THE BUSINESS CASE FOR LEAN

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For the service-based business there are plenty of threats and opportunities in today's business climate. Threats include increasing costs, the constriction of credit, increasing natural and manmade disasters, at-fault liability risks, rising employee healthcare costs, employee turnover, increasing government regulation, just to name a few.

Further, customers are more difficult to acquire and to retain. As the economic downturn plays out, customers are looking to stretch their dollars more than ever and are attentive to finding the best value proposition for their money. Highly competitive service businesses can easily become commoditized, forcing prices to incrementally drop as competitors fight for market share. And of course there is always the threat of the game changer — the competitor who figures out how to build a better mousetrap using emerging technology, a new innovative process, and/or bundling other services.

On the flip side, opportunities exist as well. You may be able to export your business to other countries where there are emerging markets. You can become the game changer by using technology, processes, and bundling in different and innovative ways to gain more market share. You may be able to converge into other markets to create new value propositions. The ability to minimize threats, to acquire and retain customers, and to seize timely opportunities requires organizational efficiency and agility, strong and enduring value propositions, and dynamic capabilities (the ability to change when an opportunity presents itself). Of course, your business needs some degree of all of these attributes just to be in business. But to grow your business in a profitable way requires extra ordinary capabilities and these capabilities do not just magically appear. Rather, they must be developed. So the big question is — how can your service business develop the capabilities that will enable you to "lead the pack" rather than running with the pack and hoping for the best? This course offers an answer to this question by introducing the Lean business improvement system for service industries.

In short, Lean is all about three words — *delivering profitable value*. Don't be fooled by the simplicity of this statement that appears at the surface to be common sense. There is a lot to unpack here. For starters, Lean is a business operations strategy that drives profitable growth through a combination of process efficiencies, agility, and innovation. The primary means by which these outcomes are achieved is the removal of Time from value-creating processes. Let's begin by making an assertion right up front. The more "Time" you have in your value-creating processes,

- The slower your services will be
- The higher your costs will be
- The more human bandwidth you will use (via effort, stress, focused attention, etc.)
- The more service problems customers will experience
- The slower your cash flow cycles will be
- The Fewer innovations you will create
- The higher your employee turnover will be
- The lower your customer acquisition and retention rate will be
- The fewer sales you will close
- The more support you will need to provide
- The more accidents will occur
- The more liabilities you will incur
- And the list goes on.....

Fortunately, the opposite is also true! The more you can reduce Time in your value-creating processes, the more all of these things will improve or be reduced. This is the road you want to be on.

Ultimately, all of these things are drivers of business performance universally measured as profitability (bottom line) and sales growth (top line). There are, of course, many measures of business performance, but our main focus in this course is on profitable growth.

The word "Time" (with a capital "T") in this context means the total amount of lead time between a customer demand request and the fulfillment of that request — a purchase, a support issue, etc. Say that you are in the insurance business. A prospective customer is shopping for a homeowner's policy. The customer calls a local agent for your company to get a quote. The customer buys and the policy is delivered in two weeks. The time between the first phone call to the agent and the delivery of the final policy to the customer is the total service lead-time — in this case two weeks. During the two weeks, you have a bunch of work activities that ultimately produce the policy.

Work activities, by their nature, take time to accomplish. The simple rule is that the more activities that are inside your processes the more Time will accumulate. So, there is a relationship between activities and Time. If this relationship holds true, then removing Time from your processes <u>must</u> also reduce the number of activities in the process. Of course, Time is really not a tangible thing you can remove directly. Rather, Time is a sum product of all work activities and is therefore an abstraction. But Time can be used as a criterion to identify where there are a lot of activities in a process. The question to then ask is — do we need all those activities to deliver services to customers?

Ok, you are thinking, "Great! All I need to do is remove Time and my business will improve. This seems straight forward enough." That's right. But, now the question is — how do you remove Time? You might be thinking, "We'll do things faster, work harder, or put more controls in place to make sure things are done correctly the first go round." Ironically, doing these things will just add more Time to your processes. So, the big question is how do you systematically remove Time from your processes? To answer this question we introduce a Lean business axiom

Lean business axiom — wasteful activities increase Time in your processes without adding value. Remove waste and you will reduce Time.

The answer to the question is that eliminating wasteful activities in your processes will also remove Time. But, what are wasteful activities?

Wasteful activities are unnecessary. However, we do these activities because we believe they are necessary. Perhaps, we do things a certain way because "that's the way things have always been done." Maybe an activity is a buffer against some kind risk or uncertainty. Maybe an activity is a workaround because the process is broken somewhere. Maybe an activity is done for control purposes to ensure things are done a certain way. The list goes on.

If you were thinking that removing Time would make things flow faster in your processes, you would be correct. However, this does not mean that the everyday work activities will speed up or that people will be taking on more work or working harder at what they already do. In fact, just the opposite is true. Removing Time from processes also reduces all the "craziness" and overwork that makes life difficult for workers and for customers. Have you ever spent an entire day doing something only to find out later you could have done it in an hour if you had gone another route? Think about all the energy and headaches that workers must endure everyday to do things that are unnecessary. All of this consumes human bandwidth (a very valuable resource). The waiting, handoff delays, mistakes, workarounds, and feedback from disgruntled customers goes away when unnecessary work activities are eliminated.

The irony is that removing Time reduces workloads and stress and enables workers to deliver better services with more ease! So, work activities become relaxed while process Time gets faster. This is because there are two kinds of time happening in a process — 1) individual work activities or the time spent actually doing something (cycle time) and 2) the cumulative time it takes for all the activities to produce a final service (process Time) — the sum of all the individual cycle times in the process plus waiting or delays between individual activities. Don't

worry if you have trouble grasping this counter-intuitive conclusion — it takes some getting used to.

Let us now clarify our terms. The things that you do everyday in your business are called tasks, activities, or processes depending on the vantage point. For our purposes, tasks make up activities and activities make up processes. You may have many processes involved in the delivery of a service. All activities consume company resources — employee's time and attention, equipment, facilities, supplies, credit, working capital, etc. This is the cost factor. Activities also take time to do. Thus, we can say that Time is money.

We could break this down even further. You have many necessary activities where workers are doing unnecessary tasks within these activities that add more Time to the activity. More resources are consumed to perform these unneeded tasks. Clearly, we want to eliminate all unnecessary activities and tasks to remove Time from processes. However, the key question still remains — how do we determine what activities/tasks are necessary and which ones are wasteful? To answer this question we must introduce another Lean business axiom.

Lean business axiom — Value is defined from the customer's point of view. Customer value is the criterion for determining what activities are necessary and which ones are wasteful.

Most people assume that the activities they do everyday are adding value because the activities are required to do their job. Unwittingly, they are defining value from a functional perspective rather than from the customer's point of view. Most of the time workers are not aware of this because they have a limited view of the process. If we flip this around to the customer's perspective and take a process view, we see a very different picture.

But, how do customers determine what is valuable to them? Customers buy services from your company because you give them the means to achieve some desired outcome. For example, an Internet connection enables them to surf the Web and access information, a transportation solution enables them to get themselves or something else from point A to point B, an investment enables them to earn a financial return, education and training enables them to acquire knowledge and/or specific capabilities, an insurance policy gives them protection against risk, etc. When you have a way for customer to achieve their desired outcome(s), you are offering a value proposition.

From the customer's point of view, the value proposition is what matters to them and it is the reason they purchase your service(s). Specifically, customers judge value based on the process touch points that they interact with. These processes touch points represent pieces of the value proposition. Part of the Lean challenge is getting workers both aware and oriented towards the customer value proposition(s) and how their activities support or directly contribute to value proposition touch points. This gets everyone on the same page moving in the same direction to accomplish the same objective — to deliver value to customers.

With a customer perspective of value as our radar, we now have a way to determine whether an activity is necessary or is wasteful by asking if the activity contributes to the fulfillment of a value proposition(s). If it does, then the activity is value-added and if it does not, the activity is non-value added and should be eliminated.

Let's recap by connecting some of the dots up to this point. Orienting everyone in the business around value proposition(s) helps workers to see value from the customer's point of view in everything they do. When viewed through this lens, we can identify value proposition touch points in the process that customers care about. With this perspective we can identify activities/tasks that do not support or contribute value to these process touch points. We then eliminate the wasteful activities that impede the flow of value thereby improving value touch points even more — resulting in satisfied customers.

As wasteful activities are removed, Time is reduced in the process. Individual work activities become calm, work activities flow smoothly at a comfortable pace, the daily craziness goes away conserving the most valuable resource any company has — the time, energy, and focus of employees. Simultaneously, the process as a whole gets faster. The reduction of time in the process leverages the business performance drivers in our favor — costs decrease, service problems are reduced, customer acquisition and retention increases, sales increase, etc. Ultimately, this enables a company to deliver profitable value.

To this point we have discussed the Lean business concept of delivering profitable value. A company can improve on this by reducing Time within its value-creating process via the elimination of wasteful activities. However, the other dimension of delivering profitable value is how well a company can convert its capacity to value.

What we mean by "capacity" is the total amount of resources that your company owns and/or controls that enables the company to deliver services to customers. Resources can be put into three different buckets — 1) people or human resources, 2) capital resources (assets) such as equipment, facilities, supplies, cash, credit lines, etc., and 3) intangible resources (assets) such as information, patents and other forms of intellectual property, your company's brand in the

marketplace, and organizational knowledge. All companies must use or "convert" these resources (collectively called capacity) at some level of productivity to deliver profitable value. From the Lean business perspective, this is called capacity-to-value conversion. Now let's break capacity down into two categories — 1) productive capacity and 2) non-productive capacity. Productive capacity refers to the resources that are used/consumed to produce value (from the customer's perspective). Non-productive capacity refers to resources that are used/consumed by wasteful activities that do not produce value. Now, we have found that most companies use less than 10% of their capacity in a productive manner. That's right, most companies use/consume 90% of their resources on wasteful activities that add no value. This is difficult to comprehend.

Capacity can be further broken down into consumable and fixed resources. Consumable resources are those resources that are "used up" by activities such as supplies and materials, fuel, utility services, some insurance, outside contractor services, some maintenance, service subscriptions, cash, credit lines, etc. Consumable resources drive variable costs because such resources must be replenished once used up. Consumable resources are used in proportion to the number of activities that use these resources. Fixed resources include employee salaries, land, facilities, equipment, some insurance, some maintenance, etc. These resources are fixed expenses and will not vary based on the level of activities. Fixed capacity can be added or reduced, but otherwise these resources are paid for whether they are used or not.

When you first start on your Lean journey, it is very likely that your company has 90% of its capacity bound up in wasteful activities. Your initial reaction may be, "Our Company is not that bad. If we were, we would not be in business." Don't take our word for it. Lean provides the tool and methods that will enable to you see this for yourself. Believe it or not, companies can survive on 10% productive capacity (not comfortably). What does this tell you about the incredible upside of improving on this? Just a 5% increase in productive capacity and you'll think that you have won the lottery!

As you begin to identify, prioritize, and eliminate the waste in your processes you will free up resources that were previously used/consumed by wasteful activities. Now you have a one-two punch for achieving significant performance gains. Not only are you delivering more profitable value, but also you are increasing your available capacity at the same time. This freed up capacity can now be used to grow your business. Most companies must invest additional capital to acquire more capacity for growth. But not the Lean business. You will be making more profit, acquiring and retaining more customers, and creating additional capacity all at the same time without investing additional capital. Return on investment is leveraged up significantly. This means that a portion of the profits can be used to generously reward investor/owners for their investments because you will not be cash strapped.

Now let's discuss what happens when capacity is released as a result of the elimination of wasteful activities — it will can have two effects. When consumable capacity is released, it is immediately converted to profitability because variable costs will decrease. A reduction in variable costs will impact the bottom line right away since you stop spending money on these resources — materials, supplies, fuel, utilities, etc. That is, eliminating wasteful activities that consume these resources means that these resources are no longer needed. The great thing here is that released consumable capacity automatically converts to financial benefits and is therefore easy to see.

However, such is not the case with fixed capacity. When fixed capacity is released, the capacity becomes available — it is not converted to financial benefit right away. Think of the released capacity going into a saving account for you to use for growth. Recall that fixed capacity is a fixed expense and therefore continues to be an expense even when it is not actively used. A big part of fixed capacity is worker time, energy and focus. Of course, we cannot really measure this kind of capacity as it becomes available, but we know it's there. Other kinds of fixed capacity can be measured — facility space, idle equipment, etc. The point is that to reap the financial benefits of available capacity, you must put this capacity to use creating value that can be sold. Companies often make this mistake. They will free up fixed capacity and then wonder where the financial benefits are. They do not go the extra step to convert this available capacity to profitable value.

To recap and connect more of the dots, the elimination of waste from your processes leverages business performance drivers in your favor — lower costs, fewer service problems, faster cash flows, etc.

An improvement in these performance drivers is a reflection of your company achieving more process efficiencies. As Time is reduced, your processes flows faster (at the process level) — the speed factor. As value-creating activities become more directly linked to each other in time, your company will also increase its operational flexibility because workers are better able to coordinate to accommodate changing circumstances — the flexibility factor. With both process speed and process flexibility your company will increase operational agility (speed + flexibility). Why is this important? Operational agility gives you the ability to reduce unpredictable threats like accidents and costly mistakes and/or take advantage of short-lived market opportunities. Operational agility enables your company to leverage its resources in dynamic business environments while maintaining process efficiency.

As your company progresses in Lean, another interesting thing happens. The intellectual capabilities of workers increases. Lean requires that workers collaborate, communicate, and

coordinate with each in order to identify and resolve process problems. They then implement countermeasures to eliminate wasteful activities, the root cause of most problems. During this process, workers use structured problem-solving methods that incorporate scientific thinking principals. Over time workers develop disciplined thinking around business challenges — they become keenly aware of causes and effects. This gives them the ability to more easily identify and resolve problems.

Just like most companies use very little of their capacity to produce value, they use even less of the talents and capabilities of their employees. Human talent is the most wasted resource of all. Unlike other resources, human talent is not in short supply — there is an abundance of it within any company. But this is one resource a company cannot demand as part of a job. You can pay employees to perform a specific job with an associated job description. However, a company cannot force workers to fully engage their hearts and minds in the business and to tap into their unique talents to contribute to company success. They must give this freely.

Many workers may not be aware of the awesome talents that they possess. Engaging with others, resolving problems, and implementing Lean improvements, develops employee talents and capabilities.

It has been established that as you eliminate waste from you processes, activities become calm and proceed at a comfortable pace. All the crazy "firefighting" goes away conserving the time, energy and attention of workers. Worker talents and intellectual capabilities are also developed as they engage in Lean improvements. Everyone is focused on improving the customer value proposition via the many customer touch points in the process. Workers now have the time to focus on what really matters — creating profitable value. With more worker attention focused on creating value, something magical happens — innovation!

Innovation can take the form of new services, the extension or bundling of existing services, convergence into new markets, the application of technology to enhance existing services, a new process for delivering a service, new marketing strategies, and many other possibilities. Innovation creates new value proposition and/or improves/extends existing value propositions, which increases customer acquisition and retention. Thus, innovation is a critical driver of profitable growth. It is not enough to come up with occasional innovations. Rather, innovation cycles need to be frequent and on target to compete in todays markets.

From the Lean business perspective, profitable growth is propelled by three interconnecting dynamics — delivering profitable value, capacity-to-value conversion, and innovation. Let's follow the Lean business cycle. As you eliminate wasteful activities from your processes you reduce your total cost of services, thereby increasing profitability (and other performance drivers

as well). This is because the wasteful activities you eliminated were using consumable resources and consequently driving variable costs. When variable costs do down, profitability immediately goes up.

At the same time the quality of your services improves because you are "refining" your existing value proposition within customer touch points. So, profitability and customer satisfaction are increasing at the same time. Your company becomes more agile because your processes become faster and more flexible. This capability enables your company to leverage its resources in dynamic business environments while maintaining process efficiency.

As you eliminate waste in your processes, you also free up fixed capacity. Unlike consumable capacity, fixed capacity becomes available, but has to be converted to value to reap the business performance benefits. The most important fixed capacity is human resources. With more worker time, energy, and focus on value creation, something amazing happens — innovation. The available fixed capacity (worker's time, facilities, machines, etc.) can now be used to commercialize innovations to get them to the market without investing new capital. If extra cash is needed, a portion of the increased profits is available. Innovations that reach the market will increase your value propositions. Ultimately, this will increase your acquisition and retention of customers and propel your company to sustainable and profitable growth. This is the power of Lean business.