

iLLUminate Blog Transcript: Danny Zane on Big Pharma Marketing

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- ANNOUNCER: 00:02 This podcast is brought to you by iLLUminate, the Lehigh Business blog. To learn more, please visit us at Business.Lehigh.edu/news.
- JACK CROFT: 00:14 Welcome. I'm Jack Croft, host of the iLLUminate podcast for Lehigh University's College of Business. Today is March 4th, 2024. And we're talking with Danny Zane about his research on how pharmaceutical marketers might overcome the negative perceptions most Americans have of "Big Pharma" and how they can better share information across varied stakeholders and begin moving past the industry's stale promotional model. Dr. Zane is an assistant professor of marketing who specializes in consumer psychology. And we're talking today about a recent study Danny co-authored with Carter Morgan, an assistant professor of marketing in the Muma College of Business at the University of South Florida. It was published in the Journal of Public Policy and Marketing. The study is titled Practitioner Perspectives on Key Challenges in Pharmaceutical Marketing and Future Research Opportunities. Thanks for joining us on iLLUminate again, Danny.
- DANNY ZANE: 01:15 Thanks, Jack. It's a pleasure to be here as always.
- CROFT: 01:19 Now what was it about pharmaceutical marketing in particular that led you to think it was an area that could open up some interesting research questions? And what was your goal in doing this study?
- ZANE: 01:31 So in general, pharmaceuticals, as no surprise to anybody, is a huge industry. Consumers spend billions of dollars on drugs and therapy each year. So there's a huge stake in this for all of us, which I think merits careful consideration of the industry's practices. And so for this reason, and a good one, I think pharmaceutical marketing, it's a hot topic, both in popular press and also in the marketing academic literature. That's also probably because it's a contentious one, one that's always evolving in real-time in front of our eyes as the pharmaceutical industry overall continues to change. And that, of course, is in part because it's closely tied to the U.S. health care system, of course, which we know is an issue of never-ending debate. So while lots of academic research on pharmaceutical marketing has been done over the last several decades, because of this evolving nature of the industry, we academics, we continue to look to update our knowledge about it, again, as those shifts continue to take place. So as evidence of this, Carter and I, our work was actually part of a recent special issue of the Journal of Public Policy and Marketing. And this issue is solely focused on pharmaceuticals. But the specific goal of Carter and I was to summarize the state of pharmaceutical marketing sort of from a unique perspective and to outline, as you mentioned, a roadmap of questions for both marketing academics and also pharmaceutical practitioners to consider to hopefully benefit the entire industry.
- CROFT: 03:08 What was the process you used to conduct the study?
- ZANE: 03:12 Yeah, we wanted to do something a little different by viewing things through the pharmaceutical practitioner's perspective. And so instead of looking from the outside in, as I think we tend to do as academics sometimes, what we decided to do here was actually interview multiple practitioners who deal with pharmaceuticals and the

marketing of them every single day. And so to do that, we went out, and we interviewed eight of these practitioners. And they included marketers at biotechnology companies, health care companies, pharmaceutical companies. They ranged from directors to top C-suite execs. We also included in here two practicing MDs, doctors, to hear about their outlook on pharmaceutical marketing from their unique perspective. And so we posed a general set of questions to each of them in this interview format. And some of these questions, we included asking about their take on the biggest current challenges and opportunities in pharmaceutical marketing. We asked them what they believe the role of pharma is in the marketplace and in society. And of course, we threw in a fun magic wand question, so something like what would they change if they had a magic wand to wave and could do anything really they wanted in that space. And so then after collecting all of those responses, Carter and I analyzed them to come away with some major themes that emerged. And it was sort of surprising to see how much convergence there was. But it made for a really interesting, I think, paper that resulted.

CROFT: 04:47

Yeah, I found it to be so as well. Now based on those interviews, you had come up with three main topics that-- and I'll just summarize this upfront. And then we can talk in detail about each of them. But the three main topics that you say are top of mind in the pharmaceutical marketing field, and I'll quote, "the skeptical way in which patients perceive Big Pharma," that was nicely put, "the challenges facing marketers as key distributors of information to other stakeholders," and, "pharmaceutical marketers' adherence to a stale promotional model." So let's take those one at a time, starting with what seems to be the predominantly negative perceptions most Americans have of Big Pharma. And in fact, one of the practitioners you interviewed told you that consumers view pharmaceutical companies as, quote, "being Machiavelli sitting in an evil lair, plotting global domination." And when people tend to see you as a Bond villain, that's a pretty steep obstacle to overcome, it would seem. So what seemed to be the main drivers for that negative view of pharmaceutical companies?

ZANE: 06:05

Yeah, that description, right, is pretty vivid and telling. And you actually have a great narrator voice too. It sounded very cinematic as you read it.

CROFT: 06:15

Thank you.

ZANE: 06:16

But yeah, there was this convergence, as I mentioned, among all of our interviews around those three topics. And maybe the most overwhelming convergence came around this first issue of consumer skepticism towards Big Pharma. And so now remember, this is from the practitioner's perspective. So these are C-suite execs at these pharmaceutical companies who aren't blind to the fact that consumer sentiment toward their companies and their industry isn't great. And I actually think that's perhaps a promising starting point for change, the fact that, again, this was from their perspective and they're realizing this. Big Pharma itself is, of course, a term anchored in a consumer stereotype about how many large-- or how few, I should say, large pharmaceutical companies there are that we believe basically are able to treat us however they'd like. But anyway, the main drivers of this skepticism or this prevailing negative sentiment about the pharmaceutical industry as a whole, what we found, again, from the perspective of these marketers and MDs in the industry, are, first, consumers' perceptions of pricing trends around pharmaceuticals. And then the next was their patients' actual experience with the clinical effects of pharmaceuticals

themselves, so their experience as they take prescription medication, and finally, also consumer perceptions stemming from the direct-to-consumer pharmaceutical advertising model that exists, the fact that we see these advertisements for prescription drugs on our TVs and elsewhere.

CROFT: 07:56

We do, every night, multiple times.

ZANE: 08:01

Yep.

CROFT: 08:02

Now are the issues surrounding pricing as simple as pharmaceutical companies, as it is often proposed, having a rapacious devotion to higher profits? Or is there something more complex going on here?

ZANE: 08:21

Yeah. So when thinking about why prices drive this skepticism, consumer skepticism of the industry, the issue is really, I think, that it's the opaqueness of the industry's pricing structure. And that leads consumers to easily default into believing that these pharmaceutical companies set high prices foremost to increase their profits. So whether that's objectively true or not, it's the fact that consumers are so easily able to default to that belief. So we see these rising prices of pharmaceuticals--which, by the way, they've commonly increased at rates higher than inflation over the last several years. But that's coupled with no good explanation for why this is. It's given this really shrouded secrecy that seems to encapsulate pricing in this industry. And actually interestingly, industry disruptors have actually realized this. And there are some attempts to start dismantling some of that opaqueness. And the biggest example I can think of right now is this new company called Cost Plus Drugs, which has Mark Cuban behind it as a backer. And so this company, they're actually offering prescription drugs with very transparent prices. So you go onto their website, and they tell you straight on the front page, "We are going to charge you whatever it costs for us to acquire that drug plus a 15% markup so that we can continue to operate our business." And they're actually growing rapidly. So it seems like major change perhaps could be on the way in this regard, which is fun to see.

CROFT: 10:05

The second thing you had mentioned was the personal experiences of patients with medications that either don't work as the patients feel they should or have those unpleasant or even harmful side effects that are listed in small print at the bottom of every direct-to-consumer TV ad. And it would seem that would be a particularly tough thing to overcome with the marketing strategy since people's experience is people's experience. What are the questions marketers should be seeking to get answers to in this area?

ZANE: 10:45

Yeah. So our practitioners that we interviewed, they indeed recognize that consumers' actual experience while taking pharmaceuticals plays into their perceptions of the pharmaceutical industry at large, which totally makes sense. So if you or I take a drug and have a good experience with it, right, it helps us with whatever ailment we're hoping it does, this should reflect positively on the manufacturer of that pharmaceutical and then also perhaps carry over to our perception of the industry at large, right? It gives us this rosier outlook on, "Hey, there's some promise here." But what gets tricky is that consumers' beliefs about how effective drugs are are actually extremely delicate and malleable. And so there's some fascinating stuff that goes on here. For example, patients go so far as to infer that drugs with good taste or drugs that have weaker side effects are actually less effective at doing the core function they're supposed to do. So we walk around with this-- you

can think of it as a no pain, no gain belief. So if there's no pain in the form of this thing tasting bad or having these really noticeable side effects, well, "Ah, there must be no gain. It must not be really doing its job in terms of curing that focal ailment I want it to."

ZANE: 12:07

And then we also have a big problem in this country with non-adherence, where consumers don't stick to their medication regimen. They sort of trail off. And so I think to tackle this issue, we first need to better understand consumers' psychological tendencies as it comes to medication. So just as one question here, do they ever unfairly attribute those inflated expectations of a drug's effectiveness maybe stemming from its taste or its side effects, for example? Or do they ever misattribute their own failure to use medication as prescribed to them? Do they ever blame the pharmaceutical manufacturers unfairly for some of their own potential wrongdoings? And if so, does that further fuel this skepticism about the industry and the effectiveness of these drugs when maybe it shouldn't? And so I think that's a nice starting point, is to really think about how deeply some of these psychological underpinnings and phenomenon might permeate through some of this stuff.

CROFT: 13:09

Now the direct-to-consumer advertising or DTCA is, as you mentioned-- I mean, virtually ubiquitous on TV these days. And this is something I've long wondered about. And I used to work in health publishing at Rodale back in the day. But if patients can't get medications without a doctor's prescription, what is the rationale for targeting advertising directly to consumers?

ZANE: 13:39

So interestingly, these direct-to-consumer advertisements for pharmaceuticals, they're only ubiquitous on TV in the U.S. and New Zealand. Those are the only two countries in the world that allow direct-to-consumer pharmaceutical advertising. So I think that that's telling in and of itself. And the reason that you described that most countries probably don't allow this is because there are these doctors that are gatekeepers of sorts. And so why is it allowed in the U.S.? Well, the main arguments for targeting consumers directly with this advertising, there's a few. But some proponents claim, "Well, it will educate them about conditions and treatments they might have been unaware of otherwise." Some argue it could improve overall population health by encouraging the use of appropriate medications and perhaps maybe even de-stigmatizing certain conditions. If you see a commercial about a certain condition, it brings it more into perhaps the popular rhetoric. Or it makes it seem a bit more normative. It maybe encourages people to go to doctors by seeing these, sort of as a reminder of, "Hey, there is intervention that can help you. Next time you have an ailment, perhaps you should seek medical advice." And there are some others as well.

ZANE: 15:00

But it now seems that this is built into the entire industry structure. So our interviewed practitioners, they actually stated that the onus is really now on them to promote their medications. And they see it as this necessary part of the system that's been created. So I think a really interesting thought experiment would be what would happen to these companies and the pharmaceutical industry in the U.S. if we had our own magic wand, right, and basically got the government to disallow this direct-to-consumer advertising tomorrow. How would the industry restructure, how quickly, what impacts would it have? I think that's a pretty fun question to think about.

- CROFT: 15:39 Indeed. Now were there any other main issues that you found with direct-to-consumer advertising?
- ZANE: 15:48 Yeah. And again, so from the practitioner's perspective, these individuals we interviewed, so they recognized sort of the necessity. But they also realized many shortcomings. So these direct-to-consumer advertisements, they present an overly rosy picture of medication and its successes, right? You sort of get this nice music. People look very, very happy and smiling in these advertisements that you see, right, and so perhaps, again, adding to those inflated expectations. But in addition to that, they also tend to leave huge gaps in consumer knowledge about underlying conditions, side effects. They don't mention multi-pronged treatment approaches, if any, so should this be coupled with anything else. And going back to that consumer skepticism of the industry overall, actually half of American adults believe that because there's so much of this direct-to-consumer advertising, the resources needed to create and share those ads, consumers believe, is a big contributor of rising drug costs. Although studies have actually shown that that's not the case. And so again, you're getting these misconceptions based on how easy it is for consumers to draw some of these default inferences about where money is going within this industry.
- CROFT: 17:11 Yeah, that's interesting because I will confess that there are two drugs I'm familiar with, Jardiance and Eliquis, that are two of the 10 on the list that the federal government is now entering into direct negotiations to lower prices because they're so high. And those just happen to be two of the drugs that are advertised the most that I see across different channels every day and night on TV. And my mind leapt to that immediately, high prices, lots of TV, TV isn't cheap. So it's interesting that when you actually look at the numbers, that is not necessarily the case.
- ZANE: 17:52 Yeah, I think, right. We're intuitive psychologists through and through. And so many of your fellow Americans probably share that belief with you and would see the same correlation, even if objectively, it's not there. So it's pretty fascinating, right.
- CROFT: 18:09 Yeah. Now your second main topic revolves around the challenges that marketers face in providing information to the many stakeholders in the pharmaceutical industry. And this includes patients, physicians, pharmaceutical companies, insurance companies and formularies, and even the government. And it's interesting because that is one of the questions that had never occurred to me, I must say, as I've thought about all of the issues around this, that key role that marketers somehow have to play in being the keepers and distributors of the information to all these different people. And I'm wondering how did that kind of evolve or come about? Was it intentional? Or did they just have to step into a gap that had opened? And what are some of the main issues you identified with the role that they play within that kind of complex web?
- ZANE: 19:10 Yeah, these pharmaceutical marketers have sort of fallen into the role of quarterback in a sense, right, of this complex system. So as you mentioned, right, that running list, there are many parties involved.
- CROFT: 19:23 Yeah.
- ZANE: 19:23 And then on top of that, there's an incredible amount of information to be disseminated across all of those. So just to throw in some really eye-opening stats here, there's over 20,000 prescription drugs that have been approved for marketing by the FDA, at least as of two years or so ago now. Dozens of new drugs are

introduced each year. And so just to put this into perspective, for instance, it's been estimated that a single physician would need to read 15 scholarly articles a day just to stay informed about the top 25 most prescribed drugs--

CROFT: 20:03

Wow.

ZANE: 20:04

--which is truly eye-opening in my mind. And so the main issue is it's impossible to get all that information to all parties. It's just not going to happen. So instead, what's come about is this structure where patients are meant to rely on doctors' knowledge, doctors are meant to rely on the pharmaceutical companies' knowledge and results from clinical trials of these drugs. And so we've come to accept that certain parties within this complex system, namely physicians and patients who are really the two primary end users of pharmaceuticals, they rely on these pharmaceutical marketers essentially to make many decisions for them. And this codependence, in addition to just demonstrating how impossible it is to disseminate all that information, it actually also creates these opportunities for major conflicts of interest to arise. So some pharmaceutical companies, they pay physicians to be key opinion leaders. Pharmaceutical sales reps still go into doctors' offices with free trials, gifts, pleasant conversation. And we know that that's all in attempts to get the physician to feel good about you and your company. And we know that physicians who more strongly identify with a pharmaceutical company, they tend to prescribe more of that company's products, recommend its products to other physicians, participate in seminars sponsored by that company.

ZANE: 21:38

And so there have been some attempts to dismantle that a bit. One example I can think of is there have been efforts to create these online databases that disclose any physician-pharmaceutical company ties or any time there's perhaps a financial sort of stake that a physician has with a pharmaceutical company. But interestingly, creating a database like this, it just ultimately puts more burden on patients because then we're the ones who have to go sift through these databases if we want to integrate that info into our decisions. And so again, it's just leading to more information and more of us needing to navigate that complex environment. So there's work to be done there.

CROFT: 22:22

Now given that, what are some of the potential solutions that you think merit further study?

ZANE: 22:29

Starting with regulation and policy and specifically talking a bit towards the conflict of interest side of things, one proposition has been to decrease the extent to which patients and physicians interact directly with pharmaceutical marketers. So should we have even more attempts to prohibit these marketers from targeting health care professionals, right, eliminate the gift giving, the entertainment, food and beverage that still happens? Can we restrict medical sales reps access to certain clinical spaces? I think a really interesting idea here is, can we adopt pre-commitment measures that are used in other industries to maybe start rebuilding some of the trust between the patients and the pharmaceutical companies? So essentially what I mean is like a money-back guarantee. So what if, for example, pharmaceutical companies could introduce performance-based, risk-sharing arrangements where basically they refund patients if there's a lack of positive results over some predefined length of time? And then with this information overload perspective, we actually saw the COVID-19 pandemic exacerbate that. So during the pandemic, info had to flow fast and

furiously, more so than ever. And that's actually only increased the shortcomings we see in terms of this information dissemination.

ZANE: 23:59

So I think just in general, what can an industry do to maybe change their organizational structures to be more sustainable into the future, especially thinking about, are there similar pandemic-like events in the future or any of these huge shocks to the system? So should new roles or functions be built into the industry to more efficiently address unexpected events that happen on a national or global scale? And I think the big question that every industry is thinking about is, what's the role of AI in all of this. Is AI going to be able to really help with that information dissemination, perhaps do it in some objectively-- more objective manner? And I'm sure we'll see advancements in that role in the not-too-distant future.

CROFT: 24:49

Again, these are the main topic categories that you identified that were in common from the people that you interviewed. As one of the practitioners you interviewed put it, and this is a paraphrasing, the third one is a continued reliance on promotional strategies that might be driven by a feeling of helplessness instead of by enthusiasm for creatively and effectively conveying information. I thought that was a very, both, sharp observation and also a somewhat distressing one. Marketing in any field, I think if it's being driven and even in part by helplessness is bad enough. But certainly in a field where you're talking about medications that hopefully are making people's lives better and in some cases even keeping them alive, helplessness is not really what you want to be going for. So what are some of those key issues that are driving that? And what's holding back the pharmaceutical marketing industry from doing a better, more creative job?

ZANE: 26:11

I agree. I also like to look at the positive side of these things in the interest of consumer welfare. And I think there is actually a lot of very interesting questions and thought-provoking questions we can ask around this. But yes, our interviewees, they admitted-- again, these C-suite executives at these pharmaceutical marketing companies, they admitted they actually don't want to spend the billions of dollars that they do on promotion in the way they're currently doing it. So they made it clear that there are these legal regulatory restrictions around promotions that they definitely feel like are holding them back. Interestingly, they didn't seem to detail specific ways in which these feelings of helplessness manifest. So I think foremost, Carter and I, we think future research should get academics and practitioners together and really perform a deep dive into what are the specific ways that marketers truly feel pigeonholed by regulations.

ZANE: 27:13

And so just as one idea here, so all of our interviewees, they talked about direct-to-consumer advertising as a whole, at the broad level. But actually, there are regulations that allow for three types of these advertisements. So you can have product claim ads where it actually names the drug and the condition it treats. You can have reminder ads, which just give a drug's name, but not its use. And then the third type of DTCA is help-seeking ads, which they describe a disease and encourage consumers to seek help, but they don't recommend a specific drug. And actually, each of these ad types have different rules per the FDA. And so we're wondering, do marketers feel particularly stuck in a standard template for one or more of these? Should we be thinking about them at a more nuanced level? Is one more effective, allow them to have more creativity or so forth? So we think that's something that should be considered.

ZANE: 28:17

I have just another point or two here. I think it's worth thinking about what would happen if a third party like the FDA were required to review all prescription drug advertisements before they were distributed to consumers. So right now, some companies voluntarily submit their ads before airing them. But the FDA does not require them to do so. So this would lead to less efficiency. But you could think, does a mandatory pre-screening maybe enable companies to actually push creative boundaries within their ads, make adjustments as necessary after getting feedback from this overseeing body? Are they open to the idea of perhaps trading off a little efficiency for perhaps a more fail-safe way to explore some innovative promotional techniques?

ZANE: 29:06

And then as a final point, I think, I'd like to make here on this is that it's interesting to think, well instead of advertising as they do about their drugs and in some cases, exactly what ailment these drugs are meant to help with, what if we took a flavor of what's called demarketing? And so this is a famous marketing term back from the '70s, which is about companies actually looking to decrease consumption of their product. And so what would happen if companies actually put their-- these pharmaceutical marketers, what if they made their advertising around this notion of, "Hey, we're here to help when you need us. We can be that beacon of hope. But first and foremost, we want to remind you that you can take health back into your own hands so you don't have to rely so heavily on our products," right? What if they promoted healthy lifestyle choices that we know exist out there? Interestingly, so there's an analysis from 2007 of pharmaceutical ads. And that analysis revealed that none, not a single one, mentioned lifestyle change as an alternative to medicine. And only 19%, so a very small percentage, mentioned lifestyle change as a complement to medication.

CROFT: 30:28

Wow.

ZANE: 30:28

Yeah, I find that-- so you see discrepancies like that. And it makes me think there is a positive side here, right? There are things that I think can be tried, can be attempted. It's just going to take perhaps a little risk from these marketing teams, right, to buy in and really put resources behind it, but worthwhile to consider in my opinion.

CROFT: 30:51

Yeah. And I think that leads us nicely into the last thing I'd like to touch on with your study, is that also in addition to the three main topics, there are the two overarching goals that encapsulate practitioners' concerns. And these are the two things that-- the people you interviewed, that rose to the top in terms of what the change would look like. And the first is to push to reinstate, establish greater trust among those varied stakeholders that we talked about before. So what further research is needed to move in that direction?

ZANE: 31:37

Yeah, we bring up all sorts of questions. I'll just highlight a few that I find perhaps most interesting at least in this point. So in terms of rebuilding that trust, I think a fascinating question is whether branding affects patient perceptions the same way compared to in other industries. So in other industries, strong brand names are often associated with more success, right? Think of a company like Apple, brand equity is huge for them, the value they get from their brand name. But in the pharmaceutical industry, does brand equity function the same way? So think about buying a branded versus a generic drug, for instance. That feels like a very different story to me. And then just another open question here regarding reinstating trust, I think future work

could try to think about more data privacy issues when it comes to online pharmaceutical marketing, so how might a consumer respond, for example, if they receive a targeted ad for a specific drug based on their previous search behavior about a certain disease. So as all of this data is collected about us, as we know, are consumers okay with marketers knowing about or inferring their specific medical issues? And I know this is a point that's come up for companies like Amazon specifically, which have hordes of data about us and are now acquiring health care-related companies and so forth. So I think that's something that should be in our minds on the horizon here.

CROFT: 33:06

The second overarching goal, which I find very interesting, is the desire to make innovation-first the main image that people have of the pharmaceutical industry, which-- and again I don't want to be the gloom and doom guy here on all of this. But given the large amount of misinformation and skepticism and outright hostility to science these days, it would seem to be another pretty steep climb. So what do pharmaceutical marketers need to do to achieve that goal to have the public think of the work they do as innovation-first? And clearly, that's it. And I think certainly, a lot of people saw it during the pandemic, where within a year, we had a vaccine that did not previously exist that was saving hundreds of thousands of lives. So there's a clear example of innovation that then got kind of swept up in all of this other attacks and misinformation and all of that. But still, the examples are there.

ZANE: 34:22

There's an interesting observation we made around the COVID-19 pandemic, which is it sort of broadly started-- I gave an inkling of an answer to a question Carter and I asked, which was, "Well, what would happen if pharmaceutical companies paused from their traditional advertising around specific products that treat specific diseases, and instead focus more broadly on detailing apparently their authentic efforts to create innovative health-promoting products?" And so actually in July of 2021, GE HealthCare released a commercial that was titled, Seeing Healthcare Differently. And it emphasized a broader message around its brand using innovation to build a better world, a healthier world, instead of focusing on any medication or technology. But just around the same time, like three months prior, Regeneron released an ad campaign promoting one of its antibodies to treat COVID-19, so one of its specific products to treat, again, this specific disease. So that difference in messaging and sort of the theme and the flavor they take, is one perhaps better than the other in bolstering this innovation-first image? So actually, I'd like to-- and we haven't done this. But it'd be nice to maybe go on to YouTube where both of these commercials are posted and maybe do some text analysis on the comments underneath them to see if we can see more positive sentiment to one or the other as perhaps a first look at some of this.

ZANE: 35:57

I think another thing that really hasn't come up in this space, but it's sort of a buzzword that's prevalent in many other facets of marketing, is this notion of co-creation or crowdsourcing. So is there any way that pharmaceutical marketers could leverage consumers to play into their marketing strategies and boost perceptions of innovation? So of course, unlike in other industries, you likely can't have consumers be co-creating or co-designing the drugs per se, right, your core product. But what about getting them involved in your advertising efforts or anything on the promotional side, can you get some of your core stakeholders more involved? And with other consumers then seeing that, would that perhaps make it feel like these

pharmaceutical marketers are on the innovation side of things? And I also think that that stems back to that flavor of rebuilding trust too.

CROFT: 36:55

I would like to give you an opportunity. We've talked about a lot and covered a lot of ground here today, obviously. But is there anything we haven't talked about that you think listeners should know about your study?

ZANE: 37:08

Not about my study specifically, but I think everyone should pay attention to the pharmaceutical industry. I think it's going to be a place where some really big disruptions could be on the way, ultimately stemming from companies, private endeavors, leveraging some of these issues that perhaps Carter and I and others have commented on that pharmaceutical companies are facing. And we're going to probably see some big disruptors in this space if that was my guess. So I think it's a place for all of us to pay attention and see what's on the horizon here.

CROFT: 37:42

Great. Good advice. And, Danny, thanks again for being with us. It was a very interesting session.

ZANE: 37:48

Thanks, Jack. It's a pleasure to be here as always.

CROFT: 37:51

In addition to the Journal of Public Policy and Marketing, Danny's research has been published in such top marketing journals as the Journal of Consumer Research, Journal of Consumer Psychology, Journal of the Association for Consumer Research, and Harvard Business Review. This podcast is brought to you by iLLUminate, the Lehigh Business blog. To hear more podcasts featuring Lehigh Business thought Leaders, please visit us at business.Lehigh.edu/news. You'll also find links there to follow us on your favorite social media platforms. This is Jack Croft, host of the iLLUminate podcast. Thanks for listening.