap got in.)





Conclusions

- So now we know what a startup is, and why most of them fail, because they lack the strategy and the techniques that are required
- The lean startup provides a more scientific methodology to approaching startups, it help the entrepreneur build, measure and grow in order to reach success, by following a couple of simple rules.





I Thank U (ITU)

