Welcome to Brainfluence, where author and international keynote speaker, Roger Dooley, shares powerful but practical ideas from world-class experts, and sometimes a few of his own. To learn more about Roger's books, *Brainfluence* and *Friction*, and to find links to his latest articles and videos, the best place to start is rogerdooley.com. Roger's keynotes will keep your audience entertained and engaged. At the same time, he will change the way they think about customer and employee experience. To check availability for an in-person or virtual keynote or workshop, visit rogerdooley.com.

Welcome to Brainfluence, I'm Roger Dooley. Today's guest and I have known each other for years ever since I spoke at a neuromarketing conference he organized in Hamburg, Germany. Benny Briesemeister is a professor of psychology at the IU International University and also scientific lead of the Deloitte Neuroscience Institute. But he has been studying neuromarketing for years, and in 2015, was awarded the Neuro Talent of the Year Award by the NMSBA, the Global Neuromarketing Association. And he has a new book, *Neuromarketing in Business: Identifying Implicit Purchase Drivers and Leveraging them for Sales*. Welcome to the show, Benny.

Thank you very much for having me.
Roger Dooley: 01:15
Well, it's so great to have you on here. We haven't connected in person for a long time, certainly since before the pandemic began. But I'm curious, you've been around the neuromarketing space for quite a few years, what have you seen that has changed over the years? How has the science and use of neuromarketing evolved?

Benny Briesemeister: 01:36
I think there's quite a lot of progress, especially in recent years. Neuromarketing always had its ups and downs. And I started my journey, my personal journey with neuromarketing back in something like 2010, 2009, around that time. And that was a pure academic background, so I was basically doing my PhDs and stumbled across the topic and just found it very interesting. And we had a project where we really looked into how can we use neuroscientific methods for anything but just basic science. So, it was really open for everything, and marketing really was one of the topics that were really hot at that time, and where we had the idea, "Okay, let's, let's test that, and let's see how far we can go with it." And that's actually how it started. And even back then when you read up the history of neuromarketing, it always had its ups and downs. But recently what I experienced ... so I turned from an academic to basically a practitioner, and now back to a half-time academic again, and what I experienced in that journey is that first of all, it started out with a lot of startups in that area. And the number of startups at least from my perspective really decreased over the last couple of years, but big corporates picked up the idea and really ran with it. And from practitioner side, I can really say that the markets out there, and the people out there, its really getting traction, like for the first couple of years, basically up to the point of the pandemic, which of course posed its challenges on its own, also, especially for neuromarketing. But up to that point, you always had the feeling that you really have to work for every client, and you have to get into the market and spread word and convince people that it's actually
a good thing. And ever since the pandemic ... it's not over, but ever since people adjusted to it, there's just very new spark and interest in your marketing. And all of a sudden, clients really come to us and ask, "Look, we know that you've been around, we know that you've done a lot, let's do some projects. Let's see what's, how we can benefit from it." And that's something that really rather recently changed a lot, at least in my perspective, that the market out there all of a sudden gets it and sees the value of it.

Roger Dooley: 03:39
Yeah. On the academic side, too. I think I'm seeing a lot more academic acceptance of the concept of neuromarketing. Because I remember when I got started writing about this back in, I guess, well, 2005 was when I really got started, particularly in United States, neuromarketing was like flying saucers or parapsychology, or something. No respected academic in the states would get near that topic. It seems like Europe has been a little bit ahead of us in that regard, where over the years, it's become more accepted. Now, there are places where you can get a master's in neuromarketing. There are various institutions doing research in a very typical professional academic manner. And I think the States is still catching up on that, but that's certainly an evolution that I've seen. When you were initially an academic, did you get pushback about talking about neuromarketing?

Benny Briesemeister: 04:33
Yeah, absolutely. And it was also ... My initial entry into the field was really basically the perspective that you just described, I went in there saying, "Okay, let's have a very hard and critical look at what's actually working and what is just a marketing bluff." And I remember the first probably two years that I was in the field, I just read up everything that I could get, try to decipher the study designs and the methodologies that they were using, and try to replicate them. And probably seven, eight out of 10 times, it just failed because back then everyone was just trying
what's working, and then trying to publish it and trying to basically get a foot into the door. But ever since then, there are really some paradigms and some solid insights that have been replicated, that are state of the art right now. And if you go to neuromarketing companies, the solid ones ... and I don't even know if there are still some left where I would say, I've got a bad gut feeling about this ... because everyone I'm talking about, everyone I'm talking with, they're really, really open with their approaches, they really can show you the science that backs up their approaches. So, it has really evolved a lot in those regards.

Roger Dooley: 05:45
Right. Well, the traditional approach was to keep your secret sauce secret so that if a client asked you, "Okay, well, how do you draw this conclusion?" Well, sorry, we can't divulge our proprietary methodology ... which who knows what it was and whether it actually worked. Well, that's good to hear that that's what you're saying? Well, I guess, if big names like Deloitte are adopting this, that's certainly a vote of confidence. Describe Deloitte's practice in this space.

Benny Briesemeister: 06:11
Sure. So, it's actually quite interesting because the approach of Deloitte getting into neuroscience, and it's not just neuromarketing, we try to really take a very broad, very open perspective on that. The approach that we take really started off in academia because there was a workshop ran in Munich, actually, with students, where students had to come up with ideas for the future business of Deloitte, and one of those groups of students basically came up with the idea of let's do something related to neuroscience, I have no idea how they came to that, and I have no idea what their initial idea behind that was actually. But I know that this innovation workshop was run by our now CEO, Nicola Anderson, and he just saw that and thought, well, it sounds really fascinating, it sounds really interesting. Because back then you had to rely on data. You had behavioral data, and then you
have market research data, but there was a huge gap in what was actually happening because behavioral data is always focused on the past, its behavior that already happened. And as we all know, if you do market research, of course, get an estimation of what might the future look like or not, but those are rather shaky. So, there was a huge gap in between that, and Deloitte then really ran a strategy project on that, and looked how are the predictions for the market of neuroscience, how will that evolve, how are the predictions? And they basically liked what they saw. And what I'm really thankful for is that they said ... that was back in 2015, we think that the market will not have grown to its full potential until at least 10 years, maybe even 15 years. So, we're talking about a time that we're really getting to ... back then they discussed, we're getting to the point in the market, where that actually get some traction. And, as I said, that's also what I see right now, so predictions obviously weren't that off. And they said, "Okay, if neuroscience turns out to be the thing that we see in it, then that's a huge thing. It can be a game-changer, so we want to be the first ones in the field that have a name in that, and have a say in that. And we want to basically get involved in shaping that future of neuroscience in the applied area, whatever that is." And then we started ... Deloitte started, but back then I wasn't part of it, but they started founding what's now called the Deloitte Neuroscience Institute, had a couple of consultants who really searched for corporations and tied a network of academics and researchers that were more in the applied field. And that's actually how I came to know Deloitte. A funny side note, when I was first contacted by Deloitte, just by the name, because as a psychologist, you were like I had never anything to do with business before I got into neuromarketing, so I saw the name Deloitte and it sounded so French from you that my first thought was that it's some kind of, I don't know, perfume or whatever. So, I was pretty far off. So, they reached out to us, and that was back in my academic days, and we had a couple of chats. And when I then decided to basically found my own company and do that, they basically found me again and said, "Look, let's see what we can do together." And from there, it actually grew.
And the idea really was, let's start out with what is there. And marketing was always the application that was the most advanced and the most developed basically. But the idea really of the DNI is that we take neuroscience, taking its full potential, and see where can we use neuroscientific methodologies and insights in marketing, but also apart from marketing. So, talking about, I don't know, regulations, talking about decision making in business in general. So, all the Deloitte businesses really have the chance to work with neuroscience tools. And sometimes, of course, it's more obvious that it's valuable, and other times I'm so traditional research methods are completely sufficient. But yeah, that's basically the approach that we took, and so far, it turned out to be quite a good gamble I would say.

Roger Dooley: 10:10
That's good to hear. And I guess to clarify, too, when you talk about neuroscience tools, some of these tools aren't specifically neuroscience, specific, like EEG or fMRI, you use techniques, and other practitioners do as well, techniques like eye tracking, and implicit testing and a variety of other things, right?

Benny Briesemeister: 10:32
Exactly. So, it started out basically focusing on eye-tracking and EEG. So, that was the starting point because that was what was just most known and most advanced back in the day. But the idea and the approach really is to take every technology that is out there, that is available, that we can use, that can provide value. So, it's really the entire field that is discussed as being neuroscience tools. So, [unintelligible 00:10:57] heart rate variability implicit testing, whatever. And it's really also more and more incorporating psychological insights and psychological tests into it. So, it's really basically the DNI stands for let's take everything that is not traditional market research and see if it can't give us some value. And the two things I think that make us quite unique on the one hand is that we most of the time really take a multi-method approach. So, it's very, very rare that we say, "okay,
this is the method of choice" and we go with that, and we look at nothing else. But what's really making the DNI approach special is that we really tried to look at not only the brain perspective, but also take the human being in its whole into account. So, we look at personality differences, look at basic differences in their biological setup in terms of what neurotransmitters, what drivers, what basic needs are there that might differentiate people. So, it's really a holistic approach in the thought process. And then when it comes down to an individual project, we try to narrow it down, of course, to what's practical.

Roger Dooley: 12:05
And to clarify, the GSR [unintelligible 00:12:07] skin response, for anybody who didn't reference that. In the US at least a lot of crime procedurals on TV would use that for gunshot residue. You brought up something about seeing the differences between people, and marketers have been segmenting their customer bases for years and years, decades, but how can these neuromarketing techniques help in segmenting customer bases?

Benny Briesemeister: 12:36
So, basically, I have two stories related to that. So, the first one is, if you looked at the early days of neuroscience, and I think those days are long past, but in the early days, when we thought about neuromarketing and applying neuroscience and business, we thought, okay, we look at the brain, and then we have the single source of truth. And because the brain is the brain, we have the misconception that every brain works the same way, which of course, is complete nonsense. I mean, why should it? But structurally brains are so similar that there was always the implicit understanding of if we look at the brain, then we get the one truth that's true for everyone. And actually, when I started, I was still in my Ph.D. thesis, I ran a couple of projects where the data ridges really made no sense at all. And if you looked at it, especially ... like I was in a research group where we try to understand
how do people process affective information, so emotional information, things like nice pictures, or especially very emotionally colorful texts and things like that. And when you look at the behavioral effects in those studies, you always had just on a very plain level, if you said, "okay, we will compare something that's positive versus something that's perceived as being negative," if you just looked at that, on that level, very often, you saw that two-thirds of your sample responded the one way, and the other third responded the complete opposite way. So, that was always ... since you had two-thirds of the people responding rather similarly, you just disregarded the other 1/3 and said probably something went wrong or whatever, and you just went with the majority. But if you started looking at the neuroscience data, it really didn't sum up, it really didn't make sense. And so, just by chance, I can't even remember how it happened to be, but just by chance, I really had one psychological questionnaire of motivational differences in people that I ran with the study. And just out of a mood, I across correlated that. So, I looked if there are people that are motivated, like on an emotional level, motivated by different things, can I see differences in the neuroscience data? And all of a sudden, all the data made sense, because I had like ... when it presented things that were exciting, I had roughly 1/3 of the people in the sample that really loved exciting things, and the other two-thirds were like, no, just give me stable stuff, predictable stuff, and don't let it be too exciting. And they responded very negatively to it. Which absolutely makes sense, and which is so obvious when you think about it. But back then it was really like, okay, it's strange that the brain is different for different people. So, I started incorporating that. And the idea really is, if you look at people, what you can see is ... generally what we say now, which is, of course, simplified, but there are basically three fundamental motivational systems within each and every person and it really depends, which is the dominant one how you behave. And that's basically something like social motivations, like am I someone who's very outgoing, very interested in meeting new people, very interested in long-term relationships, stuff like that? Or am I someone who's really more like, I need
excitement, I don't care about the social stuff, it just has to be very high energy very, very new, very adventurous? And the third dimension, which is often called the autonomy dimension means how much control do I actually feel in the situation? And usually, what we think is that we always want to be in control of every situation. And that's how we're being trained. And that is something good. And I always say, generally, that might be the case, but if you just think ... and a very recent example, if you just think about COVID, every one of us wanted to be more in control of the overall COVID situation for sure. But once you got COVID, how good did you feel that some physician took the decision off your shoulders and said, "okay, look, you're sick now, go home, take some medicine, take a vaccination, and just rest and get well again," because he's the expert in that? And if you have to make those decisions as a layman, you're very happy that you don't have to, and you just feel overwhelmed by the decision. That's what I mean with how competent do we feel. And people just generally, and that's a little bit like a personality trait, people differ into what extent they align with those three patterns. As I said, everyone has all three of those motivational systems, but there are people who lean more to the social side, there are people who lean more to the excitement side of things, and so on. And if you take that into account, it really explains a lot of differences in people. That is something that we see in the behavior, but that's also something that we see in the neuroscience data.

Roger Dooley: 17:23
One of the interesting studies in your book, Benny, was one co-authored by Anna Yurga [sounds like 00:17:28], and it's about car dealers who are offering financing to customers, and how they were able to identify two very different segments with different needs, where one group was really in need of guidance, hand-holding, they didn't feel comfortable about discussing financial things, they felt very uncomfortable with that and they needed a sort of slow, helpful approach, where the other group felt very competent in that area, did not want advice from
somebody, perhaps trying to sell them a product of some kind. And by identifying those segments, and then giving the car dealer personnel, sort of a little script or a little flowchart to walk through and determine which segment the customer fell into, dramatically increased their results where you could get higher close rates in with both segments, rather than trying a one size fits all that didn't really work well for either one of them. So, that's really, I think, a key insight, partly from neuroscience. And I think that oftentimes, you can get some of these things from conventional methods like surveys and whatnot, but the tools of neuroscience really give us much greater opportunity. And I guess one tool that is not used that often in the marketing space is fMRI. And you've got an article in the book from ... I forget who the author was, where they used fMRI in conjunction with eye-tracking, and were able to predict ad effectiveness with 94% accuracy. Why don't you explain what ad effectiveness means and just sort of the bare bones of how that study worked?

Benny Briesemeister: 19:04
Before I get into that, and you're absolutely right, there's a there's really ... I'm always amazed about the really cool use cases that are out there. Before I get into those, there's one more thing that I want to add to the Anna Yurga study, because that is really an approach that I hadn't seen for a very long time. And as you said, there are traditional marketing methods where you really try to get a persona and try to differentiate people, but the idea very often gets down to if I start to make customer segments, very often comes down to geographical differences, to differences in their buying behavior in the past and things like that. But the psychological dimension, the neuroscience dimension, the how do I process information, what type of information do I actually need, is very rarely looked upon. And that is something that can have so huge effects if you consider that. I'm a very, very big fan of that approach to really look into those types of things. Because as I said, If I feel very confident in my decision, and I get tons and tons of information,
I will turn away because I feel like you try to push something onto me. Whereas when I'm someone who's really insecure, I need that information, I need that justification. So, it's very, very different people. So, considering the study, first of all, I want to ... The overall approach of the book was ... I haven't written the entire book there, they're just two or three chapters within that that came from me because the approach of the book overall was, there is as we said in the beginning, there's a lot of academic discussion about what is your marketing, what can we do, what can we not do? But if you go to the practitioners, and if you go to just marketing people, or to just business people, they've heard the term, they have a vague understanding of what it is and what they might do with it, but very often if it comes down to how can it really help me? What they lack are use cases. So, the idea of the book was really ... we reached out to dozens of companies that are active in the field of neuromarketing and ask them can you give us like a short write-up of your best use case of your approach? And we wanted to really have the book as a highlighting of those are the lighthouse projects where you as a company, as a business person, can look into it, can understand what is the use of neuroscience, and basically use that as a tool to really make it tangible for business people who have no neuroscience background whatsoever. So, probably the words that I'm using right now are the most academic words that you'll find in the entire book. Because, as I said, I'm a part-time academic, but the use case is really try to be as practical as possible. And concerning ad effectiveness and the fMRI study, the overall approach, and that's been out there for quite a few years now, there's been a very long discussion whether or not fMRI, imaging of brain functionality is actually useful for business applications. Because it is, of course, there's a lot of effort running those studies. And for me, when I talk to business people, the biggest argument always is you have a participant, you put them into that machine, it's very loud, that the person is lying there, it's getting some pictures or some video material in that case, so the ads that they're seeing ... and in the end, you're scanning their brains, and there's absolutely no argument that the FMRI machines
are probably the best machines to really look into the brain and see the neural processing, but is that really transferable to business purposes? Because it's such a strange situation that the person in there doesn't buy anything. It's very far away from their usual environment where they usually would see the ads. So, there's always the fear that might really influence how the advertisements are being processed. And studies like that really show if I present video material like advertisements to people in the FMRI, and really look into their brains how they've processed the information, look at the right processes ... Of course, there's a lot going on in our heads when we process visual information, but if I look at those key brain areas that are responsible for the decision-making process and for the seeking out of information, then that can actually predict how much revenue will I make with that spot when that is broadcasted and I know that several 100,000, people will see it, how many of those will actually respond positively to that, how many of those will actually be affected by it, go to the store, buy the product that's been advertised. So, there are a lot of studies like that right now that show that we can actually predict real-world sales data, that we can actually make the spots efficient. And yeah, that's one of the examples showing that this type of research, those types of methodologies really provide business value beyond the just plain academic value of looking into the brain and looking at cool images of your neural processing,

**Roger Dooley:** 24:06

Well, you alluded to the effort involved in doing FMRI studies. They tend to be very expensive, and the sample sizes tend to be small. You can only have one person to that machine at a time. And typically, these machines cost millions of dollars. Do you foresee a time when fMRI is being used quite commonly by businesses or at least special use cases where it will be worth it?

**Benny Briesemeister:** 24:31
Well, I think it's a very interesting question. I think there's a very big debate around that's quite interesting. Because I always tend to say, if you do FMRI studies, for me the big value is there are just as I said, the most precise methodology to look into the processing of the brain. And if you are a company that has .... where a lot of your business value a lot of your future business depends and on the marketing campaign that you're running, then those extra 2, 3, 5 10% that you can get out of an FMRI related neuromarketing study, those are absolutely worth it. We're not talking about ... As you said, those machines cost millions, but you can rent them off for studies, and then we're talking about a couple of 100, maybe a couple of 1000 bucks of scanner time. And then the overall project really isn't ... probably, we're talking about some $10,000, or something like that. So, it's really if you have the right project, and if enough heavy lifting has to be done with that campaign, it's absolutely worth it right now. That being said, I tended to be rather skeptical about the development of methodologies and their evolving, then I saw that a lot of machines where I thought they will never get into the normal labs, actually, they built smaller versions of that, and all of a sudden, those were assessable. So, I still think that FMRI ... because you need this shielded room in which you need to run those studies, I still think it won't be a day-to-day thing where businesses just go there and say, okay, look, here are the 6, 7, 8 campaigns that I have to run in the next couple of months, just test them all ... and then the next one comes in line, the next one comes in line. I think we're not getting there. But I think that if there's enough, as I said, value in your campaign, if those extra percent are really making the difference, or can make the difference, I think there's a very strong argument for those types of studies, and I think that those types of studies are really important for further developing the field of neuromarketing. Because what we see right now is that with smartphones, there are so many sensors now, smartwatches and stuff like that, where we just get biological data by accident so to speak, that we really have a gold standard with FMRI studies that we can use to validate and to test those types of physiological data and see how strong is there predictive
power, where's that going, how much can we actually learn from those? So, yeah, I think there's a big future for those types of studies, even though I don't think it will be a day-to-day thing?

Roger Dooley: 27:18
Well, actually, Benny, you just led me into my next question, which is, today, we are all wearing smart devices and biometric sensors on our wrists, and we all got a smartphone in our pocket connected to them, how do you see this being used? Is Deloitte using it? How do you see this being used in the industry?

Benny Briesemeister: 27:36
I think, again, there's a complex answer to that. So, yes, we are using those types of devices right now. We've been using them for probably two or three years. Again, it really depends a little bit on the questions asked. We started using those devices like smartwatches, not for marketing purposes, but really for coaching reasons, for advances in leadership, stress management, those types of things, well-being within the company, within employees. So, that is something where you can use them right now. So, things like biofeedback play a role there. But we're also in the process of really looking ... The big advantage of those devices is that they just make it so much more scalable. And there is, for example, there's one chapter in the book from a company that I really like, they're sitting in Portugal, and they basically built ... it's not a smartwatch, but they build a little device that is just as big as a smartwatch that they send out to people and then they collect data instantly. They can collect hundreds of data points within an hour from 100 people, and then have instant processing of that. And they use that for video optimization, and basically ad targeting and stuff like that. So, you can use those types ... because they're so small, because they're so light, you can use those types of devices to
really run real-time studies. Like if you know there's a TV show broadcasted at 8 pm, we just send out those devices to a group of people, let them watch that, and we get instant feedback of how that was perceived and can even see if it's, for example, a game of American football like Super Bowl, they're capable of even depending on how the game is running to predict where do I have to place my ads so it generates the most buzz based on those types of data in real-time. So, that is really a thing that I think will be a huge thing in the future, and it's getting more and more into that because you really get the big amounts of data you can collect from many people at once. So, that's really a huge advantage there,

Roger Dooley: 29:40
Benny, we could keep on going forever. I think I got through about half the topics I wanted to discuss. How can people find you and your ideas online?

Benny Briesemeister: 29:49
Thank you so much. I know I talked too much, but that's when you were enthusiastic, you try to get into as much information as possible. You can reach out to me, Roger, as you already said. I have a LinkedIn page so that's my first go-to website. So, if you want to connect with me go to LinkedIn. If that's not enough, you can also reach me via email, I'm very easy to reach through the Deloitte Neuroscience Institute. There's a public website, there's my always up-to-date contact information on there. And then also, we're building the website for the IU, the International University. There will be ... that's not there yet, but there will be a personal website, which is more on my academic endeavors so you can reach out to me over there as well. Just basically Google my name, and it will come up, but LinkedIn is a very good way to start.

Roger Dooley: 30:34
Great. Well, we will link to all those places on the show notes page at rogerdooley.com/podcast. Benny, it's been great catching up, and best of luck with the book and also the exciting work you're doing.

**Benny Briesemeister:** 30:46

Thank you very much. It was a pleasure.

**Outro:** 30:49

Thank you for tuning into Brainfluence. To find more episodes like this one, and to access all of Roger's books, articles, videos, and resources, the best starting point is rogerdooley.com. To check availability for a game-changing keynote or workshop, in person or virtual, visit rogerdooley.com