

### MODULE 3 DILEMMAS ON BUYING BEHAVIOUR RESEARCH

ÁN: I will talk about a very broad and complex topic. I think that many approaches. So, I decided that I will talk about four questions. I will start with a very basic thing, a very basic dilemma, related to research paradigms, because I think this is a very useful one, useful to know how we approach different research questions. And in relation to this, we can talk about all research, challenges, and opportunities in methodology. So then I will talk about technological innovations, and a meaning of these innovations in research methodology, then I will mention a few social and structural changes, and also a huge part how we do marketing research. My last point we'll be about some trends, some technical, business market trends, so we will see, what are the trends in business projects.

So, let's talk about paradigms first. The first dilemma is often related to a certain method, why we should choose the certain approach, certain method – qualitative or quantitative, or within quantitative results, what are the preferences and it helps to understand these beliefs, and we prefer certain methods over other opportunities. So, I just put these five approaches together: positivist, interpretivist, pragmatist, critical, postmodern approaches, that are completely turns in the literature and other criteria, when you evaluate these paradigms, with I can introduce this part. I know you know are more or less about these paradigms, and I think it's useful to use it as a kind of starting point. Because I will add some purchasing behaviour perspective at the end. So first let's see from quantitative and qualitative perspective, what we can see from these paradigms. So, for the *positivist*, a quantitative data collection is really important, they need it statistically representative, so they really appreciate and require these statistical criteria for the analysis. *Interpretivist* prefer qualitative studies as usual, but *pragmatist* research question is in the middle and based on a natural research question, beside they use quantitative or qualitative method. *Critical* approaches are more co-operative, though quite often qualitative, and a *postmodern* approach is usually a qualitative approach. So, you can see, I collected a few research designs, that comes to these different paradigms, so for example for a positivist, doing experimental studies or making with descriptive promises, working with case studies, and

also exploratory designs, or working approaches with grounded theory, it is a good choice to follow the basic accepted system or this paradigm. For interpretivists and pragmatists descriptive analysis, narrative analysis, case studies, phenomenology, ethnography, and also grounded theory are in the option to be useful to research. In the case of the critical approach, actual search is a relevant one, and what I can see is market research actually became more and more important; and also other participative types. For a postmodern approach, generally, means that the personal history is also important. And here you can see the principles for the postivist, the objectivities very important, so you can make objective result for a positivist is absolutely yes. And they believe that there are truths, and you can uncover the univers of laws, and uncover these laws. For the inerpretivist, and pragmativist the description and explanation of different value systems, beliefs in the kind of key principles; the critical approach, co-creation approaches, and for the postmodern they consider the knowledge as a subjective entity is one of the key principles. And here, what is also important, I think, to see what is the researchers posture according to these paradigms. So for example, for a positivist, this is an objective position, so this approach believes that there's value freedom evaluation of situations and the most important thing is to rate by us, to degrees by us. But all the other approaches are much more subjective. In the case of postmodern approach more creative one, and that's why for the positivist approach we can have generalize results with general meaning which is good for generalisation also production type of studies under these concepts. If I add this purchasing behaviour, the pespective here, than we can see for example that evaluation of efficiency of the marketing activities, or determination of different effects, relates to this type of approach. While here for the inerpretevist and pragmatist, the identifiacion of meaning, for example meaning of shopping, and you can put in context this with understanding of shopping destination shopping and values and beliefs, is a potential topic here. For a critical approach, which is more or less about the power of structures, the understanding of different power of structures, here in the purchasing behaviour we can understand, for example role of children in the decision making process. For a postmodern performativity shopping is a very interesting one, or understanding of the meaning of hidden shopping, hidden meaning of shopping. I think, if we know these paradigms, we can understand the reasons how someone refers to certain type of research and what is basic orientation to the different methods.

So, keeping this knowledge in mind, let's talk about two recent trends. The first one is technological innovations, because I think it's very important to understand how customers behave. What kind of characteristics of customers and purchasing behaviour, and how we can understand this from methodological point of view. I collected a few things. Let's talk about innovation, because I think these have significant influence on both purchasing behaviour and on marketing research. I do not want to go into details, because I'm quite sure that you all know these terms – virtual reality, internet tools, internet of things, artificial intelligence, mobile devices, those very small, miniaturized devices, which don't include one as compared to the neuromarketing tools. They use it to digital media platforms and the technological interactions, and also have a very important impact on purchasing behaviour. As Malhotra mentioned, in one of his studies from last year, technological advances have shrank the barriers of distance, time, language, lifestyles and culture. But, I can feel some conflicts here and you will also share your feelings, I think, as part of the discussion session after the presentation. The first, on one side of the point that says that we have a speedy innovation, so we can see many new technologies - I just mentioned a few before. On the other hand, we have this traditional research logic, which is about reliability and validity. And clearly, that there is some conflict here – how can we deal with this conflict, and what does it mean? For example, in the case of speedy innovation, it enables us - all these techniques, and approaches, and methods - to understand emotions, to understand the unconscious characteristics of conception. We can get new insights to new cognitive behaviours, cognitive decision making processes of customers. We have big data, and with the help of big data, we can find hidden patterns. We can use algorithms to discover hidden reasons, hidden relations, hidden networks, so this is a kind of underrelated discovering. It also means that secondary data, that we can think as significant - more and more significant – and we have to deal with the unprecedented volume, velocity, and variety of primary data. So, this is, I think, one side of the situation. What about the other? What does traditional marketing logic say about it, and this is the thing I know, you know, but I just couldn't stop myself to collect a few quotations from different and recent papers dealing with neuromarketing, marketing devices, brain related techniques. And what I found, warnings, critical evaluation on these methodologies, because – just to mention one – Agarwal – Javier concluded that: „Neuromarketing needs constructive criticisms to grow and bring itself

into mainstream marketing research.” So, we started something, but we must be critical. What Meyerding and Mehlhose concluded about neuromarketing and neuroimaging: „They are not and are not in the future the most cost effected methods thus compelling to use traditional approaches.” And according to Malhotra „We need more and rigorous research evidence that neuro-marketing research indeed measures what it claims to measure”. So, nice, we have new things to use; new opportunities, new technology, but we have to consider the traditional research logic related to reliability and validity. But, I also found a kind of conclusion or recommendation how to solve this conflict, what to do with this conflict. And what I found, this is a kind of shared opinion of different researchers repeated in different papers – that we need to integrate new methods to traditional ones. That can use as a kind of complement, this is a kind of common understanding of usage of these new methods, that integration is very important but we need to use these new approaches as complements the traditional approaches. So, this is the technology side, and some considerations here, and you can learn more if you have further ideas.

The other one, which is also a huge challenge, and also opportunity for companies to understand purchasing behaviour, comes from social and structural changings. And here I also just collected a few ideas, and I won't go in details again, because I'm quite sure that you all know what these things mean. We have to deal with new phenomenal consumption and co-creation. Customers need instant communication, and they can provide continuous and real-time feedback. We have to deal with multigenering and multitasking, which clearly influence how we purchase and how we can research the purchasing behaviour. I think in an important segment within customers, is a conscious customer. There are new movements, like ethical based, value based, political based consumption, which is also the question, may we need new approaches from the methodology point of view. Not to mention, globalisation, which put culture differences in a key position. There's a very interesting study where the authors compared traditional research approaches in the interviews, focus group discussions to customer co-creation for idea generation. So, for product developement purposes. And they clearly found that customer co-creation was more beneficial to generate ideas and to support companies in product developement ideas compared to traditional research focus group or interview groups. Some marketing research consequences link to these new struc-

tural social changes. We have new types of data, we have new tools for data collection, to applications, to devices, mobile devices. That's why we need new tools for the data analysis part, we have to deal with huge quantity of online data, both qualitative and quantitative, of course. For the quantitative analysis there's a kind of modelling challenges related to big data, we know that the half of big data projects proved to be a failure. And what we also have to deal with, these are the data quality at ethical issues such as spam, privacy and fraud. Very important, especially the online data. In Malhotra in relation to virtual communities concluded, that nature communities can be useful for marketing research processes. Very useful to use that for segmentation, idea generation, pricing, whatever so, different types of research topics.

So, my last point is about market research trends, what we can say for companies, because we all know that there is a difference between requirements of science, and what business accepts. If I want to know something, which could be more rigorous. We need better samples, more data. In life of a company, they follow different logic for different reasons. So, I checked a few market research trends, and here I try to mention six that were shared, more often mentioned in different papers. And the first one, relates to behavioural science, it says that this is a very-very prominent and important topic. It relates to qualitative studies, to observations, experiments and it helps us better understand decision making processes. The second trend is with the quantity of consumer data, because customers are ready to share their data for personal services. So, we have huge quantity of data, we have to deal with. And this a trend how to deal with consumer data. The third one mentions artificial intelligence and machine learning. And emphasizes importance of text, image analysis, data mining, data merging everything related to the artificial intelligence and machine based learning. The fourth one - I think somewhat linked to the first one -, is about emotions. Emotions are increasingly important, and we can understand them through neuromarketing, with help of neuromarketing. This is what this trend says, and it helps us to understand unconscious customer reactions to certain stimuli like communication campaign or a product. The fifth one is about inner story telling and it talks about co-creation, VR technologies, video captures, video analysis, solutions with the help of mobile devices, because customers all have their mobile devices with them that they use for a research purpose. And it says that co-creation is important be-

cause customers do not want to observe something, they want to be involved, and we can use this for research purpose. The last one is, a very interesting one, because it talks about the combination of qualitative and quantitative, so it just highlights the importance of mix methods. It says that there is a need less distinction between qualitative and quantitative. Somehow, we need to combine them and these qualitative studies need to be experience and business issue in it.

So, these are the advance that I found to be useful to consider today in evaluation to understand the purchasing behaviour. And then I use the GRIT Report and I'm not sure that you all know GRIT Report. It's a global report, repeated every year, the sample consists of clients and representatives of market research companies. It's a global one. The majority of the sample comes from the US, but also Europe gives a good portion of the sample. From the second part of the last year they measured the percentages of companies who used or considered to use a certain technology last year. And here we have a percentages around 80%, quite high; the middle is the 60% area; and the last part is around 30-33%. So, what are the top approaches? Online communities, working with online communities, text analytics, mobile service, this is an online service, but optimised for mobile devices, so the main purpose is to fit in, on a mobile device, which means it shorter and it follows all the requirements on the mobile, that are on the PC-s. Then social media analytics, webcam based interviews, big data analytics, mobile qualitative ethnography, usage of mobile devices, for ethnography, which is a very useful one, I think. It's not a big surprise, because these devices are everywhere, so why not to use them for ethnography study. Let's see the last part of the list, still quite high, I think, with 33%, not that bad. So, wearable-based research like smart watches, other fit related fitness devices, and others. Sensor/Usage/Telemetry data, so these automatically collected data like windows collect uses for a this type of data usage, biometric response, internet environment, crowdsourcing, virtual environment, virtual reality. So, this is the last section. It's clearly to think, that the things that I mentioned earlier, that we can consider all the methodology consequences, and dilemmas and all the things should be considered here.

So, what are my conclusions? – with a question mark, because I hope this is not just a conclusion, it is kind of starting point in the upcoming discussion.

I just collected a few things, that I found in papers and when I went through all the journals, when I prepared for this presentation. Anything also is related with my personal experiences. The first of all real data is increasingly important for a quantitative study. So, working with real customer data is a trend, became more and more important, and it comes from big secondary databases, datasources, and that's why data based modelling became more important, and will be more important in the future. The second one, is about integration. Because we have so many sources to know where that data from. Different secondary data sources, primary data sources, and mentioned a few new ways, how we can collect data. And a question: how can we integrate? How can we merge these data? Because, merged databases may be produced by a new level of mobile device, than using a single database. But, and this one that I highlighted here, it comes with ethical issue, so here we have very strong ethical considerations, what we can merge, what are the consequences for customers. The third one relates to the need for human oriented research methodologies, because of the understanding and interpretation of customers experiences. And here this human orientation seems to be essential. The last one is just link to the combination to quantitative and qualitative. It shows the growing importance of mix methods, for example working qualitative data with computer data analysis. And my final citation is just linked back to a kind of paradigms. It talks about the paradigm shift, because he sees the marketing research as a more ongoing project, business project, linked to normal, everyday business operations, and not to kind of ad hoc specific problem oriented projects. Because of this new data, and this new creation of data, we have to work with. Thank you very much for you attention.

**ZV:** I think we've heard a lot of interesting thoughts about market research and marketing research trends. The basic question for us in this workshop to discuss about the applicability of the different methodologies and the limitations of the methods in understanding buying behaviour, basically on psychology. So, let me open the discussion.

**BC:** I just ... on the connection between the four approaches at the beginning and at the end of your presentation. I don't see the connection.

**AN:** You are right. I tried to find a clear connection between the two parts,

which was difficult. So ... the position as two separate aspects, and we have to somehow create the link for ourselves, for our approaches. So, if I'm a positivist for example. What do these new technologies mean to me, how can I, for example, didn't highlight, but there is a popular methodology named prediction markets. Prediction market was new to me, to be honest. I don't have experiences to prediction markets. This is a wisdom of crowds kind of approach, so they collect a very diverse sample, and test innovations there. They don't ask whether would you buy a certain product, they ask what do you think? It would appeal to girls, young girls and members of this panel, answer, if they have a strong answer, but there's no need to answer all the questions what they get. They have virtual money to play with. That's why they believe that we take predictions if they give good prediction to value of the opinion increases or otherwise, and they can create valuable predictions based on these panels. So how does it relate to traditional prediction? The positivist approach will have these objective truths of knowledge. But I only have questions: If I see these new approaches, and I compare to the traditional paradigms, I see some question marks.

**AG:** I just have one comment. I'm going back exactly 60 years, in Ohio, where you do not believe anyone, but believe everyone. Ergo: we started to collect data for more resources and tried to classify them. And I think this whole idea of consensus, forecasting that you said correctly, this one of paradigms is coming to the floor and I think you brought it together very well. Also the social media has been stressed. The one point I would like to have is my colleague who came from industry, his faculty of recently also is about decades of experience. He says B2B is late to recognise the value of social media, and the word that he's using now „even if we have a world conference, is better called content marketing”. And that's a big turn that I'm still trying to understand. But the fact is, B2B is very big now, but not on Twitter or Facebook, but on LinkedIn. And so by and large he's point is to progress and that you said correctly, he would agree, artificial intelligence and algorithm are coming to the floor. But you still need that combo that you have correctly said, Ágnes. Quant and qual, one view is not enough, using more and more, and try to build that into. And when we did the forecasting by the way in a number of ways, for a decade, let's say from 1961 up to 71. And there is since 73 years ago changed, and it's called OPEC. So forecast for oil etc. wasn't



good. What I'm saying is that, yeah, we have a great part, as you said and you highlighted some very good points and I enjoyed to seeing that, so let's see what the new generation is doing!

**FP:** I would like to remark, is that, I really liked these sentences, I'm going to use it, congratulations. But on the other hand maybe you should think about more about buzzwords in research of the market. I saw several times that sometimes you just put money in the company, or on some type of research just because it seems to be trendy to do it. Now like Facebook analytics. But, at the same time those Facebook analytics from the beginning were not as valuable, as the traditional research, because of the facts, that the software itself was covering only the public pages, not the comments on the private profiles, that for the beginning it was biased in terms of research. But, nevertheless I really think that the huge shift that is going to happen, but it's still just something that we sense, but we use is this big data. But again, at least, in our case, I do not now if Mr. Zuckerberg has it, but we do not have the good softwares to get these big datas, and put them into the good patterns. So, yeah, maybe we should follow more about buzzwords. I'm totally agree with the critics of neuromarketing, and in my opinion, it didn't proved its value. There are some results of course, but things that we can find out also by applying an old good questionnaire.

**VC:** I just have some comment for doing research, so you asked us in which approach we are to get closer to. I am wondering if you observed some trends, some revolution, if I to get academic research and/or/if there are remarks on differentiation between the academic research and the practical one. Of course the academic has its limitation, doing time or money, or whatever. But practical probably is more under what Florina said, the fashion when investigating things.

**AN:** That compares and mentioned trends relation to these paradigms – even you can see some industry influence behind. So, I found this study which has been mentioned that postmodern is quite popular in fashion, related and medium related studies, or this type of experimental studies, for example, but companies are often still need a positive approach, because they need prediction, they need the feeling of objective truth, whether they accepted the

truth exists or not. But they need some hot facts at the end of the day. That's why you cannot say that there's no need for positivist approach in the future. That's not true. So, there are some trends here, but still I think all these paradigms exist, that are offers us, and we can adjust these backgrounds research questions as well. We can accept more systems and different definitions of paradigms.

**BC:** I agree with that. We navigate between research paradigms. To social media we gave different paradigm, postmodernism. Going back to the last section of the presentation about market research used by companies and the question is, what is emphasized, whether there are data gathering methods what is lacking, is not data analysis but what is the capability to interpret this huge mass of data. I think it is the major problem of the future being for companies, being to research data a lot of presentations by colleagues, presenting a lot of data and at the end, they are not able to interpret what is clearly inside the data, and we lack competences of interpretation more and more, and I think this is, collecting data, the first point of the conclusion.

**AN:** Yes, I think it's related to first and third one. We have data, real data, huge quantity, and still we need the human oriented approach in order to explain that.

**BC:** And there's a few about arts. We have the impression that the more we collect data, the more we're not clever. In fact, the more we are fool. Because many of actors are not able to get something, just mass of data.

**FP:** If I could bring just one practical example, that I lived by myself. This interpretation, capability is something that you required by the experiences you have at the end of the day, is very-very important. I remember that I was part of a study, and it worked for a very big consultancy company, in order to find it about the regular energy customer, but the analysis from that consulting company had experiences to dealing only with customers from B2C, and from waste management. Therefore all their predictions, and conclusions were completely wrong, for the energy. So they understood not much anything from the data they were collecting and it was unbelievable. So, this is one example. And the second example was about commending prediction

about how different scenarios of liberalisation of the energy market, and increasing in prices of the energy, were impact on the purchasing behaviour of the customers on the market in different years. And the analysts from the consultancy coming again somebody from the big 4 were not able to correlate statistical data, real statistical data from the market with the ones of pure marketing as taken from the customers discussing with them. And none of those technological innovation, at least now, can solve this dilemma. Maybe we can create some kind of arguing, I don't know, maybe in the future, but this would be connected with future PhD doctors, not only students, in my opinion. And I know we have all kind of economical models and so on, but as we know that they are limited at the end of the day. So, sometimes you just need a very good business intelligence department inside the company, you know, that you'll be sure that you can analyse all this huge amount of data.

**AH:** May I just comment you had this statement that co-creation was much more effective than traditional focus group methodology or something that. Exactly something related to this problem that we have all these departments some people will only specialized in understanding the big data structure and interpretation. The other will understand how consumer is making the decision. So, when they sit all together in a co-creation workshop and realise that they can talk to each other, discover what the other really thinks, that is a very interesting moment, when this whole comprehensive understanding can formulate, and it can happen. So, one of the buzzwords again, I have to say, because yes, I agree with that the very strong buzzwords, like few years ago neuromarketing was, everyone was shooting on us, actually everyone was like, „oh my God, let's going to kill the whole market research, because this is which will be the most important". Now, where do you see it? Really? You don't see it too often. So, the new buzzword, something like conversational insights. Insights were based on sociology in learning theories, insight was a way of learning. Then we had insight managers, so they became like the operational level turn, we have insight managers. Now, we have the insight in the industry – it's all over, everywhere. So, this co-creative and multidisciplinary method or sitting and merging data different types and sort of data. That's just a representation of co-creation, a co-creational workshop is just like that. So, that we'll have to reach all these comprehensive and full understanding, if at all.

**AG:** Creating words?

**AH:** Yes, the industries absolutely creating words. So, we have this conversation with insights, ideas, I think insight is everywhere and neuromarketing... Respondents have to look at the advertising, and now we see that, nice results that where the consumer there saw something, and that's exactly what we measured, that they realised that there's a stimuli but you like, but we not understand what they really feel, whether this will influence their behaviour, when they do their purchases, so we just only registered a very simple neuro response to stimulation, a visual stimulation.

**AG:** And when you have all these free access, you agree that you have become the product?

**AH:** Yes.

**AG:** That's a way you pay.

**ZV:** Let's focus a little better on our core topic, buying behaviour psychology. And the dilemma concerning all the methodological approaches, in the development of market research or a marketing research for long, for many years, participating approach was dominating. I mean the respondents, the members of a qualitative research group act as a participating agent of the process. And now, of course you know, that participating means a certain level of distortion. It has psychological effect, I won't go into the deep analysis for this phenomenon, but it's true that it is a problem in the research. And in the last years of the nineties and the early years of this century, non-participating approach was increasing, again. Ágnes, I have a question to you, first of all, that what is your opinion about the participating approaches in this new technologies?

**ÁN:** I think most approaches are still there, and used for different research questions. I think it depends on a nature of a research question whether it's participating or not, depends on the method. This is my idea, that I have, I cannot see a trend here, to be honest.



*From left to right: Florina Pinzaru, Alexandra Zbucea, Bernard Cova and Véronique Cova*

**ZV:** I think not participating approach seems to be a little bit increasing with the technological development.

**ÁN:** Because this is one part of the picture. The other one because of co-creation techniques, and the other side of the story, I think that increases there as well.

**ZV:** It depends on - if a member of a research group, has not exactly information about the goal of the research, it is a kind of non-participating or somewhere between participating and non-participating.

**OD:** Let me add some points here from the particular part. I agree with you, that non-participating is increasing and will increase. There are generally logical reasons behind, getting hard to reach people. Many years ago we did interviews with electors. Today, would you let in an interviewer in your house? Not really. It's basically, in real life it's not ok, but years ago it was. This is the point, this is the social part. On the other hand of course there is a technology, what is basically available, so if I have data, because you are clicking and I agree on cookies, „sorry, leave your data, then we all give that to Google, and to Facebook, and they are there”. So this is basically non-participating data. Evolutional change driven by technology, driven by the social changes,

and that's why I also think, that all these virtual things that still can grow, of course, it's all about the money. So, the nature of reality is at the end of the list, because it's very expensive now. But what will happen in like 5 years? Let's see the other paradigm, the online communities, what basically a buzzword in 4-5 years ago, all the companies „OK, just let me build an online community, put all the questions there”. But the companies, they are having their own panels. Online community is kind of an access panel. It's just a question how we call them. But now it's totally common, so we can use it, because companies they are having databases of the loyalty card – they have their own data, so that's why the participative research is less. So, there's a whole shifts around our social being, the technological reasons, just hiding this. The other question is, that what we can do without classical marketing research approaches, so that will be a long discussion. But the focus group will be there in 15 years or just online chatrooms?

**FP:** I think that it depends on very pragmatically on budget as well. For instance taking into consideration just the old loyalty card. If you want to develop something in programming, I don't know, some kind of new structured questions and answers from the loyalty card, and you'll have the system like SAP, it could cost 1 million Euro to develop it. And to apply a questionnaire at the level of the whole Romania, statistically valid, it will cost, with a lot of questions, only 100.000 Euro. So it depends a lot also on money.

**OD:** Yeah, that's the point. That's why I'm checking the ESOMAR reports and some data on the share of qualitative or quantitative research, I will assume some publication, and it turned out that the share of call increase was by 3% 2019 vs. 2016. So, basically there is a shift, because face-to-faces is going to online, which is easier, but it's not about insight gathering. And understanding of what they consumer things, even consumer of B2C or B2B. It's very much shifting provides are qualitative and insight generation, and that's why you receive a shift there, or a kind of emerging trend of qualitative. And it's even doing trouble. So, if it's not only a kind of local issue, that's what I see.

**AH:** According to ESOMAR, 2013 is the year when there was a change, in proportion of what sort of data the world actually gathers. And primary data is going down, and transactional data is coming up – so that's why big sec-

ondary and transactional data are buileding up huge databases. There is a big gap of course, what we get from big data, and what we can get from all, and it's not easy to integrate it actually. But there are ways definitely. However, I think it's also very important, to going back to your point on participatory and non-participatory reserach. From psychological point of view, it also have to recognise the trend that the boundaries of intimacy - because of the technological changes - have moved extremely, so whatever we consider that there is a very private information from 20 years ago, it's nowhere now. We just give out everything on ourselves. Partly consciously and partly unconsciously we are knowing we are giving it away, so exactly what Otilia mentioned in countries where data protection is less stable, or less strict, the „IOT”, internet of things, can just stream you a perfect ethnography, you can see the room, the food in the fridge, what the family will eat. You don't have to ask permission at all, you'll still recieved all these information. So, yeah, there are different types of data to interpret today and in the future. And what might be the role of the traditional research? I guess, it's very important to raise the awereness of the quality criteria, so research quality, research can be only quality if certain qualities are kept or applied.

**ZV:** But, you know the question still remains in front of us, that we can explain better the psychological process of desicions or not. Is there any development, you know, or we have to give it up.

**BC:** Maybe we can turn the question as in term of access to the data. I think being a small business or being a researcher beginning a carreer, it's incredible that without paying you can access to a lot of data and you can build your own market research for free if you have a capability of interpretation - always the same problem...- but the data is there. If you ask me something about consumption, I can't go on with it. But if we use social media, I can give you a plenty of qualitative data. Than I can interpret these data and that could be useful for a company and a company paid nothing. And I can see some students now, doing master thesis, just by doing netnographies on net, on website, on Facebook. They come back with great master thesis, we follow them with participating research. Just because everything is accessible. And I think not just the bad news, I know the frame of intimacy and „private” but it's a good news, too.

**ZV:** OK, you think that the motivations can be accessible now?

**BC:** We have for example YouTube with a thousands of videos, people filming themselves, doing it. To sum it up: people go on youtube, and see the videos, what other people did and uploaded, and they click on the dislike/like button, so we can get data from there (trends), and it would be a „foolish” step to make a questionnaire and ask people, because you have the data from the websites, internet. Just link it up, it is free.

**AG:** So I'd like to ask the two practitioners here. Is the goal to catch the eyeballs and keep them online or is the goal eventually we hope to sell them a service or a product? Or the companies are doing well with keeping them on-line and they actually hoping to „zip” them? Because a lot of people go surfing, and you do not buy, even if they go to the store, they compare it to amazon, but you not buy it.

**OD:** I really think that we need not necessary, but the market research, professionals both academic and business, need to be defined what we understand on the market research. Because it's not only classical, not only you know, „we create questionnaire, we ask, we have primary data”. Quantitative and than do qualitative, and then we understand it. But, it much more a holystic way, also Ágnes said, we need to define what is the very first question. Because my feeling is that we researcher, only just defining the research question, but at the end, there needs to be a business question. So, to make a decision based on what we make as a research question. And there is a very first question, that we can't find, what methods. And I also think that old methods and online, are also fine. The question is, what we are using for. This is what we need to change, I think, in our mind. That's why I was looking that, marketing was a big puzzle, it could not be a big success, because it's just technical issue. Cannot make it as strategical. Companies are doing two ways of market research: strategical, where they do segmentation, decisions, you know, for longterm; and they do technical researches, now I need to decide whether this application, this webpage, this communication is fine. And neuromarketing is measuring all of these technical questions. Let's say, commercials. But product, it's all a technical solution, but the cost is strategical. And that's why I think it's stuck in this term.



**ZV:** If I think of a scientific field, the goal is the same, as in business. Perhaps it has even more sophisticated research questions. The goal is the same, we want answers to something, they want to go forward one step, two steps or more in understanding the situation and buying environment.

**OD:** Yeah, but that's what I'm saying. That this is the question, you want understand that the webpage is working fine, or you want to understand, how people are searching on internet. Two different types of issues. And that's how we need to find out solutions for different issues.

**ÁN:** That's why I think that participation is still important, because sometimes at the end of the day, you have to talk about your ideas, you have to decide that your interpretation is right or wrong. So, you may have hypothesis, you may have assumption based on what you see. And I think participation is important part of this process. Just a small comment to interpretation aspect.

**VC:** I am confused with the difference you make in market research. Marketing research and research in marketing. Perhaps, it's because one is more academic, and linked with some research issues. And here's the one is more applicated, and managers use. And the link between the both, I think it's quite objective. Because we are not speaking about same things. I understand that it's very interesting your presentation at the beginning. But in fact, it's seems that if you want to put in something that really different, this is not in academic research where to take the practical management. But it's just only one kind of our contribution in our research - theoretical contribution, not in management, methodological tools which are also differs from management - this is different from management, so how is the contribution for a manager.

**ÁN:** Yeah, that's why I wanted to start it with a scientific approach. And to use this approach as a basic one, and then I edit these trends, just to see what is happening in business, because there are some linked with the two acting, however the requirements are very different. That's why these are really two things. Apple and orange. But, I can see the link between the two, so yes, I can see it a scientific research and a business research. Sometimes it's easier to sell a study for business, and you can then publish it. Because you don't have solid data or good enough for a certain journals. But yeah, there is some conflict.



*From left to right: Ágnes Neulinger; Florina Pinzaru, Alexandra Zbucea, Andrea Huszák, Véronique Cova and Bernard Cova*

**FP:** All you have solid data, but actually, let's say the algorithms, you used in order to interpret it, are easy to be understood but what if for example journals are not interested in it. It can happen.

**ÁN:** Too simple.

**ZV:** May I have a comment to your presentation on market research trends in 2019. Does it mean that is qualitative dominating experimental research?

**ÁN:** Yeah.

**ZV:** Because in the decision making research especially in psychological sciences there is many experiment based quantitative research – quantitative generalization.

**ÁN:** What I found, it talks about experiment as a quantitative study, but still it also emphasized the qualitative approach of deeper understanding. That I found the relation between these. They just talk about these two things, that behaviour understanding is a key and hot topic.

**ZV:** That's why I think it's important to communicate with psychological research.

**ÁN:** Fully agree with that.

**ZV:** So, for example in the articles of journals of marketing, but in the Journal of Mathematical Psychology as well you can find very interesting experiments.

**AH:** Basically, the big question is how the human mind works. And you studied from scientific point of view, and the business which studied it for profit, for its own purpose. But basically, the very big question we all want to understand, and really know how customers make the decision?

**VC:** The question is not only to know how we decide, how is our practices. And not only to understand what he does, but what he really thinks. The question is if body is more important than the brain.

**AH:** Yeah, probably, how it works and what is its language. And then we can interproduce, like we don't know that language, and that kind of means what you are just saying, what's that that there.

**FL:** What are the motivations basically? Behind the decision.

**BC:** Too match consumer behaviour... they don't know how to be consumers, and most of the consumption is about people consuming together, and not just someone, and make the decision – no, most of the time you don't make the decision. We had lunch together in the afternoon and then I'll be influenced. We have to reinvent „consumer“. And that's why online communities are interesting, because you have to investigate how people do together, not just isolated consumers.

**ZV:** But group decision, group consumption has equally got psychological aspects.

**BC:** Yeah, but not only psychological aspect. I don't think that psychology is

the best way to look at group decisions. I think technology or sociology and so on. We must cross disciplines. And if you don't think with psychological, you just think about the cognitive and the brain – the brain of one person. One person is at the moment is with others.

**ZV:** Cognitive approach is not the only approach.

**OEK:** We try to study emotionally aspects as well, motivational aspects as well, but study online consumers and the analyzation of comments and others is very important in these studies. Because they have a fact...

**BC:** Reaction to ones. What Andrea said, we want to know, but I don't want to know what they want.

**AH:** What I said, that it's not the cognitive focus here, it's just the mind, the science of this and how they make all these decisions, the influences, the social aspect.

**BC:** I think totally different, the ways of seeing humans.

**ZV:** So let's go on. I pass the word to Orhidea to give us an insight of the psychology approach in research methodology.

**OEK:** Let me present you a big picture of my results related to psychology of consumers, consumers' behaviour. Central to our definition of consumer's behaviour are affective, cognitive and behavioural responses of consumers. We have studied online consumption generally, the decision-making processes, and we tried to understand the e-commitment, e-satisfaction, and actions of online consumers, psychological aspects, motivations behind the transaction, for example. Furthermore we tried to capture impulsive and compulsive buying behaviour as well. We used different qualitative and quantitative methodologies to find answer to our questions: we study consumers' behaviour using physiological data, we use survey methodologies, but focus studies as well, - and I am going to present some interesting results from these different studies. Generally we use qualitative methodologies for preparing surveys, experiments or for further interpretations of results which was collected from

the quantitative studies. Therefore we collected data from focus group studies related to expectations of online consumers, expectations related to online platforms, webstores. I will present results related to the most important webstore characteristics, some of them are for example credibility of informations about products, privacy of data, data protection, data management etc.. These aspects are in close relationship with risk perception of online consumers. Risk perception has an impact on searching for products and on shopping and buying decisions and depends on presence of specific information about stores products transactions, buyer process etc.. One of the most important aspects is the possibility for exchanging opinions with other consumers. We used more but different groups, therefore we couldn't collect representative data about consumers' expectations. After the focus group we planned a case study as well, we tested Bookline, which is one of the most popular webstore in Hungary for shopping and buying books. We test this webstore using some important usability criterias, and we found that the more important criteria are: the possibility for personalisation, interactivity, possibility for exchanging opinion with others, discussing with others about the books. However these were the most important criteria, the satisfactions with them were the lowest. These were those aspects, which need to be developed in the case of Bookline. However these results were very interesting for Bookline, were not valid for the other webstores. We couldn't conclude that these criteria are as valid as we could use them for developing surveys, further experiments. Using qualitative methodologies as focus groups or case studies we met with problem as a validity of results. For testing these criteria we could use other qualitative methodologies as well, known from web usability studies, for example heuristic evaluation or cognitive walktrough. In heuristic evaluation evaluators, namely consumers make judgments about fitness between page characteristics and some well-known design principles. Cognitive walktrough is focusing on how easy is for users to perform some very specific tasks (for example buying task) using one webstore. These type of methods can help us in preparing surveys and experiments. Therefore we could use these results in developing a laboratory experiment. In this lab we collected primary data from video recording, we recorded behaviour of users, we collected data about movements with keyboards. Furthermore we measured mental effort of our users monitoring how the mental effort varied under the interaction. For recording emotional reactions we measured electrodermal activity of users.

These psychological and physiological data was used to study decision-making of our users. This experiment took an hour, we could test 13 users. After the experiment we made interviews as well and we used qualitative methods for understanding every aspects of the interactions. Here the qualitative methods preceded and followed as well our quantitative procedures.

Three years ago we started to study impulsive and compulsive buying behaviour using survey methodology. This study started with focus groups, with qualitative methods as well. Our goal was to understand and to know the main psychological aspects behind the motivation of online consumers. Then we studied compulsive and impulsive buying behaviour using valid clinical tests and surveys. We tried to identify motivations behind online consumption, the main question was: *how can we make difference between compulsive internet using behaviour and compulsive buying behaviour?* First of all we tried to identify the main motivations behind online buying and shopping behaviour - immediate positive feelings, unobserved buying, avoiding social interactions, product and information seeking -, using online and offline survey methodology, and we tried to validate the test of Kukar-Kinney et al from 2009, which was used to test motivations related to shopping and buying on the internet and compulsive buying behaviour as well. We identified four different consumer groups: compulsive buyers, who show the highest scores in all shopping and buying motivations. The second cluster was named the antisocial product and information seekers, they show the highest score in the product and information seeking motivation and low scores in the other motivations. The third cluster had a high score in the product and information seeking motivation, but low in others; and the rest of buyers were classical, bricks-and-mortar buyers, who show the lowest scores in all motivations. In this sample the prevalence of a compulsive buying behaviour was very similar to the prevalence of compulsive buying behaviour generally.

In this study we found a lot of significant differences between consumer groups. There were significant difference in unobserved buying behaviour, in the product and information seeking and in the immediate positive feelings between compulsive buyers and normal buyers. Furthermore compulsive buyers show higher hedonic motivational tendency than normal buyers and

they are more prevention focused than promotion focused. They try to avoid the risk-taking in online buying process.

In the second phase we could validate the previous results: compulsive buyers show significantly the highest value in the unobserved buying, in avoiding social interaction and in immediate positive feelings, but there were no significant difference in the product and information motivation between the consumer groups. We couldn't find evidence for lower satisfaction level with life, for higher sensation seeking in the compulsive group. We tried to validate our survey using some valid clinical tests but we couldn't find significant difference between normal and compulsive buyers in clinical aspects, just in BSI interpersonal sensitivity and BSI paranoid ideation. What does it mean? Who are our compulsive buyers? Is this a compulsive internet using or rather a compulsive buying behaviour?

**FP:** If I can joke on this, because this is the end of the workshop, because I take it a little personally, I'm one of those customers. And I'm very happy, you didn't find any correlation. So like an anonymous alcoholic... I'm Florina, and I'm a compulsive buyer on internet.

**OEK:** So summarizing our experiences: we used questionnaires, clinical tests, experiments for testing psycho-physiological data, we used focus groups, case study, structured interview method, - qualitative and quantitative methodology – as well. *And what are the dilemmas?* The results from the tests are just probabilities, because psychological tests show just probabilities. Sometimes we had validation problem for example with Kukar-Kinney's test, because it isn't validated on the Hungarian population. Furthermore we couldn't control the sample, because sometimes we put surveys on some internet platforms.

*What is the solution?* It is important to use different methodologies: to collect psychophysiological data, to use neuromarketing, survey methodology, validated tests, interview techniques, focus group, case study experiments, etc. but all together and finding those consumer groups which could be representative depending on our goals. And if we have, for example, motivational questions, psychological questions, it is very good to use groups which are diagnosed, or which are known. To avoid problems of interpreting our data.

Our very different kind of data. I think, that this is the psychological problem with studying the consumer behaviour, so it is important to study cognitive behaviour on the level of perceptual information, but motivational, emotional aspects of the consumption, as well. And behavioural – what are our consumers doing, in front of these type of online platforms?

**ZV:** I have a question. If I understand well, first of all we have to find a homogeneous population, by a diagnose, before starting the qualitative and quantitative research?

**OEK:** Yes. Our study starts with a quantitative methodology, and then we need to use some qualitative as well, or foresee something about these complex behaviours.

**ZV:** So, before you see the results, you have to homogenize...

**OEK:** And this is for validation as well, it should be good for validation as well.

**KF:** And how do you characterize compulsive buying behaviour by the marketing or the frequency of shopping or purchasing? So, was there any idea of how much they buying things, or purchasing, or the frequency of purchasing on online?

**OEK:** Based on the motivation behind the buying and shopping. We can say that they buy more then normal buyers, but it based on the motivation. All the social interaction, buying the services and having the positive feelings when they are in the process of the buying.

**ÁN:** For me, it was very interesting how you combine different approaches, and my question relates to this: what would be your order of preference based on the usefulness of these methods – it would be the highest, so the most important, what would be your order, based on what you learnt from these methods?

**OEK:** I think it depends on the research question, because when I want to prepare what will happen next as an experiment or in survey, we can start



with focus groups for example. But, a lot of focus groups, not just one focus group...

**ÁN:** But what if it's a very intensive project, what would be your ideal order?

**OEK:** I think that the order was OK. I would start with survey methodology, with testing a big population.

**ÁN:** And through the survey you cannot understand the real problem... so this is what you suggest? So is it crucial to have a survey?

**OEK:** I think yes, because we cannot find our compulsive buyers in normal life. These people try to avoid the social interaction, they try to buy, for example at nights, when the family is sleeping and so it's very hard to find them.



*From left to right: Andrew Gross, Otilia Dörnyei, Cintia Virág (student), Klaudia Angyalosy (student), Orhidea Edith Kiss and Zoltán Veres*

**ÁN:** So, it is a kind of screening to find the right type of buyer.

**OD:** Can I ask, how is your source of online sample? So, where is it from? It's

from your source or is it from some panel, access panel?

**OEK:** In the first research, we checked to find personally consumers, who buy one or three times per months - these are online buyers in our definition. And we tried to find them. In the second research, we visited the big plazas in Budapest, for example WestEnd and so on, and in this case we tested all buyers, not just online buyers, and we used face-to-face questioning of our consumers. And from these very big sample, I tested just online buyers.

**OD:** But is it weighted at some point of online buyer population? Because we know what age, what location, online buyers live. And I just think of representativeness of Hungarian online buyers.

**OEK:** This data were from Budapest. I think that no, it is not representative.

**ÁN:** But you could still wait for the shoppers from Budapest.

**OD:** I really think that you share at some point, it's Budapest focused. Because online shoppers are living countryside in small settlements, because they don't have their access, that they can go to stores. So, the behaviour of online shopping whether you are doing it in Budapest, they are living in small settlements in Hungary.

**AH:** And we also have this thing that now, there's this showcasing, written more to shops to attend showcases. People go there to look at products, and they go home and shop online. So there are showrooms - not showcases, sorry -, so they use the shops in a different way than years ago. So, I think it's an important dynamics in study of online shopping behaviour.

**OEK:** We have a question on it. Or they choose products online, they go to plaza to try, and then go home and shop online.

**ZV:** Just thinking of representativeness, what is your opinion about this new trend, not really new in the last 10 or 15 years, this semi-quantitative analysis of a qualitative information? It's a big business, but from methodological point of view, what do you think about it?

**BC:** I know that academical methodology is not really accepted to look at a frequency of the scores, of the words, qualitative, quantitative, so it's not a big deal in academic research.

**ZV:** But is it a good tool for interpretation of a manual analysis of the information?

**ÁN:** Let me answer with a question to it, please. What if we have a huge amount of qualitative data? For example, I'm making an analysis on online comments towards something, this is qualitative. However I would say, just to mentioned, few of my students, usually do this for master thesis works, so what if they analyse let's see 5000 comments, if you analyse a few month, or of a platform you have several of comments. It's really quantitative and there is a quantity there. It may have a meaning to calculate some percentages, which is not generalisable for anything, but valid within the context that I analyse. So for example, if we use it as a case study, some of my students make a study of trolling, trolling behaviour on online, and she analysed the different tactics what these trolls do. And the percentages were really informative about to be aggressive, to be supportive, to be whatever. Not valid for any other online communities, that's for sure, however it was interesting to see within that particular community. I think at some point, it's interesting to see percentages.

**BC:** Because you cover risk of using the meaning which is from qualitative sentences etc. and focus too much on the frequencies.

**ÁN:** But, what if we can keep both?

**BC:** Yes, but as far as I know it's not something which is really sought by supervisors even reviewers and in marketing I see a lot of frequencies, stuff like this, quantative stuffs, basically on qualitative data. And I see that the reviewers are always.... doing quantative and qualitative data, because it's doing quants on the first interpretation – what is the meaning. Because if you just do what on the basic word analysis, you lose every meaning. You should try to overinterpret data, it's difficult to justify. That's why I say, not easy to get to accepted in the academic field, but sometimes – you are right - it gives a direction.

**ÁN:** Yeah, that's true, it's a difficult one, but if you follow certain rules, for example double or triple coding for meaning and you are able to have a high overlap between different parts. That can help you in interpretation.

**AG:** I have one question, a central question for you. I am an amateur in this field, I confess, I don't shop online, but you mentioned Bookline. So, I'm still collecting in my old age of books and in the US, as you know Amazon is a big one, and there are different costs for different shipping methods and some of these old booksellers are making a money not of the book, but shipping, they charge for dollars. What very few people know in North-America, that there is a Canadian subsidiary of Amazon, which specializes in books, called e-Books, in Vancouver. And it offers free shipping for all books, no matter what. So, my question: in Hungary or central Europe, or all over the EU, are a different price for shipping or not? For shipping goods. I mean if you buy, do they charge separately for shipping?

**OD:** Yeah, they do. But there was very much who did not, but now they are in big trouble, because they cannot increase their prices, because consumers are used to free shipping.

**FL:** They don't define their prices based on the distance of shipping, but the amount of money to spend. It's not that big country.

**ZV:** I have another question about opposite philosophy, opposite approach. To finetune the representative and quantitative data in a qualitative phase followed. Let's say focus groups, with the same population. Because from statistical point of view, it can be attacked, because the second phase is not representative. And we want to finetune a quantitative result to better understand the results, but in a non representative environment.

**OD:** Let me tell a particular example. There are series on TV-s, in Hungary, there are a lots of new series now, and we tested them in showcase that 50 people were sat down in a room and they watched the first and the second part of the series, the TV shows. And then filling a questionnaire, quantitative questionnaire, on evaluating different characters, the place where it's played. And after that, there was a quick evaluation, and selected 8 people were put together in conflict focus group. So we definitely selected four very positive one

towards the show and another four who were very negative. To sum it up: the focus group contained the people who liked the show - had positive opinion-, and people who didn't like the show - had negative opinion-, and it's working very-very well. So, doing two broadcasters. So, in that case it was working.

**ÁN:** I just join this opinion as a question of screening: if I know what type of customers I like to say, and learn more of them, than it'll work. It's not representative, but if you know that, an uncertain meaning there is within the group, let know more about it, take it as a good. It's very useful, very beneficial. It is for the interpretation, only. And in analysis, you have that: let's say women, men, different age groups, and if I'm uncertain of one group, the meaning there because it's contradictory, that's a dilemma, for example, why not to ask them with the certain profile. This is how I would use, how I used in the past.

**ZV:** It can happen that based on the result, we do qualitative interpretation at the end of the process you will have main shifts in the quantitative results. That's the statistical dilemma.

**ÁN:** Okay, I see your point now.

**VC:** But I think that it's perhaps all the questions are of context. For example, what is your field and a question is for example „Is this bottle is half empty or half full?“. And what is the „half“, that is your 50% quantitative thing, but your own interpretation of this basic number depends on the context. For example, if you introduce some variable of emergency. If you're about to detect so. But if you are in another context you could only focus on the empty part. And so, you never lies according to another. Only you take in consideration the context. And I think you can interpret, you can present qualitative way of a quantitative data, because you put another information about certain context of a phenomena of the situation. And it's really a good thing, I think so. And you can argue that offer the bottle empty or full is can be considering in different way according where, what the situation is, who is considering the phenomenon. And so all these things are of comparison. What is the environment of social culture, physical, demographical what is the environment of the facts.

**AH:** I totally agree, that through my all carrier I was a qual researcher in the business. I have to protect all the time my area, because everyone's asking: what we have the quantitative data that statistically validated and so on, and I always have to say, „what I studied, and what I am answering is apple, and yours it's orange". And that's thing we don't compare – an orange to an apple. So, we both contribute in a different way, and I have my role, with my result, with my interpretation and you. That's again the point of how you interpret, and whether you have the intellectual capacity as a researcher, or as a result user, or manufacturer, whether you really understand. That what you use this one for, and what the other result for.

**BC:** But the interpretation is limited or bounded by the context. As compared to the academic context in a business context, you know what counts is the best explanation of the phenomena and you can mix everything and the customer will be happy - it's all up to you. I think your question now depends on if it's an academical or business context.

**AG:** On this side as an academic who has mastered of econometrics and other things like engineering and looking for high R-squares and multiple regression and on and on. So, what I'm saying, there is a time to show a quantitative technique on knowledge more. Somebody or several people said here interpreting the data and to me that's were business and learning from others. I would say that management, marketing etc. are truely half way between art, very creative and you cannot explain it, and very hard science, business is in between like pottery. And one expert use that example, because his wife is a potter, and I thought that it was very clever. And that's for sure, that business is really a combo of that two, and most important we have to do good quantitative data. And than you can say something more confident. That's my view.

**ZV:** I have a provoking question to Orhidea: what's the reason that in behavioural research researchers can accept wrong conclusions. Let's say a few experiments and not a big sample, I think for some people it's correct, but I don't understand the generalization. What is the reason, let's say experiment with forty students. They can publish, they publish it, as accepted result.

**OEK:** We have experiments by the psychologists, but we have other col-

leagues as well. We use quantitative methodologies. Some of my colleagues use these types of methodology with 30 persons, but not in the all, for example social psychologists use big databases. Or clinical psychology uses cases, for example. Just cases.

**ZV:** Can the results be generalized from small sample experiments?

**OEK:** Yes, because we have a lot of data. For example, I present you an experiment, when we collect psycho-physiological data. This type of experiments need one - one and a half hour, we can collect a lot of data about one person, and I think that this type of experiments could let us to in-depth understanding of the functioning of the human – brain, emotions, motivation.

**ZV:** In a generalizable way?

**OEK:** Yes. But I think after this type of experiments we have to use service for gaining a lot of data, related to the phenomena or qualitatives for example, using interviews, focus groups to interpret our data. So, not enough to use just experiments with 30 persons.

**BC:** Just a question, Orhidea. You use a concept variable, we do not use it. It's mental effort of the consumer. Can you explain really what is this, and how to measure it?

**OEK:** We measure it with using heart rate variability. So, because this heart rate variability can use as sign of mental effort. And mental effort is the hardness of performing a task for example, which can be measured by the time, by amount of mistakes, for example.

**BC:** So, the consumers who shop online, is the number of time or mistakes you make, you change ideas before buying something? And you mesasure it by mistakes and time?

**OEK:** Yes. And with our choice with the variability as well. You can say the curve of your mental effort in this case. Simultaneously with your mistakes, and with your time used when buying something.

**ZV:** Another question: have you found personalities in this field of research that is anything as a clue for evidence and significant difference between of-line and online behaviour? Can we segment the market? With hundred percent validity from this point of view? Typical online, typical offline shoppers.

**OEK:** Yes. I think. We see the different behaviour between online consumers and offline consumers. For example, in risk-taking by the behaviour.

**ZV:** The risk is different, I think of online and offline.

**OEK:** Transaction, which are invisible for example.

**ZV:** And is this the volume of the typical online shopper increasing by young generation?

**OEK:** Yes.

**ZV:** So offline shoppers will disappear?

**OEK:** Maybe. We don't know.

**OD:** The frequency is changing. Basically the penetration of online shoppers is 50% now in the Hungarian population, but those, who are over the online shoppers, shop more frequently. That's the recent change. And I also think that there are what kind of category of people are online shoppers and offline shoppers. So this can't be different case if it is books, or tickets.

**BC:** Industry does matter.

**DO:** You know, the involvement is very different in different cases, so for example you book a flight what we do online, but you don't buy shoes online.

**OEK:** We have a problem in the definition of online consumers. We use frequency on multiplied type of amount as consumer online, and time of product – not just tickets, not just travels and so on. Products which could be.



**OD:** And I'm also thinking that it's the involvement of the price. I don't know, it's 10 euros, or 1000 euros. So this is a different thing.

**AG:** Are they Hungarians or are they foreigners?

**OD:** Hungarians.

**AG:** Glad to hear that.

**ZV:** But online surgery can never beat the markets...

**AG:** How about DIY?

**ZV:** It's a matter of technology.

**BC:** Just a comment. There was something missing this afternoon in your analysis, something called brands. Internal involvement, internal market research. Why don't you speak about brands? There's a role of brands in compulsive buying, but you know, you were not speaking about brand names...

**AN:** Part of the picture. So, when I talk about online nature of communities, communities are there. I talk about different research approaches, yes, brand is one of them. I didn't want to emphasize branding too much. But you are right, I could have talked more about this topic as well.

**AG:** My colleague who comes from industry, in Cleveland, Ohio and working academic, if you developed this picture, he would say enterprise AI companies. There are hundreds of brands... AI changed the marketing forever, it will do something with B2B as well.

**OEK:** We didn't arrived yet at this stage. We continue the interpretation of our data, we have a lot of data.

**AG:** I hope to see it.

**AH:** I found very interesting in your presentation where you mentioned, it's the part of the online activities of online consumers, important to have comments from other, and recommending and evaluation of other consumers. So what others say. So, this social aspect lurking into an online and isolated situation of this case, it's just very interesting. That you are sitting alone in your room and it's still seek for evaluation from others, what you also mentioned. Which also brings in for me an interesting thing, thinking of the chatbots or automated comments, totally fake comments from quotation by others, by artificial intelligents, content marketing, basically. So this is how this come together, so this social validation is so important for us, humans that it's like lurking into these levels to influence us towards prefer such brands or making choices favorable for different industries. So, I think it's very important, that you also have this as a result in your study.

**ZV:** If there is no more comment or questions, let me thank you for your valuable contribution to the discussion. And in the hope you enjoyed our symposium, see you next time. Goodbye.

