Podcast Transcription

Implementing Lean Marketing Systems



# Lean Mapping Guest was Steven Borris

Basiness 901

Related Podcast: <u>Lean Mapping Consists</u>
of More Than 1 Tool



#### Podcast Transcription

#### Implementing Lean Marketing Systems



Note: This is a transcription of an interview. It has not gone through a professional editing process and may contain grammatical errors or incorrect formatting.

#### Transcription of Interview

**Joe:** Hello everyone. This is Joe Dager, the host of the Business901 Podcast. With me today is Steven Borris. He is the Director of Productivity-Jigsaw and author of Strategic Lean Mapping and Total Productive Maintenance and soon to be released The Success or Die Ultimatum. Steven, thanks for coming on the show and could you start out by explaining how that company name evolved, Productivity Jigsaw?

**Steven:** I felt that when I was going to fix companies and help them out, mostly we were doing shop assistances and you tend to look at the issues and figure what the problems were, so you tend to do little pieces of here and there. You wouldn't do all of Lean; you wouldn't do all of TPM, you might do some OEE but we were always trying to teach a core philosophy. Lean was the one that I chose as our core philosophy and then from that, I imagined building up the process with going into a company, analyzing their issues and then doing whatever the problems that they had were. Because gradually what you'll end up with is a Lean expert or a TPM expert but you're just doing it in single jigsaw pieces. So, it makes sense that you're building up a picture but you're doing it as the company needs it rather than starting with 5S and then doing something else.

#### Podcast Transcription

## Implementing Lean Marketing Systems



**Joe:** I was introduced to you through your book Strategic Lean Mapping, and I saw it on the bookshelf at a conference and glanced through it. I enjoyed maybe what I would say the overall perspective of Mapping. Was that the intent of it or what was the intent of the book?

**Steven:** Before I learned to do mapping with post-its, I used to use Excel or PowerPoint. But then I discovered that I wasn't doing it in anything like the right detail. I wasn't asking the right questions. There was another consultant who worked for Scottish Enterprise, her name was Agnes Pollock and she did a version of mapping and she taught it to me and I thought it was amazing. I used the same mapping, and I blended with one that I used for SMED and between the two of them, I developed a technique that worked really well for me. I just think that people don't analyze their companies enough; they seem to think they know what the issue is, but they really don't know all of the issues. Some of the issues they do know, they just don't even try and understand that they are actually problems. But when you start looking at this and then quantifying them, you'll see that this is costing you a hundred grand a year, and they have no idea. I think that doing proper mapping takes a little bit of time at the beginning, but in the end you end up so much better off from the company perspective; they know what the key issues are.

**Joe:** I thought what was interesting about your book when I picked it up is that Value Stream Mapping is a powerful tool but people really think that is the only mapping tool in

#### Podcast Transcription



#### Implementing Lean Marketing Systems

Lean and they have a tendency to, "Oh, we need to value stream map this..." like out of the blocks or something, but you wait pretty far in the book to introduce it.

**Steven:** Yes. I'd have to be honest; I use Value Stream Mapping less than most. What I find is that when you have got the other map itself laid out, you can use that map for anything at all. You can use it for risk analysis, you can use it for manpower, you can use it for looking at capacity problems and bottlenecks, and you can use it for process mapping. Even with what I call the Big Picture Map, once you've got the Big Picture Map, and you find all the issues, you can then just add the VSM part in the bottom. Because really the VSM part is just a little castle- wall part where it either adds value or it doesn't. I usually find that people don't know how much time they spend doing stuff or how much time they spent waiting, so it tends to be quite hard. You got to go in and get rough ideas to make some measurements. I think the Value Stream Map comes at the end of doing the mapping.

**Joe:** Can you talk about the flow of your book? You start out with what you call...I think a Big Picture Map.

**Steven:** Yes. The Big Picture Map is the one that Agnes Pollock taught us. When I worked for SMAS, it was different when I worked for National Semiconductor. We used to do process maps and analyze what we were actually doing. But the Big Picture Map was trying to see how the whole company operates. I used to have to go into a company, and I'd have a day,

#### Podcast Transcription



#### Implementing Lean Marketing Systems

originally it was a day, basically we had a day to try and analyze their issues. We were government based, so we had to save the company money. If you do a map, you don't really save any money. The map tells you what you will save, but it doesn't actually save anything. I was going into companies, and I was struggling to find all of the issues we had. We had to do more gamble work, more talking to directors and eventually what would happen is that if a company was good enough and it would accept to go for some project, we would try and start with the map.

We could do a Big Picture Map with all the senior managers in a day, possibly two, and that way you can call up all of the issues that we have because it looks at the customers, it looks at the suppliers, it looks at all of the admin, and then all of the production plus goods and shipping. It looks at every part of the company, but what it doesn't do is look at people.

If you've got all of the managers in there, one guy is doing something, it was maybe a company and they all think that if we do this modification, they would be able to wake up the productivity. Usually that can happen but you have no idea that the next place down the line suddenly gets flooded with what they can't handle. When you're doing a Big Picture Map, somebody can say, "Well when you did that, we had these problems..." and suddenly it gets things into perspective.

Whenever I try and analyze a company, the best place to start is with a Big Picture Map.

#### Podcast Transcription



#### Implementing Lean Marketing Systems

That way you can find all the key issues, you find the ones that you know about, but you can usually bring up a few that they don't know about. Some of the things they've discovered have been quite amazing, and these are only the superficial problems. The sort of bigger problems that people have an idea are there, but a lot of them they don't even think exist as problems.

**Joe:** In the Big Picture Map, you use some tools within that though, don't you? It's just not a tool in itself. I think in summary, the mapping steps in it information and communications.

Steven: Production and statistics, yes.

**Joe:** And what else?

**Steven:** Lead times for each stage, stocking points, quantities held, quality and inspection points, scrap and rework lists. The reason you did the materials first is that it lays out the departments. A lot of times when you talk to people about how things work, they'll say, "Well, Betty does that, and she sits at her desk at the door." But that's not a department; the department she has is maybe Sales or whatever. So when you look in at the materials, you can follow the materials through and you can look at the different departments it goes through and then when you got the information for the materials, that lays out usually the product line. Once you get the admin stages, you want to know where people are talking to

#### Podcast Transcription



#### Implementing Lean Marketing Systems

so you find that goods ends should talk to production, you should talk to the customers, you should talk to the suppliers, you should talk to the process lines, you should talk to the QA guys to let them know that the stuff's coming in and they can come down and do checks.

The lead times, there's just usually a rough idea of what the people have. The data production, they just tend to be the details. They're so many you can look at but you usually settle for the number of people who are there or in shifts, the number of shifts they do, maybe the OEE for the machines, the production rates. There tend to be particular statistics that help when you're doing it. But I think in the book I've got something like 20 questions that you can ask that help you build up an idea. You don't put all of them in the data box. You could, but usually you just want a few. The idea is to just guide you through the problems that each different area has. For example, if you know that the capacity of an area is a hundred units an hour and the one that's leading up to you is only 60, but the one before it is 150, you know you're going to have a problem. So you can get ideas, and you can anticipate things, and if you ask the right questions at all stages, you can work your way in and find out what the problems are.

**Joe:** This is creating a current state. Do I create a future state with the Big Picture Map or not?

**Steven:** Once you've got the process laid out, I try and get the map laid out first. I Try

#### Podcast Transcription



#### Implementing Lean Marketing Systems

and get all the departments, all the steps, and all the basic information. One of the things I like about it is when you've got all the managers together, they think they know what all the answers are and when you suddenly ask them what the OEE for that machine is or even what the optimum is. I'm quite stunned to discover they don't know. What you try and do is get them to go and find out the details, and they could find out how hard it is to get that information. Once you've got that, you can then start to look for it. Once you've got all the details, you then start to look for the problems and that can be any problems they have; it's not just Lean problems.

If I was doing a process map, I would ask for every step if any of the seven ways occur, but I'd also look for things that you learn from TPM for example. What's the availability, are there any speed issues. You try and find all of the problems that exist if there are any specific. Even people issues you can include.

**Joe:** So after the Big Picture Map, you do a process map?

**Steven:** Usually what you do, once you've got your Big Picture Map, you then try and identify how long or how much each problem is costing. For example, one of the companies I did was really quite obviously they were looking for more productivity. What we did was we went down, and we walked the line and I noticed that quite often, the bottleneck machine didn't have anybody standing at it. When you go back, you start questions like how often

#### Podcast Transcription

# 66

#### Implementing Lean Marketing Systems

the machine isn't available. I discovered it wasn't discovered at breaks, lunch breaks, coffee breaks. It takes them over an hour and you get them to find out what the costs are for that machine for an hour and I think it was something like \$500 an hour of production they were losing. You can just scale that up over a year and then you can work at if it's problem you want to fix it. In that particular instance, all we needed was somebody to load cardboard on the end and somebody to shape the box on at the other end of the palette. It cost them no money and saved something like \$150,000 a year. And that's profit that's not turnover; that's straight profit and that's just by finding out that that issue exists.

If it was a more complex issue, usually what you do is you try and find out all of the problems that exist. When you quantify, or you can get it into cash, you can list all the problems, one to ten, whatever and then you can prioritize them for the cost that it is costing the company. When you know how much they're costing, you can then look at how much it would cost to put it right. Subtract the one from the other, and you've got the cost for the company over a year and then you can prioritize which issues you're going to hit first.

Usually what you do when you're trying to do that is you would go down and analyze it at a process level. Before you do that, you can choose to do the Future State Map which would be what the map would look like if that was fixed and it tends to be quite often people don't know what they want it to look like when it's finished. So we setup and one of the reasons I like post-its is that they're easy to change around, and you can try and setup.

#### Podcast Transcription

#### Implementing Lean Marketing Systems



Joe: We look at the individual processes and then I think you jumped into a Capacity Map which I really haven't heard of before I read your book.

**Steven:** Now the capacity map is my own. I was doing some work in a recycling plant, I had a colleague with me, we had a team of people that we were trying to train and what we did was we finally got the guys to do the process and there were 10 steps in the process. We put the process up on the wall, and we couldn't see anything wrong with it. It was really weird. We knew the system wasn't working efficiently, but we had no idea why. Basically what was happening was trucks were coming in with the materials. I can't tell you what material is it, in case you can work out what the company was, but the materials were coming in and they were being loaded into a pit and then the pit would take them to a conveyor belt and into a baler and they were only getting maybe eight bales, sometimes instead of maybe 30 that they could make.

When I was looking at this, they had four different ways that the materials came in and when I was staring at the wall map, I saw something and this is really stupid it may sound but I used to do electronics when I was younger, I used to work as an engineer and I saw what we call an operational amplifier circuit and I actually saw it in my mind. I used to call them 741's because you feed a signal like from an amplifier, and you get an output; it's that simple. It's just a single chip amplifier. But basically what that does is there's a maximum

#### Podcast Transcription

#### Implementing Lean Marketing Systems

gain you can get out of it and that maximum gain would be the maximum throughput of the baler. Then I am working out what was causing the inputs to disappear and suddenly I saw a capacity problem. Basically, what was happening was if you got in an 18-wheeler truck, you could get the machine running non-stop and get 20 to 30 bales an hour. But then suddenly these little white Ford transits would come in from a local shop or something and they would start to unload their stuff and you can only do four vans in an hour, so suddenly you were down to maybe six or eight bales an hour and everything would just halt.

Suddenly the capacity became an issue, and that's when I started to look at this idea of the capacity map. It's also like to the theory of constraints. Once I had a map, I started to use it for other companies. Basically there was a company that made doors and when we laid out the entire process, exactly just using the process map, it suddenly dawned to me that what I could do is I could look at every machine, find out what it should be able to make and what they were making. If you take the ratio of what they do make to what they should make, that should get the OEE of the machine, so that was the capacity. You could literally look at the flow of the product going through it and see when it was easy to feed out when there was going to be a bottleneck. That will tell you from the beginning you need two machines instead of one in parallel. It just worked beautifully and all I had to do was when I had the process map steps laid out with the yellow post-its, I just had to write what they were doing and what they should be doing in another post-it and stack it above. It was that simple, and suddenly the whole horizon opened up. We were able to make some huge gains

#### Podcast Transcription



#### Implementing Lean Marketing Systems

in productivity and it was probably as easy as the original goal when Eliyahu Goldratt wrote it and basically it was probably analogous to the scout troop walking through the line and getting the slowest guy to walk first. It's that simple if you just look at it.

From that map, I also did a bar chart and again it's so easy because it's just a histogram and the smaller the height of the bar chart...Imagine like limbo dancers, the harder it is to get the stuff through it. If you've got a big bar chart leading into your little one, you can't get the machine to cope with it so you got to start controlling the flow so that you're making sure that you're not overlooking the bottlenecks. So that was one, as I said that I just made up by myself.

**Joe:** Well I thought it was rather unique and of course, you explained it perfectly. You caught my attention with that 741 op-amp circuit in there from my old electronic days. I said, "Ha! Someone remembers that besides me!"

**Steven:** It's just that when I looked at it, I saw the forward inputs and the one output. I actually saw the triangle in my mind. I couldn't believe it. It was just really weird.

**Joe:** Oh I got a kick out of it. I'd have to admit; I might have bought the book just for that circuit. I don't know.

#### Podcast Transcription



#### Implementing Lean Marketing Systems

**Steven:** Well, I've got a book upstairs that's got something like 3,000 circuits for 741's.

**Joe:** Finally after you go through all these, now you get to the Value Stream Mapping part, right?

**Steven:** Yes. Again as I said the Value Stream Mapping part, most of the problems tend to be a small level. They're not really big issues. There are some things like when you go into a company like the one I mentioned where they would wait for an hour over lunch and if you were to look at every step of the process and you would ask which Lean waste occurs here? You would be able to see that waiting is there, and then you would analyze and discover why it's waiting and then work out what's necessary. I've always found that when you ask people how long things take, they don't really know. I mean you've got this huge debate and for some strange reason, and lots of people think you can't solve problems unless you get data. You can stop the problems and then you need the data to help you solve it, but you're using that as in a fault-finding mode.

I think Value Stream Mapping, some people see it as the only things that go wrong in a company and it's not. It's only if you do Lean that the Value Stream Mapping is really important, and even then you still have to end up with a little detail to find out where the problems are. When you're doing the Big Picture Mapping, in the new book that I've written, we had a problem with a company that was supplying metals and sheets of metals and things

#### Podcast Transcription



#### Implementing Lean Marketing Systems

and fabrications and they were supposed to get...I think it was a dozen trucks in a shift and basically they weren't managing it. What we did there was we did a quick VSM to see whether or not it was actually feasible to get a dozen trucks. But we didn't do it to find out what the problems were, we did it to find out if it was practical and then we went down and tried to find out all the causes for it in more detail. So, I like the VSM but I actually prefer the Big Picture Map and the process maps, because if you've done your process map, you can just do the value underneath that; it's just like an add-on.

**Joe:** But even after the Value Stream Map, you had other maps in there. You talked more about doing a couple other things, whether they're flow charts or maps because then you really start laying out ways to make a decision from all this, right?

**Steven:** Going way back to my electronics, I was a Customer Service Engineer for Ion Implanters, and they were the bottleneck in the semiconductor industry. So basically I would get a phone call and be sent out to the site, and I'd have to find out and fix the problems right away. In fact usually as I was walking across to the reception desk, they would ask me how long it was going to take to get the machine running and I didn't even know what the problem was at this point. What I discovered, and I'm going way back to...gosh, around 1994 I think or something like that and I discovered that most people don't know how to fault-find. They don't do it logically. I had to start rating procedures and things. I find that most of the engineers that I met were better than I was, they just didn't know the machines well

#### Podcast Transcription



#### Implementing Lean Marketing Systems

enough. So when I would end with a problem, I had to find ways of teaching the guys how to fault-find, but also to write simple processes that they could follow and manage to do maintenance better or do whatever the job was better and find out the solutions to the issues.

I find that problem-solving is probably one of the biggest issues you find in all companies and even something as simple as the '5 Whys.' People tend only to use these processes in training courses. They don't think it's a real process which is weird.

**Joe:** I thought you did a nice job of laying different methods out there because I came away from the book knowing a little better when I should apply things and somewhat in the order they should be done. I think maybe I've read better books on individual tools that you talked about, but you took a system's approach I would say of when and how I should use mapping.

**Steven:** I try to make things as easy as possible. I find a lot of the books I've read, they tend to disappear into huge amounts of theory. I think some people want to know, but most don't, they just want to know how to do their job. And if the theory doesn't really matter, then you can skip it or go into even just as a simple explanation, so I try to keep things at a really high level.

#### Podcast Transcription



#### Implementing Lean Marketing Systems

For Lean, for example, when I talk about that, I tend not to go into huge amounts of detail about culture. I think there was some, there's more in the new book. But once you get the fault-finding under, then it gets you through most of the issues because you've got to learn how to do, of course, fault-finding; that's a crucial part.

**Joe:** I think you did a nice job of that because if you could go ahead and just start practicing and going through a process, you made it very simple and you made a very logical description of the steps I needed to take. Because it's like if you start with Value Stream Mapping, nine times out of ten, you're missing 90% of the information that needs to go in a Value Stream Map. Then you even turn that into a fairly simple process so that you could get things done. If you want to dig deeper, you can dig deeper but you can go through the process and get something done.

**Steven:** I did a pharmaceutical company, they wanted to map their process, and I wasn't really sure what they wanted to map because they didn't actually have...they had an idea of the process at the time, but this was just a factory being built. What I started to do was lay out the process as they thought it was going to work, but I also tried to layout the actual chemical steps of the process. What suddenly became apparent wasn't that they wanted to know what the process was, they wanted to know what the risks of the process were. And as soon as you get that process laid out in just straight-forward yellow post-its, you can go into the process and say, what risks doing I have at this point?

#### Podcast Transcription

## Implementing Lean Marketing Systems



They had a process where they could nearly spend up to 20 weeks trying to make a particular medicine and drop it as they were walking away from the final machine and suddenly they've got another 12 weeks to go. What you do is at the end is you get people on a trolley so that you can't drop it or you've got a contract that you have to get fulfilled somewhere down there and up the line, you ask is there anything that can come back and bite you at this point? Then you can look at that, you can redefine your process for your contract. But once you've got the whole process again, you can go back and look at it, and you can ask how many people you are going to need to do this. You can ask do any of the Lean wastes happen at this point. You can ask if there are any reliability problems with the equipment. You can do everything that you want and know once your process is laid down.

And for me, the VSM is only one of the things you can do with that process. As soon as you've got the map on the wall, you can then go underneath it and get the teams and you can get the operators to go away and find out the teams if you don't know how much is value added and how much isn't. That's one of the things that gets the folk involved, it's the involvement of the operator that make it, the culture, that's what develops the culture. And that's the thing I think helps when you go into a company, and you've got 100 people, you could expect 10 of them to be desperately keen to try and make improvements. But at the other end, you've got 10 people that are going to make your life miserable, they just don't want to get involved. It's the five men in a boat scenario, and I think it's probably more likely

## Podcast Transcription

#### Implementing Lean Marketing Systems

to be a bell curve. They will be your 60% that really want to participate and then you've got 40% at the lower end that don't really want to know.

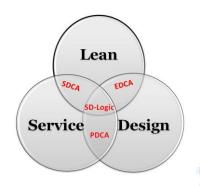
**Joe:** I would like to thank you very much for your time. This podcast will be available on the Business901 iTunes store and the Business901 blog site. Thanks again Steven!

**Steven:** Cheers!

<u>Lean Mapping Consists of More Than 1 Tool</u>
<u>Copyright Business901</u>

#### Podcast Transcription

#### Implementing Lean Marketing Systems





Joseph T. Dager

Business901

Phone: 260-918-0438

Skype: Biz901

Fax: 260-818-2022

Email: jtdager@business901.com

Website: <a href="http://www.business901.com">http://www.business901.com</a>

Twitter: <a href="mailto:obusiness901">obusiness901</a>

Joe Dager is president of Business901, a firm specializing in bringing the continuous improvement process to the sales and marketing arena. He takes his process thinking of over thirty years in marketing within a wide variety of industries and applies it through Lean Marketing and Lean Service Design.

<u>Visit the Lean Marketing Lab</u>: Being part of this community will allow you to interact with like-minded individuals and organizations, purchase related tools, use some free ones and receive feedback from your peers.

<u>Lean Mapping Consists of More Than 1 Tool</u>
<u>Copyright Business901</u>