Business901 *Podcast Transcription*

Implementing Lean Marketing Systems

Organizing Complexity
Guest was Timo ter Berg

Related Podcast: Making Complex

Thinking More Organized

Business901 *Podcast Transcription*

Implementing Lean Marketing Systems

Transcription of Interview

Timo ter Berg: I'm living in Amsterdam. Our company is based in The Netherlands, in Amsterdam. We have a company called -- in English it's called Critical Thinking and in Dutch, Kritisch Denken. And it is a company and a foundation that has its goal to bring to the market evidence-based methodologies to develop critical thinking skills and supporting research into doing that. We are focused especially on education, on schools, universities, on different levels; most of it secondary and higher education. But you know what we bring, we bring methodologies to develop critical thinking skills for individuals but especially for schools so that it can integrate our tools into their curricula.

I'm not a businessman, although I'm working as a CEO of a very, very small company here but from origin, I am a Philosopher, and I'm teaching Philosophy. I'm teaching Critical Thinking now and for most of the time though, I'm now busy with developing Rationale online and making it available worldwide. But I'm not directed at businesses; our target groups are all in education and we did do some training in Swiss companies and Civil Service, but the most of the people who are using our programs are working as students or as a lecturer in all kinds of universities and secondary schools all over the world.

Business901 *Podcast Transcription*

Implementing Lean Marketing Systems

Joe: *Welcome everyone! This is Joe Dager, the host of the Business 901 Podcast. With me today is Timo ter Berg. He is the CEO of Critical Thinking, a leader in the development of software that helps people visualize and organize their thoughts. They combine innovative graphic display tools with the latest research on how to make complex thinking more organized and accessible. Timo, I would like to welcome you. I've been a longtime fan of your software product, Rationale. Can you tell me a little bit about the company?*

Timo: The company is connected to a foundation and both have as a goal to make available the best tools to develop critical thinking skills. We are only bringing to the market those kinds of tools that have proven by research to be effective and efficient in developing those skills. We are focused on education, schools and universities and not so much on individual training of people, because from research it's clear that you can only develop critical thinking skills by doing a lot of exercises; exercise, and exercise, and exercise. And I have the idea that you can only do that in a surrounding like a school or a university or something like that where you can have so much feedback that you can really develop yourself and get on a higher level.

Joe: *I first ran across you from your software product Rationale. Can you tell me when that was first published and about that product a little bit.*

Timo: It was first published in its current form I think in 2006, and it had a predecessor that is called Reason!Able. Both are made by a group of brilliant people in Australia, in the University of Melbourne and a spinoff of that from 2006, Reason!Able was changed into

Rationale, and it has the form it has now. Rationale was a Windows only program. The last two years, my company has been responsible for bringing Rationale as a Windows program online. So it's now online available, and it hasn't the limitations the Rationale windows version has.

Joe: I was a Reason!Able customer now that you say that. I remember that. That's the first software I bought, so that was quite a few years ago. Rationale is based on what we might call the process of Argument Mapping. Can you explain what Argument Mapping is?

Timo: Yes, it's an official representation of reasoning. It's an official representation of making arguments in such a way that you have a contention, a claim and you want to support it with evidence, with information that you think is supporting the claim. So you can give reasons for a contention, you can give reasons for reasons, you can give objections, and you can give rebuttals. And in an official structure of an argument map, you can see the logical structure of an argument before your eyes. So in an argument that reasons are green, objections are red, there are logical connectors of words that are placed between sentences like because, or, but, or, however. You can add different kinds of resources to support a claim you make. And by making such a map, an official representation of the logical structure of an argument, you can become very specific on the details of an argument. It's possible to zoom in on the details of a claim and the way it's supported or not without having to remember all these stuff.

When you're reading an article, for instance, you have to remember all the logical connections between sentences and after five or six or seven sentences, you're lost. What

you do with an argument map is making a still of an argument so that you're able to be very precise in evaluating the answer, the contention whether it's supported well or not. So that would be my first description.

Joe: *One of the things you talk about in Rationale is Essay Planning and being able to build an essay, and that's like somewhat of a step-off than an argument. What's the connection there?*

Timo: In an essay, you try to give a contention, a position to defend the position by giving reasons and objections, etcetera and you write it in a form that you hope that the readers of your essay will comprehend what you are saying or what your logical structure is in your argument and have fun reading. Every teacher of writing will explain to you that you should think first before you start writing. What you're doing in an argument map is making visual your thinking in an argument map, and when you've done that, you can export your arguments map into prose by using the essay function within Rationale. And then you have the hardcore of your essay is available within Word or whatever editor you use, and you can build your essay around the argument map you have been exporting. So what you're doing is, first you think about a subject and you come to a position, you build an argument around it and you think, well this is okay, this is really a good argument for a position you want to defend or to do research in and only then you export it as a text file to your editor, and then you have to edit, the bone structure of your essay is ready, and then you can fill it in, flash it out with all kind of details, background information, things that are fun to read. But the hardcore of your essay, you'll be making first.

Joe: Can argument mapping help in collaboration, because that's part of what your company is about.

Timo: Yes, a lot of us are working -- as teacher's we are working with groups of students, and they built together some argument around an issue. Argument mapping does when you present it with a beamer on a screen or something like that, it makes it possible to have a discussion on issues that can be very precise, and that generates something from a shared thinking process. For instance when you're working with people who have to defend a PhD and they present their Ph.D. or parts of their Ph.D. to the head of dissertation on a map on a screen and people can be very precise in asking questions connected to some claims people make. The fault is it enables having an argument that before all the people involved, it allows to focus on specific issues and you can be very clear about what you are talking and what not because everybody sees the issue involved before their eyes; so it facilitates a process of shared thinking.

Joe: Is argument mapping an extension of let's say the IBIS method or dialogue mapping? Is there a connection between the two?

Timo: I'm not an expert on dialogue mapping but in argument mapping, you are using logical rules. When you're looking at Rationale, you will see all kinds of tutorials that are available there and in which logical rules are explained, and you can make exercises about them. Those rules have to do with, for instance, when you're making a grouping map, what is a good classification of different items within a grouping map. Or when you are talking about a reasoning map, what are the ways in which you're making assumptions within an

argument visible. There are all kinds of rules to make the logical structure of an argument in such a way that it is as strong or well-formed as possible. Another example of how to evaluate different kinds of evidence you give for a claim that is solid or not, so it seems to me but again I'm not an expert on dialogue mapping, Rationale is fairly focused on learning to think and learning to practice good thinking by practicing the rules you need, for instance, to make a good argument.

Joe: *A lot of people claim that software gets in the way, and they prefer to use let's say like post-it notes on a board and everything, what's your take on that?*

Timo: Just try it out. Download a copy and open a free account at Rationale, and you will see that the interface is very easy. You can drag your claims, your reasons and objections with this one mouse, your left mouse button, and you can drag claims around, make a different argument that's very easy. That's not possible with post-it's or something like that. Especially when you're dealing with small complex arguments in which a lot of claims are connected with each other or you have to deal with different kind of assumptions that are being made and that should be made explicit or not. Making an argument map helps you a lot in reducing the complexity of that argument. That's my impression. The original makers of the software did a great job by making an interface that is fun to use, making connections between the claims is done very easily. You try it out for yourself.

Joe: *I love the ease of use of it and being able to drill down and create the pros and cons of it because I use it a lot just for newsletter writing or even the marketing side, developing, email templates and auto-responders, because I can basically build a tree out of the auto-*

responder list in the critical thinking aspect of it. You've come out with a new product recently that's called bCisive. What's the difference between that and Rationale?

Timo: Good question. By the way, bCisive was made first as a Windows version, and we broadened the line a year ago. And in an argument map, you are doing research on a claim. On the top of a tree there is a claim and you want to give evidence for the claim or give objections and come to a balanced conclusion whether this claim, this contention is true or probably true or acceptable. In a decision map, besides it is focused on making decisions, and you're making decisions map in bCisive. And in bCisive you can make official representation of the process of coming to a decision. So in a situation that has a question, you need to answer the question and you have different hypothesis about what could be the answer, if the hypothesis has pros and cons and you can express those pros and cons on the same level within a decision tree and only beneath those pros and cons, you can give reasons and objections for or against the different options, and in such a way you build a decision tree and in the end you can decide whether Hypothesis A or Plan B or whatever is the right thing to do.

So the interface of bCisive is much more connected to the real world situation in which business people make decisions and you can visualize the real world in which there's a complexity that gives rise to a question, that gives rise to different options, that should be compared to each other, and that process you can visualize very easily in bCisive and not in Rationale. So Rationale is really focused on building an argument, using a logical structure - - logical rules, sorry. bCisive is focused on coming to a decision on what to do and what to think.

Joe: *What's the difference between these products and let's say your normal mind mapping software.*

Timo: Again, a good question. In my opinion, mind mapping is not focused on reasoning or learning to reason, or learning to argue. Rationale is focused and making arguments maps is focused on the process of reasoning. With reason, you can do well or bad so you need rules to make a good argument map, and that's the strength of this Rationale by having all these tutorials and the connected eBook. Mind mapping is a great tool for brainstorming. You can put all kind of stuff into a mind map, but the connections between them -- sorry I'm not an expert on mind mapping; I missed the rules to do it well, to do it in such a way that you can make a sophisticated argument in support for something or not, and argument mapping is really focusing on coming to a good position, a good contention that is supported by solid evidence where in which reasons are well connected to other reasons and finally to the contention you want to prove or something like that.

Joe: *You talk about critical thinking skills and spending the time and education to learn them. Why is it so difficult to learn those? I mean is it a different concept for the normal type of thinking?*

Timo: Critical thinking is a very broad concept. So the way we define it is that is built out of three different aspects you can call it. Critical thinking is about an attitude, it is about disposition, and you need to have the disposition that you are curious, that you have patience, that you have the will to find the truth for instance; that's a big word. So there are

dispositions connected to the concept of critical thinking and there are skills connected like making a good argument, making a good categorization of different items, being aware of assumptions being made in an argument, adding good evidence for your different claims; that kind of skills is the skills part of critical thinking. And then you have some knowledge about what is an argument, what are fallacies. So critical thinking is a very broad concept. It's a combination of disposition, knowledge, and especially skills.

I don't think people normally are apt to think critically in such a way that they want to correct themselves in their first reactions. People think that their reactions are a way of thinking. When you really want to go deeper into your thinking in your first reactions, and you want to discuss them whether they are right or not, then you are entering the subject of critical thinking. And most of the people do like more to react to things than step back and ask themselves, is this really true what I'm saying? Am I biased or not in the way I evaluate this news in the paper or not? People are not naturally critical thinkers. People are more like reacting to things, and I have a lot of trust in their first reactions. Perhaps you know the work of Daniel Kahneman; he wrote a book about slow and fast thinking and he made a distinction between having your first reaction, your intuitive reaction on issues and sometimes they are very well and you can live with that, but in more specific and complex situations, you need to be much more precise to come to a good judgment. You need to have the disposition to be able to want to doubt your first reactions, and that takes energy.

Joe: *That's interesting. Can software help me? I mean can Rationale help me develop critical thinking skills or do I need to develop the first before I would even attempt Rationale?*

Timo: One of the reasons why I started working with the group of the University of Melbourne was that they have been doing a lot of research into the question, what is really an effective and efficient way to develop critical thinking skills. And well, they came to two conclusions; one visualizing helps, so that's why they made first Reason!Able and after that, Rationale. Visualizing -- I'm not a scientist, so I can't explain very well why it's helping but from the pre and post testing in the 5-year research program, it became clear that making a feasible structure of logical relationships between claims in the text really helps people to develop those so-called critical thinking skills and this was measured by a test that is internationally used to measure critical thinking skills, and that's the California Critical Thinking Skills Test.

We have done some pilots here in The Netherlands. It is clear that making a visual representation of, for instance, the logical structure in a piece of text really helps people to come to grips with it and to get more clear on what to think of it. And in the process they develop what is called as critical thinking skills as operationalized in the California Critical Thinking Skills Test, so it works. Visualization is one necessary condition to develop those so called critical thinking skills.

The second one was that you have to practice it. When you want to develop your critical thinking skills, you do not need to read a book about it, but you have to make exercises, and exercises, and exercises to train yourself in the skills. It's like learning to play the violin. You have to do a lot of training, a lot of exercising, and then you'll get the skill in doing it. And those two aspects you'll need to develop your critical thinking skills, you can find in Rationale in making your dealing with logical relationships more easy because you visualize them in

the argument map and there are a structured set of tutorials from easy to more complicated to enable you to do the exercises you need and you will see feedback in a short feedback loop by having the model answers available in Rationale.

Joe: *Should I read your book?*

Timo: The eBook is available within Rationale, and the eBook contains only those concepts you need to start with the process of learning to think critically. So there are chapters on what is a reason, what is an objection, what is a contention, what is a claim, what kind of language do you use when you want to be very precise in your reasoning? You should be very careful and learn how to use the language that's precise enough to be able to evaluate later the different claims. There are chapters on analyzing arguments, how do you develop or how do you find the assumptions that are being made, the hidden assumptions most of the time. In all kinds of reasoning, there are hidden assumptions and when you want to be able to evaluate an argument, you will have to make those hidden assumptions, bring them into the open and make them explicit. Well, that kind of stuff, the rules you use that are written down in a very short book, an eBook, and that's available in Rationale.

Joe: *Timo, I have to ask you this, but you may have already answered it, but the argument has such a kind of negative connotation to it. Should we view that more differently? Is there a better way to describe that?*

Timo: Yes, I understand what you mean. Go to YouTube and find the Argument Clinic, a sketch of Monty Python. You see that the word argument is used there as a way of having a

discussion. We prefer to use the word 'reasoning'. Rationale is not so much to win an argument, having a row with each other and trying to convince each other. That's most of the time what people think when they hear the words 'to argue' or 'having an argument.' We are using the word argument more in the -- there's a meaning of that you learn to reason, that you give reasons -- let me rephrase that, reasoning is the process in which you are looking for the best way to support a contention, you are looking for objections, are they really good objections to this contention, and then you decide on the basis of the reasons and objections and all the evidence, whether you for the time being accept this contention or not.

So reasoning, you can do it on your own. Arguing about the way you're describing it now is always directed at other people, and you are trying to convince them. That's the goal of 'to argue and not so much getting clear on a position to examine. So there's a difference between reasoning and arguing. You can argue by way of using a good, developed structure of reasons and objections, but you can argue too by trying to convince other people, by shouting, or by using fallacies, or by threatening, etcetera. That's also a way of convincing, but that's not what we mean by the word to argue or making an argument map.

Joe: *Is there something that I didn't ask that you might want to add?*

Timo: This is such a broad subject that you can go on forever discussing it, but I would like to invite all the people, just try a free account.

Joe: *Timo, where can I learn more and contact someone if I have questions?*

Timo: Our main site is Reasoninglab.com and on that site you can see two programs we bring; Rationale and bCisive and you can always email us from that site. And you will see that when you go into Rationale, there are a lot of means available by which you can develop your critical thinking skills yourself using Rationale. There's a Rationale guide, there's a help function, there are videos, there are free huge set of exercises you can do and you can always email me.

Joe: So it's Reasoninglab.com is the Website to learn more?

Timo: Yes.

Joe: Okay. Well, I'd like to thank you very much Timo. It was a pleasure talking about it. It's a great product, a fun product to use, and I wish you the best going forward with it.
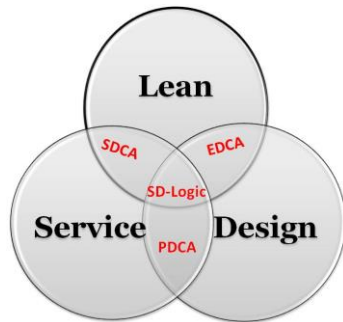
Timo: Okay, thank you.

Joe: This podcast will be available on the Business901 iTunes store and the Business 901 Blog Site. Thanks, everyone.

Business901   *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: http://www.business901.com

Twitter: @business901

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.

Visit the Lean Marketing Lab: 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.