Gary Angel: "Shake It Up"
Season 3: Episode 6

Speaker 1:   Welcome to Stayin' Alive in Technology, a series of conversations with Silicon Valley veterans touching on war stories from the past and practical advice for today. And now, here's your host, Melinda Byerley, founding partner of Timeshare CMO.

Melinda: This episode is brought to you by my company, TimeshareCMO.com. But it could be your company here. We've got season three of Stayin' Alive in Tech completely booked already, with an additional 10 more guests on the wait list and close to 30 more on our list of people to approach. Currently, we publish twice a month most months of the year, but we could go to a weekly format if we could engage more editing and social media time as well as cover our current costs. So please consider a sponsorship for your company. We've got fabulous content reaching some pretty senior folks in the technology sector, and you're doing your part to help capture the living history of the technology profession.

Melinda: Our next guest is considered one of the leading customer analytics and digital measurement experts in the world. Gary Angel is the CEO and Founder of Digital Mortar. Digital Mortar provides comprehensive collection and measurement of the customer journey in retail stores. Previously, Gary led Ernst and Young's digital analytics practice, helping a variety of Fortune 1000 brands drive digital transformation and performance. EY acquired Gary's last venture, Semphonic, in 2013.

Melinda: As president of Semphonic, Gary led their growth from a two-person practice to become one of the leading digital analytics practices in the United States. Voted the most influential industry contributor by the Digital Analytics Association, Gary podcasts at the Measurement Minute, blogs on the Digital Mortar website, and his book, Measuring the Digital World, was published by the Financial Times Press. Gary's name was suggested to me by Jim Sterne, who appeared earlier last season on this podcast and I am so grateful to him for that.

Melinda: I hadn't gotten to know Gary's work as a young practitioner of web analytics because his firm was really thriving in the Fortune 1000 space and he was really making his mark before there was social media and I just didn't see a lot from him personally. But as I've gotten to know him, he is clearly one of my profession's elders, but not just in the tactics of web analytics, which we'll talk about, but as the founder of a successful consultancy with an exit. I also just enjoy Gary's style, personally, which I think you'll also find it's freewheeling, he's thoughtful, but he's grounded in science and logic and he's very practical. I think it's our shared Midwestern heritage.

Melinda: But even though Gary is my elder, he's not staying in one place. He's founded yet another company and this time it's both hardware and software. He is really raising the stakes because he himself says he likes to be moving around a lot. I've titled this episode after the song by the Cars called "Shake it Up," which you can listen to on Spotify, but please don't forget to rate us on iTunes, Google Play, Stitcher, SoundCloud, or wherever you get your podcasts. Enjoy meeting Gary Angel.

Melinda: Gary, welcome to the podcast.

Gary: Thanks. Great to be here.

Melinda: Gary, when you were a little boy, what did you want to be when you grew up?

Gary: Other than a professional football player like everybody else?

Melinda: Nothing wrong and I can see how that's come to fruition for you.

Gary: Oh yeah. But biology and genetics took care of that relatively quickly, I think. My parents wouldn't even let me suit up. I was so skinny and frail and sure I was going to get broken in half if I ever played football. But I always wanted to hit people. I mean that that was sort of the dream. I don't know. I was actually really into military history when I was a little kid. I remember visiting battlefields, Gettysburg and places like that. And I seriously, when I got out of high school, I was seriously considering the military academy. So that was probably, of the slightly more realistic things that I was thinking about, that's probably what I wanted to do.

Melinda: I guess. If you want to hit people, the military is a good place to do it.

Gary: It's the next best thing. If you can't get paid a lot of money to do it in football, get paid a little bit of money to do it in life. Right. Yeah, so...

Melinda: So Gary, how did you come to study at Duke and how did you pick your major?

Gary: Well, I didn't really pick my major. I kind of fell into it. I think like a lot of people, when I went to college, I didn't have any particular reason for going there. I went to college because that was the expected thing. And I'm glad it was the expected thing, but in a way I'd spent 12 years, I think like a lot of folks going through a grinding, awful public education system. And by the time I got out of high school, I was just really fed up with school and sick of it. And so I went to college somewhat as a because this is what's expected in me. When I chose a college, my single biggest requirement was it not being Indiana where I lived. I mean, I wanted to get out of the state. I wanted to do something else. And that was really what I was looking for. I chose Duke for a lot of reasons.

Gary: I mean, it felt like a good college but not super, super competitive. It's kind of gotten more competitive as time has passed. But when I went there it wasn't quite that way. I was really into the fact that they had a great basketball program. I really was into sports and I love basketball. I loved Indiana basketball. So Duke was high on my list from a basketball perspective. And I wanted someplace warmer than Indiana. So Duke went out on all of those things. In terms of how I fell into my major, which was philosophy, I mean, I think I didn't go there as a philosophy major. I had no interest, right, no idea that I was going to do that. I started out as kind of a poly-sci major, took one class, thought it was really squishy and uninteresting. Mostly-

Melinda: So you went to that super concrete field--philosophy?

Gary: Yeah. Well, so I went to one philosophy class and it was a medieval philosophy class, taught by the head of the department, sort of an introductory class and to a medieval and Renaissance philosophy and really enjoyed it. And I think from there it was just a matter of taking more classes and eventually finding that that's what I enjoyed the most. And I think, so it wasn't any kind of conscious decision and I have to say half of that, I think, as I went through college, was a somewhat bullheaded determination not to have a useful degree.

Melinda: Love it. Contrarian from the beginning.

Gary: From the beginning. Yeah.

Melinda: How do you think being a philosophy major has impacted decisions you've made in your life or your career, if at all?

Gary: That's tricky. I do love philosophy. I still read it. I still occasionally try to write it. I think it's one of those things that sticks with you and formulates a lot of the ways that you think when you read really good philosophy. I think what comes through is that the work that it takes to achieve any level of clarity of thought. So much of the way we think in general, in life, in business, is muddy, is unclear, is filled with loose abstractions and undefined concepts and simple generalizations that don't really hold up. And I think if philosophy teaches you anything, it's how hard it is to say anything interesting and useful.

Gary: I think that has stuck with me. And I think there's inspiration to be found in just how clear and how powerful really good philosophers can get at the language they use and the way they think. That's something that, in general, we don't achieve. We don't have time to achieve. I think it is just the basic facts of life. When you're out there doing real work in business you're never going to achieve the level of clarity and thought that someone put into a book that took them 10 years to write. But having said that, I think it definitely influenced me both in terms of thinking, realizing how hard it is to get things right and to be clear and to say anything interesting, and two, it influenced me aspirationally to want to be able to do that at least as and when I can.

Melinda: So as I was preparing for this interview, I looked at your LinkedIn profile, as I often do with our guests, and I discovered that you have this intriguing gap in your LinkedIn profile between Duke and founding your first company. But I did a little digging. It wasn't that hard because it was on your company website and I discovered that you led IT for, as you put it, the largest democratic political direct mail company in the United States. And I know I have questions, as they say. How does a philosophy major become an IT leader?

Gary: Well, yeah, so a couple of things contributed to that. First of all, I was a self-taught programmer before I went to college. So when I went to college, even all through, I was often doing on-the-side programming work. And part of that was that nobody did it back then. I think the days that when I went through and did that, there was really no such thing as a computer

programming degree. It was not a popular major. There were not tons of people doing that. The PC was just coming out. Most of the people who were doing it or programming on it were hobbyists like I was.

Gary: I got into it not for any real career reasons. It was just so fascinating. I think programming was something that I enjoyed doing right out of the gate. And when I started doing it, I was completely self-taught. I've never had a class in it, which is probably regretful. And I'm sure that people who look at my code realize it. But having said that I think that was something that I really enjoyed doing. And when I got out of college, I actually got recruited. My brother was very involved in politics and he recruited me to come back and work on campaigns in Indiana, really doing the computer work. So I was doing direct mail primarily, back then, and doing lists and processing lists. And this company Below, Tobe was based in California. They were the largest political mailer on the democratic side.

Gary: But one of the guys who worked in sales for them had Indiana roots. He'd worked with Birch Bayh, who was Senator, and Evan Bayh became governor and eventually somewhat presidential candidate. But anyway, he heard about the work we were doing and thought it was interesting. And I talked to him and he hired me and brought me out to Los Angeles. And again, I was desperate to escape Indiana and the cold weather. So that was nirvana in a lot of ways and it was really fascinating work. I mean, I think, if you work at various places, you learn a lot at all those places.

Gary: But I learned a tremendous amount there. I went from being a hobbyist, really, in computers to someone who did it really seriously. And I found, interestingly as I did that, and this wasn't totally shocking because I'd always had some ambivalent feelings about politics, but when I went there, part of it was the interest was political and the other part was computer. By the time I was done there I had pretty much abandoned any interest in politics and my interests were almost entirely on the computer science side of things.

Melinda: So you write in there that you had your early experience in selling your soul and your first exposure to analytics...

Gary: Well, as I look at it, I feel like I've worked in a lot of really questionable areas, which is something that I worry about, frankly. You start out doing political direct mail and that was still a kind of early days for that. But it got to the point where it was so saturated and so annoying before mail stopped being a thing. I didn't know if you probably remember, but-

Melinda:	Sure.
Gary:	... for a while there it felt like come election day you were getting this endless stream of pieces in the mail of all sorts and they were all so fake and phony. So I feel kind of bad about that because I feel like I contributed to that. And then I went and I did... I worked on some commodity. That was my first really entrepreneurial venture was to go work on a stock and commodity trading software project. And that's fine as far as it goes. But even their commodity trading is sort of a weird exercise in adding no real value to the economy and people just trying to get rich. And I went from that to doing credit card stuff and I spent a lot of time helping the...During the industry when they were growing out and we started bombarding people with credit card offers and things like that. So, yeah, I guess as I look back on what I've done, it feels like a lot of times data and information is being employed in ways that I wouldn't exactly say were awful, but in the sum of things I don't feel like I've added a... I've added probably less value than I would have liked from a social perspective in terms of doing analytics and, hey, what can you say about that? I feel a little bad about that. I honestly do. I think as I look back on some of the things that I've tackled, a lot of the things I've done, they were all fascinating and they were all interesting. Most of them were not done with any real intent. But sometimes as I look back on the way those industries evolve, I'm not super proud.
Melinda:	I'm going to stop you right there because I was going to take you in a completely different direction. And I'm now going to blow that up because this is such a fascinating take. I think, because we're facing it right now, sort of this unintended consequences.
Gary:	Yeah, really that's true. I mean, and it's interesting and you think about it. I got to say: when you're young you don't much care, right? I mean, I wasn't particularly motivated about those things. I was making career decisions the way most of us make career decisions. These are interesting work and can I make decent money.
Melinda:	Can I get paid for it, right?
Gary:	Yeah. Can I get paid for it? And I think nothing wrong with that. That's just the way we all live and, but I do think that, having said that, as you think about some of those things, in retrospect, it becomes significantly more gratifying when you worked on things that you can look back on and say "that actually was pretty valuable." And I think getting a chance to do that is something

that I still kind of wish and it crosses my mind from time to time that, that would be worth doing something like that. And I think I keep pushing that off and pushing that off until it's like a retirement project at which point I probably will do something like that.

Gary: But yeah, as I look back on some of those industries that I focused on, it isn't, like I say, that I feel bad about it. Politics is politics. It's necessary. It's core to what you do. There's nothing wrong with doing political direct mail. But it is true that I think over and over again what I've seen is we take the information technology in the abilities that analytics gives us and then the market tends to over-saturate them to the point where they just become annoying and a lot of times they fail in their original intent and purpose and they become sort of a social drag.

Gary: And I think I definitely have seen that in politics where the vehicles of communication have become so clogged and overburden. You see it in things, it's interesting. You can see it outside. And this is not anything I had anything to do with or have ever been involved with. But it's interesting in social networks to see something like a LinkedIn, where, when you start using it, it's very valuable. And then it gets clogged with people who are selling you their frigging mobile app developers and their lead generation services and eventually-

Melinda: Coaching.

Gary: Yeah, and coaching. And it's... And eventually, instead of being a platform where you can actually connect to people you're doing business with, it's just this deluge of crap coming at you. And I'm glad to say I've had nothing to do with that. And I'm just one of the many victims. But that's one of the things where you start off with, and I think this is commonly true in political direct mail. This was true and when we started off delivering political direct mail, it was a new way to get legitimate messaging out to people about who a candidate was and what they stood for and what they cared about and why they might be electable. And there's nothing wrong with that. But when it turns into hundreds of thousands of pieces and every person's getting 20 things in their mailbox every day. It just hit saturation. And the way things work in our world is that a lot of things get driven to the point where, even if they started out being perfectly reasonable and valuable, sometimes they get to the point where they're just a social drag. And that's hard to prevent. I think one of the challenges we face as a society is that so many things go that way without any bad intentions on anyone's part.

Melinda: We talk on this podcast a lot about how the past has brought us here, that it's not a mutation, it's an evolution. And Jim Sterne and I touched on sort of the roots of direct mail and web analytics and you were living it. So I think it's a nice segue to sort of talk about how you went from this direct mail and how specifically you came to be working on web analytics because I've seen it the same way too, in my career. I think a lot of us heard that, that was where this whole thing started.

Gary: It really was. I mean, I think direct mail was originally the vehicle for direct response marketing and direct response marketing was really the first place that analytics took root from a marketing perspective. Maybe from a broader business perspective, but certainly from a marketing perspective, I think that that direct mail is really the precursor to that. And it's interesting, I think when I came through that, so many of the lessons I learned about how to do things, how to test, how to measure, how to think about control groups, how to think about your messaging and experimentation. Those all came out of the direct mail industry.

Gary: And I think it's true. It's funny now because it's a total dinosaur and nobody cares about it and rightly so. It's not a particularly effective communication channel any longer. But I do think it was extremely influential, certainly for me, but I think for the broader industry, it was really the place where direct response marketing and so many of the rules that we live by got writ of because it was performance-based. People could test and measure and they did. I mean, when we were doing, I remember back to the days of doing political direct mail and we had, I remember this one program that was truly the single most complex thing we did.

Gary: It was what's called a slate card mailer, where shortly before the election you would send out a slate card, which was basically here's all the people you should vote for and every frigging election in your area. And it was a tremendously complex piece. First of all, because if you think about it, we were sending these out at least statewide and sometimes broader than that. So we're sending out millions of pieces, and every neighborhood has its own elections and its own slates. And there was a tremendous amount of targeting that went into that. So, we were thinking about what messaging needed to be in each neighborhood for each kind of voter based on their voter registration history, based on the demographics of the neighborhood.

Gary: And then we had to get our... We had certain candidates that had paid for positioning and then we had the slates that needed to be put forward to be

most impactful for that. The logic was insanely complex. And just thinking about the amount of testing and variation that went into that and the amount of logic that was driving that, it was a really, really complex thing. And, of course, we were doing this all in way back in 370 assembly language. Which so, it was brutal from a programming perspective. Absolutely brutal. But I think that's the kind of stuff when you get into the nitty gritty of trying to put together something where you are literally targeting down at the neighborhood level on a program where you're delivering millions of pieces of mail, well...that gets you into the fine grain concepts of targeting and thinking about targeting and then also that sense of "can we tell whether something worked or not?"

Gary: And sometimes we could and sometimes we couldn't, which is true of a lot of analytics, but I think from that perspective I'd say, "Hey, like anything else, the things you do early on tend to be very formative." But I think from an industry perspective, there's no doubt in my mind that direct mail was hugely influential in terms of the way that marketing analytics evolved across all of digital, but really all of marketing.

Melinda: So probably very little about Cambridge Analytica surprised you.

Gary: Very little. I mean, I think, yeah, people have been abusing their access to data and their rights with data since day one. And I think that when we were doing that work, we were working with publicly available voter registration data, right? And that data is just available. We are pairing that up with publicly available census data and so every data source that we were using for real was pretty much a publicly available, provided by the government for free, data source. Having said that, I think people would have been shocked to realize how much data there was floating out, and back then, people would have been shocked. Nowadays, that stuff seems incredibly tame, right?

Gary: It's not even really personal data. But the voter registration data, that had, for every single voter, the primaries they had voted in, whether they had voted in the Democratic or Republican primaries. And then whether they had voted in the general election and had their history going back as far as they were registered voters. So there was a tremendous amount of information available to that. And you could do things like, if you were CEO, for instance, you could run and get out the vote campaign, and in a get out the vote campaign there's certain rules and regulations about what you can and cannot say.

Gary: You cannot endorse candidates or parties in the get out the vote campaign, but you can send the get out the vote campaign to people who always vote democratic. So is that skirting the rules? Sure. I think that is skirting the rules. And yet, did we do that all the time? Absolutely. So, I think, if you put data out there, people will at best play by the rules and use them to their advantage, at worst, like Cambridge, they'll go well beyond what the rules really allow them. And I think, if you're putting...in any system that's in public, you should expect that people will push it to the limits of legality. And some people will go beyond the limits of legality. And looking back on my career, I can think of many instances where I feel like I pushed things beyond the spirit of what was allowed.

Gary: I don't think I... I don't remember at least, ever pushing them beyond the letter of the law. But that's the way things work. I mean that if you're thinking about public enterprise in public systems, if you're not recognizing that people are out there to push the rules as far as they can, you're just not being realistic about the way society works. I think so often as we think about public policy, one of the things we miss is the fact that, hey, men aren't angels, right? People do what they're going to do and if public policy doesn't take account of that, you're going to have a lot of bad public policy.

Melinda: It's, yeah. It's an intriguing question to ask and hard to do. But I think about going back to being a young person and being curious and driven and motivated and on the cusp of this new technology, would you have been able to walk away if you were in that political environment and they were doing what they're doing?

Gary: Yeah, that's a really good question because I mean, it's so tempting, right? And a lot of times it feels like you get into that situation where you think everybody else is doing it too. And that's probably a case where pretty much Cambridge was probably the tip of the iceberg, right? I mean, this is a [inaudible] kind of thing right. I suspect there were tons of companies abusing that data and we know about only a few of them. So, yeah, I agree.

Gary: I don't think those are easy things. And yet, you do what you do. If you're pushing things to the edge and beyond the edge, hey, you take responsibility for that. That's not really an acceptable thing to do, but having said that, it's not so easy to walk away from either. And it's not like I feel a tremendous amount of moral righteousness relative to that. I feel like that's one of those things where people often do cross boundaries and when they do cross boundaries, they deserve to get in trouble for it. But do I think necessarily

they're monsters? No, I mean that's just... I feel like you're right. A lot of us could easily get caught up in the same kind of thing and done exactly the same sorts of things.

Melinda: So, you went on to found Semphonic. Is that if I pronounce it properly, in 1997?

Gary: Yeah.

Melinda: And I was also fascinated, this gap that I was mentioning on your LinkedIn resume before we get there, you had four jobs in a little over a decade. And that was long before it was cool. Right? Now it's pretty much accepted that young people will move frequently. And I think it's worth you reflecting on that because I think young people need to hear it. Right? Looking back on that, I've got to believe you found value in it. So, I'm sort of leading you because I think I know you well enough to know that you will have. But talking about that, was that useful? What did you get from sort of seeing several different places within that span of time?

Gary: That is both useful and a risk. And I wouldn't put it any other way. I mean, I think that, from my perspective, I've always been in some ways I describe it, I go back to the novel "Shane," a little fiddle-footed, right? I mean, I get bored pretty easily with things. And so, from my perspective, I think there's always a temptation to go on and be doing the new stuff. And that's, when you look at my career, I've spent some long periods of time at... Certainly I spent a long time at Semphonic. But even there, I think one of the challenges I had was that I constantly wanted to work on new stuff instead of leveraging the dollars out of the old. So not necessarily the best way to run a business.

Gary: So that's just me. I tend to get bored pretty easily on things. And I did find that traditional jobs, which was what I was doing when I first started out, that I tend to get bored with them after a couple of years. Even in a place like Bella Toby, the political direct mailer where I really had close friends, it was very gratifying work in many respects. Probably the closest I've ever been to the team there, but after three... I don't remember how long I spent there, three and a half, four years, something like that. I just felt like I knew everything there was to know about that business and I wanted to push, I wanted to get better as a programmer. I wanted to get better as a technical person.

Gary: And the work we were doing was kind of hackwork from a programming perspective. So, I think from that perspective, I wanted to push the boundaries and be willing to do that. I think a lot of times these days, companies try hard to create opportunities for people to grow where you don't have to do that, but as hard as they try, they still often fail. And sometimes companies are only good enough for certain kinds of things. I mean, you can learn a lot at a small startup, but if you want to learn about big time consulting, you're not going to learn that. If you want to learn about... If you want to really become a good programmer, working in an enterprise just may not give you the scope to really do that.

Gary: So, I think a lot of that should be driven by what you want to do and what kind of skills you want to have and what you enjoy doing. But I did find that going from a couple different kinds of companies helped me a lot, helped me grow as a technical person. But it also, as you say, I mean I think one of the things you do learn from that is what kind of work environment you like, what kind of work environment works well, how different it can be. Even working in some bad places.

Gary: I won't say this was absolutely an awful place, but I spent a little bit of time at Hughes Aircraft. I was doing contract programming for them and I was working with a bunch of engineers, most of whom were 20 years older than I was at the time. And every lunch they went out and they downed quite a bit of beer with their lunch and they came back in the afternoons and yeah, couldn't have a meeting because half the people were falling asleep and that did not...I just couldn't take that. I mean that environment did not suit me. And I wouldn't say that that was a great experience, but learning how different environments can be and what's a good environment, what's a bad environment?

Gary: It's funny when you start out, if you fall into a good environment, which I feel like I kind of did with the political direct mailer, that was a really aggressive, hardworking, very friendly, close culture. You cannot realize how special that is and you can go off and work at a couple of other places and come back and maybe too late, but realize, "Hey, that place was pretty damn good." And I think that helps too. Sometimes even a bad experience can be pretty useful in giving you context about what it means to have a bad experience and how much different the good experiences are. And even if you can't go back and do the good experiences again, hey, at least you appreciate them more the second time around.

Melinda:	Hi, it's me again. Thanks for your support of this season in Stayin' Alive in Tech. Can you believe that we're now being heard in almost 70 countries? I love seeing the stories of our guests travel far beyond the confines of the apartment where I'm recording this podcast. And if you love tech, you know how algorithms work. So, I'd consider it a personal favor if you took the time to write a review for us on iTunes, Google Play, or wherever you get your podcasts. Also, we're a labor of love, but if you or your company would be interested in sponsoring our podcast to offset the cost of our sound engineering, domain hosting, social media marketing, and audio equipment, please visit stayinaliveintech.com and let us know. Enjoy the rest of the episode.
Melinda:	You mentioned in the founding of Semphonic, the agency that you developed, some of the key methods for digital analytics. And I'd love to hear what they are because I don't know if I ever have.
Gary:	Yeah. Sometimes I wonder about that too, right. Well, here's the thing, I think, from my perspective, looking back on this, when we started, people had no conception of how to do behavioral analytics. I think that the initial measurement in web analytics was entirely focused on the website. We'll measure-
Melinda:	On hits, right? How many hits did we get?
Gary:	Yeah. So, it was terrible. I mean it was insanely stupid. But the thing is everybody knew it was stupid, but nobody knew what actual good measurement would look like. And I think some of the methods that I think that we really pioneered at Semphonic that have made a difference to some extent formally, but also just filtered into the consciousness of how you do this. The first thing that we really sort of put out there was functionalism. This idea that you measure a website by looking at the function of each individual part of the website and you design metrics that are specific to that function. And then you tailor your measurement to that. And I still think that's a really interesting, powerful paradigm. It was-
Melinda:	So, this is like engagement has different metrics than acquisition?
Gary:	Well, not just that, it's that if you think about the website, it's a whole set of components and each part of the website is designed to engage the customer differently. So, we had this idea that the homepage has different metrics than a router or... Even we had specialized names for all these things.

So, we had router pages, we had convincer pages, we had converter pages. The router pages are navigational. So, if you think about most big corporate websites, they're sort of the homepage, which is like a front door. It's designed to engage people.

Gary: It's also designed to funnel them into the right area of the website. And then you have these sort of, what we call router pages, which are the next tier down, which don't sell you anything, which don't give you enough information to buy anything. They're designed for a company that has maybe, 40 or 50 products to get you to the things that are most interesting to you. So, their function is entirely navigational. Well, what that means is if we wanted to measure a page like that, we weren't going to look at how much conversion it drove-

Melinda: Or bounce rate.

Gary: ... we're going to look at how good a job it did routing people in to the right places, right? So, the idea really was that you measure with respect to function. I think that's a powerful concept, one that people can still get clarity and usage out of. And then I think the other thing that we really brought to the table was the focus on segmentation and shop. The idea that if you really want to understand a website, you can't look at the website. You need to look at the customer and the customer experience. That seems so basic now, right? But people didn't think that way. That was a long, hard fight. And I feel like we were actually really in many respects, the pioneers and the people driving that methodology to be behaviorally focused, to understand things not in terms of pages viewed or hits or bounces, but in terms of a journey and looking at the customer from that perspective. And I had this methodology, two-tiered segmentation with sort of a very formal, traditional customer segmentation, but then the behavioral use-based segmentation. And I think those concepts were really fundamental to how, to this day, to how you do digital analytics well. I think, they did trickle down into broader practice and it's not like other people weren't doing those things too, but I think we were certainly one of the pioneers in helping people go beyond sort of that basic, okay, here's the measurement I have, I can see how many pages reviewed or how many things were downloaded. How do I turn that into an effective system for actually thinking about measurement of an experience on a digital asset?

Melinda: So, this is the part where I get to be selfish because I'm interviewing you. And I have a couple of questions for you, which is that sort of as an agency

founder myself, which is a new thing for me, as you know, after having been 15 years on the buy side, I mean, and I'm wrestling with helping clients drive insight from marketing analytics and the change that comes from that. And you've been at this for a while. And what do you see are the biggest barriers to marketing getting the most from their analytics? And has that changed?

Gary: Oh boy. I mean, I think the big barriers are almost never technology and methodology and analytics as we've talked about is, and we all kind of know this, right? The big barriers generally are people's willingness to engage with the idea of measurement and continuous improvement and the discipline that entails.

Melinda: And fear, the fear. I feel like the fear that it raises. The change.

Gary: Absolutely. And there's all sorts of components to that fear. There's the fear people have of not really understanding the measurement, sometimes one of the crippling things that can happen for people is that they get to positions of decision and leadership and then underneath and behind them, the way people do things well has changed. And I certainly think that happened in many respects in the marketing discipline where a lot of people got to the levels of having important decisions to make. And then looking back and realizing that they'd never had exposure to this kind of behavioral analytics and this kind of test and measure discipline, that's changed.

Gary: I think one of the things that has changed is nowadays you get the people who are getting to those positions have come up through ranks where they've been deeply exposed and tactically hands-on with those kinds of things, which has made it vastly easier. So that's one thing that has changed. I think some of the just basic fear that "I don't understand this stuff"--that has mitigated and going down a lot. But I think that some of the other fears always do remain. There's so much institutional pressure in most marketing budget decisions. You buy something and changing channels or dropping channels is always hard and always painful. There are always commitments.

Gary: People have made their relationships, they've built up...the amount of friction to make fundamentally changing decisions in an enterprise is always surprising. And I think until people have worked with a large company and seen how much friction gets built up in any given area where the enterprise is committed to something, they don't understand why companies move so slowly and why it's so hard to make decisions. But I think, for instance, one of the things we saw frequently with people doing marketing attribution studies

was, well, not only is marketing attribution a really hard technical analytic problem to solve, but even when you solved it, it was often hard to get meaningful change because there were really two outcomes to a marketing attribution.

Gary: So, one is that, "Hey, what you're doing is pretty close to optimal and you can do these little tweaks." That was the easy outcome. The hard outcome was, "This channel sucks, you should drop it." That rarely happened because people just did not want to risk or make fundamental changes or battle the friction around that. And I think this is an area where to some extent also the complexity of marketing attribution works against it. Because with any complex problem, by the time you get to an answer, there's always a lot of doubt about whether that answer is right. And so when you've gone through a complex analytics thing and you come up with what you think is an important answer, if the answer is a negative one or one that people don't want to buy into, good luck getting people to adopt it because the sheer complexity of the process means that people rightly are going to have doubts about it.

Gary: And I think that's one of the challenges you have to face when you think about how you're going to apply analytics. If you're doing things that are hard and complicated, you maybe should reconsider it in the sense that if the answers are meaningful, then you're likely to get push-back just because people are not going to want to believe the answer. And there's because it was hard and complicated, there's going to be plenty of room for them to have doubts. And so, I think sometimes you have to be realistic about what you're doing and whether it can be applied and whether the results are going to be clear enough and un-debatable enough to effect meaningful change in an organization. And often that is just not the case.

Melinda: Yeah, and that's good advice I think for the CMOs in house, too. I work with folks, and I'm sure you do too, and it's like you almost want to coach them to set the expectation. The desire...I think we're so optimistic as marketers, we want to promise, we're about growth and we're about change and we're excited. And then we set these expectations that are just not realistic, that things take longer than we think they will take. And moving these orgs around, taking a hundred-year-old company that's been sales driven and working on building out a marketing function online, whoof, that is not something that's going to be done in a year.

Gary:	It is painful. It takes real time. And it's not like you can't bootstrap that process and do it more quickly than you could have 15 years ago, but you are absolutely right. Those kinds of things take time. And I do think the other thing I'll say--certainly when I was at Ernst & Young, one of the things I spent a lot of time working on digital transformations, a lot of times with organizations that were pretty large and pretty conservative. And I think the biggest mistake I saw those companies make was: not stick with it. It takes a long time. You're going to fail multiple times. Sometimes failure causes people to abandon routes, but if you know it's the right route, failure shouldn't have that impact. You just got to keep plugging away at it.
Gary:	And I certainly saw organizations achieve really meaningful progress in terms of digital transformation, but it is arduous. It is hard and you have to have the commitment to do it even beyond those initial failures because as you know and I've seen countless times, you are going to fail out of the gate. It's just so hard to build up the necessary expertise. And one of the big challenges in the digital world is when you are doing those things, you are right out front immediately competing with world-class people who've been doing it for 15 or 20 years and are deeply, deeply experts. So, it doesn't matter if you bring in outside expertise, it doesn't matter how much you invest in it. You are going to have failure out of the gate. You have to be willing to live with that if you're going to be successful with it.
Melinda:	Yeah. That's like, it's also an interesting learning too, if you have young people in your consultancy or if they're people you know who are sort of career consultants, it's easy to get into this mindset of "what's wrong with the client?" If you haven't sort of lived in these organizations and sort of tried to do this kind of change before.
Gary:	That's a hard balance because in a lot of respects you want those people to maintain the aggressive nature. You want them to be frustrated. Honestly, I'm still frustrated with that. I think part of the reason that I have stayed mostly on the vendor's side is that that does drive me crazy. There have been a few clients, even on the vendor side, that I could not hack from the standpoint of how slow, deliberate, and poor I thought their decision-making was. And so, I think you're absolutely right. You don't want people to become... I think one of the things you do have to fight against is negativity about your clients. Clients, they have their challenges. And you have to have a real-world appreciation for them. On the other hand, I don't want people to lose that sense of "it should be better than this. It really should." And I think part of that's what you offer in a smaller entrepreneurial outfit is the fact that

it is better than that. But you also want those people not to lose that sense of: "this is what we're driving to change. And there's a real point to it." Once you get to the point of just shrugging your shoulders and saying "that's life," well, how often are you going to affect meaningful change at that point?

Melinda: That is a fantastic quote. And you mentioned the small entrepreneurial venture and then you sold Semphonic to... Or you merged with or how... I'll let you pick the verbs with Ernst & Young.

Gary: Oh we didn't merge. They frigging bought us. That is not a merger. Yeah. There was that-

Melinda: I learned a long time ago they said merger, because you never know.

Gary: I think in that case, that's safe. No, they acquired us.

Melinda: They acquired you. So then you own your own shop. You've been, for a number of years, driving this company and you're clearly someone that's aggressive, driven, and pushing for change and now you've landed in this giant consultancy. And I'd love to hear what you've learned from the transition that you wished...this is me sort of very, very not to in very transparently saying, what was that like making the transition and what would you go back and tell yourself before you made the transition. And then we'll get into Digital Mortar and what's going on today.

Gary: It was hard, harder than I expected in some respects. And the things that were hard, some of them were things I expected. Some of the things weren't. I think that in thinking about that process and going through it, I felt like one of the big concerns I had was I hadn't had a boss for a long time. I hadn't had anyone manage me for a long time and I wasn't sure what that was going to be like. And if psychologically I was in a place where that was going to be okay, that turned out not to be a very big issue. When you're a partner leading a practice at a place like EY, you have a lot of autonomy.

Gary: As long as you're meeting your numbers, doing a reasonable job, you don't get a lot of hands-on management and it's very team-oriented. And I didn't feel that, that was a big problem. The things that bit were a lot of the smaller cultural things. Things where you couldn't really control performance and reviews for your team. I was used to being able to say, "Hey, this person's great. I value them. I'm going to give them X raise." It didn't work that way at EY. It's very formal. As with any big company, this is not unique to them. And

it's not knocking them. When you have a 190,000 people, you can't do things the way you can do when you have 55 people. But the idea that your people had to go through this review process and were essentially being scored by people who didn't know them at all.

Gary: And were getting, and we're getting scored on things like how much client billable time they had done, not on whether they'd done a great job, not whether they deliver great work, but metrics, hard metrics that were measurable in a 200,000-person organization. That was hard. Some of the hierarchical things, the slowness of getting decisions and making decisions. I will say one place where I feel like companies like EY really struggle is that they are partnerships and partnerships tend not to be in some ways very decisive organizations. They don't pull in the same direction because they've got a lot... Every partner is their own little island of autonomy.

Gary: And I was probably worst among those people, but we're all going in our own little directions, so building a strategic direction and executing on it is a lot harder. And I found that to be a struggle. But I also found, I think for me, one of the biggest challenges was just emotionally not feeling like what I did made that big a difference. When you're in a practice like Semphonic, every day you feel like, almost regardless of who you are in that company because it's true, you are contributing vitally to the success of the enterprise. But when you're in a 200,000-person company, you can have a good year or a bad year and it's pretty much a drop in the bucket to the larger company. And I found that frustrating. I never built up the same sense of identification that I wanted to have. And that was one of the main reasons why I spent three and a half years there and when I left, I wanted to get back to being entrepreneurial. And a lot of that was, I just wanted to have that identification again with the success of the company.

Melinda: Great transition to talking about where you are now. So, tell us about Digital Mortar and how you came to be interested in working on this project and this technology in particular?

Gary: So, the idea behind Digital Mortar was pretty straightforward, right? We'd spent nearly 20 years doing behavioral analytics in the digital realm. And I think what we saw was an opportunity where technologies were emerging that allowed us to take the same kind of analytics and measurement principles and apply them in physical spaces because you had devices now and there's all sorts of different IoT devices. But what they allow you to do is track shopper movement in space. And I say shopper, but this could be any

customer in any kind of space. But the kind of data that you get back from this is very similar to what we're used to from a digital perspective. It's a timestamp.

Gary: It's a location which you can just think about as mapping to a page and it's an anonymous person ID, right? And that's very similar to what we had in digital. And I think we saw this really, we had a large client on the digital side when I was at EY and they started experimenting with these technologies and they were having trouble with it and they brought us in, knowing it wasn't our thing, but just we had a good relationship and they said, "Could you take a look at this and see if you can do anything with it?" And I thought it was absolutely fascinating.

Gary: So I think from that perspective, I looked at it and I said, this is a discipline that's brand new, which I liked, that people don't know how to do, which I liked, where I thought I had a lot of relevant expertise, which was nice because I didn't feel like I was starting completely from ground zero. And which gave me an opportunity, I also thought, to build product, which was something I'd wanted to do for a long time because as I looked at the analytics products we'd seen in these areas there just wasn't anything that was even remotely credible and decent. So from that perspective, it was an opportunity to say, "Well, yeah, I've done this path of building a Semphonic consulting company, but boy, it'd be cool to build an [inaudible] kind of company." And that's what I am trying to do with Digital Mortar.

Melinda: So you're building hardware as well as software?

Gary: I would have said no to that a little while back, but the truth is, when we started, we started with off-the-shelf sensors, and we still use quite a bit of off-the-shelf sensors, but there are times when we found that the off-the-shelf sensors don't do the job well enough or in the way that we want to do. So we're not building hardware in the sense of that, but we are taking what's called system on modules or SBC, single board computers. These are really small general purpose IoT devices. We custom flash them with our stuff and build out what amounts to a unique IoT collection device for our purposes. So yes, we are even doing that.

Gary: And that was something we pushed back on and avoided and didn't want to do for the longest time. Quite frankly because it scared the heck out of me. I'm not a hardware guy. I'm not an engineer. I have not even do I not have experience with it, I had no skill in it or interest in it. So that was something

that I sort of got dragged to kicking and screaming. But one of the things we found was that in this world of IoT, a lot of the custom built sensors just don't do what you want them to do. And when you're in that situation and you have a business application that requires a certain kind of measurement at a certain level of capability, sometimes you have to go down that path.

Melinda: So it's fascinating because you talked about sort of the past and sort of what we learn and what we can do with data. And I think it's a great transition to ask: what are companies learning about us when they track us this way and how has it make it better for me as a shopper? We'll get into sort of the risks or the privacy piece of it. But just first, what's the benefit? How does my experience as a shopper get better because of this work?

Gary: I'll try to cover both of those things. I think they're closely related. One of the things to understand about this technology is it's not... It doesn't know who you are. We're not using facial recognition technologies. These are anonymous trackers. So the kind of information that people are getting is in some ways very basic. It's as simple as how many fricking people do I have in my store at what times of the day. How crowded was the store? Did I have enough staff for the times when my store was crowded? Did I have long lines at the cash register?

Gary: Was the shoe wall too crowded for people to get the shoes they need or to find a staff member? So if you think about it, the kind of measurement that people are getting here is measurement about the shopper experience in a very anonymized form. And I think the nice thing is how it makes it easier. It's pretty transparent. Well if the store is more convenient, if the lines are less, if you can actually find a person to help you when you need it, if the store is laid out in a way that actually works for you, those are all good things from a shopper perspective. So in that sense, I think that the ways this information delivers value are pretty crisp and clear and unlike a lot of some other technologies are all about messaging people on their phones when they go into an area, couponing them.

Gary: I have mixed feelings about that. Hey, I mean sometimes it's nice, but I think I'm like most people, I really don't want to get bombarded with Bluetooth messages when I walk around the store. And I don't want your coupon or any messaging to be showing up on my phone. So that's not the kind of stuff we do. The kind of stuff we do is analytics optimization. And I think the benefits to the shopper are pretty clear and transparent. If the store performs, works better, your shopping experience is going to do better. And yet for a long

time, the truth is most organizations are not able to answer basic questions like when are their cash registers busy? Do they have enough people taking care of lines? Are there areas of the store that are too crowded? Even questions like that have just never been answered before. And this kind of technology lets you actually take care of those problems.

Melinda: So it has nothing to do with like Melinda's here and she has downloaded our mobile app and she is now actually following through and looking at the shoes?

Gary: If you have a mobile app it probably does have to do with that. But that's the one case and I think we do some mobile app type measurement and mobile app is an incredible platform because it allows that kind of integration and messaging. But that's a tiny sub-segment of most populations. And most of the measurement we do is focused on broader shopper populations. Understanding how the average customer--not the person who has a mobile app and is pulling it out and using your store, they are not the average customer--understanding how the average customer is actually using the store. We focus much more on things like queue optimization, labor allocation, staff allocation, and store layout than we do on things like messaging consumers.

Melinda: I love that because I was asked in the Sprinkler call that I did, you know, about AI and machine learning. I was like, "Yeah, it's great. But really most companies are struggling still just to get the basics done." And hearing that retail is really about...It's not about nefarious AI, but about "can we just reduce the wait time at the Safeway on Fridays at four o'clock?"

Gary: So much of this is about basic blocking and tackling of retail and that's where analytics can really deliver value. I think that there's a temptation to go for the pie in the sky stuff, but the truth is that retail experience is often dependent on a lot of small friction points and analytics can help you remove those friction points. And this is, I think part of what we learned with website optimization is that so much of website optimization is not big changes, but taking care of small friction points. And when you do that over and over and over again, eventually you get to a world-class experience.

Melinda: What do you think that analytics professionals, if we're encountering IoT data, are there any nuances we should be aware of or be watching out for?

Gary: Boy, does it suck.

Melinda:	Okay, thank you. We're done now.
Gary:	It does hearken back, for people who've been at digital analytics a long time, it will be no surprise to say that it hearkens back to the early days of web analytics where we used web logs and the data quality was a continuous and proverbial problem. Not that data quality is ever completely solved. And I know that there are plenty of practitioners out there from a digital perspective who still spend a lot of their time struggling with data quality issues and big complex websites are an ongoing challenge in data quality and governance.
Gary:	And that's never going to go away. But the IoT data is much more primitive. The community is much more primitive. The data is often filled with holes and problems. We spend a significant chunk of our time and you mentioned machine learning. We do a lot of machine learning, but we don't use machine learning too much for the sexy stuff of figuring out shopper patterns in the store. We use it primarily to try to clean up data and to try to get the data into good enough shape to actually use. So the data itself is actually quite comforting and familiar to people who come out of digital. It's very simple. Most IoT data streams, this is machine generated data. There's only a few columns of data. You get tremendous amounts of it.
Gary:	In that respect it feels very similar to digital data. The behavioral analytics techniques we use are often very similar. The one thing I would say that is quite different is the geographic component. When you're talking about this kind of geolocation analytics, so much of what we do involves mapping to the store. On the website we did some of that kind of mapping, but it kind of falls out of the website. The fact that the website is digital, that you can tag every page, that you can build a hierarchy right into your tag, none of that stuff happens.
Gary:	And a big challenge for a lot of our clients, and this goes back to how unsophisticated and nascent most of this industry is, just telling us what's where in the store. If you've got hundreds of locations, just keeping track of what's on what shelf turns out to be a very big problem. And if you can't tell me what's in an area of the store or where the areas of the store are, it's very hard to make sense of the data. So there are real challenges around this data, both in terms of the fundamental data quality, but also in terms of the basics of mapping it to the physical space that turn out to be vitally important.

Melinda: So we're coming near to the end of our time and I have a few last questions to help us wrap up. I'd love to ask you, what you know now in your life that if you'd learned it earlier would have saved you a lot of time, energy or money?

Gary: I always struggle with questions like that because-

Melinda: Because you're a philosophy major, so I know it's going to be a good answer.

Gary: Well, yeah. There are no easy answers to questions like that. Things I know now are things that wouldn't have been true for me when I was 25 or 30. And it's kind of probably wrong to pretend that they would be. But I guess if I had to say a couple things about that...I am a committed entrepreneur. I've never regretted that. I've failed at companies. I've succeeded at companies. The failures are bitter. They're hard. There's nothing more personal than failing at your own company. But I've never regretted that. And I do think that, I wouldn't say going back that I feel like you can't... A lot of people come out of college these days and just start as entrepreneurs.

Gary: I don't think that's a bad thing, but I don't think it's a terrible thing either to go off and work for some people for a few years and learn stuff. I actually think that in many respects that was valuable. And I think there's a bit of hubris in some respects and thinking that you can come out of college and just be an entrepreneur, not to say, hey, there are people that obviously do it very successfully and far more successfully than I've ever done it. But there are things sometimes it's nice to learn before you do that, but I will say that, if you have that itch to be an entrepreneur, I really do encourage people to try it. I've never regretted it, even with the failures. Obviously every entrepreneur will tell you if you've been through it, that failure is a more likely outcome than success. That's so hard to believe.

Gary: It's hard to believe even when you're older, but it's definitely hard to believe when you're young. It is true, but I'll say you almost always just... It's an incredibly enjoyable, intense experience. The things that you end up remembering and caring about as you get older are the really intense, passionate experiences and that, hey, that's as true in romance as it is in business. The times when you're just filling time, you don't care about looking back on it. Entrepreneurship one thing, boy, it delivers the intensity. And I think that that for most people, those are the things they'll look back on pretty happily, even if it failed. I mean, there are some occasional disasters, failures, whether it's business or romance or anything else, that scar you to a

level that you really regret. But I think for most people, even a failure at entrepreneurship is probably a pretty good thing to do.

Melinda: Who are some of the people that have helped you along the way? I always say that nobody ever gets where they are alone. And I think it's a great chance to give a shout out to somebody, to people who have helped you.

Gary: Well, you know what, one person who really stands out for me is my original partner at Semphonic, Joel Hadary. I mean, we got together, we'd been friends, we'd done some work together. We started that company and grew it and worked together for many, many years. And we ended up selling it largely because he wanted to retire. But I just, I look back on that and in so many ways that was a satisfying partnership and a great relationship. We're still friends, we still talk regularly. We have lunch, and I run stuff by him. But what I think worked so effectively about that relationship from my standpoint is that we each had things that we really liked to do, and they were very complimentary.

Gary: And boy, I'll tell you, Joel ran all the business aspects of Semphonic and I miss that to this day, having somebody who can really take care of and did not mind and even sort of thrived in taking care of HR issues and accounting issues, tax issues, and stuff like that. But if I'm like most entrepreneurs, I hate that stuff, and it's a terrible drain on my time and emotions to do it. I miss that. And so, someone who in many respects just facilitated my ability to work on and do the things I wanted. I so appreciated that. And I think from a partnership aspect, that was certainly one of the best experiences I've ever had. And it lasted for like 50 years and I still miss it.

Gary: So I give a shout out. There's been tons of people who I think from an intellectual standpoint, the team I had at Semphonic was just incredible. And I think about people like, Paul Legutko, Jesse Gross, who still works for me, Allison Hartsoe, who has her own agency, is fantastic. Phil Kemelor, ditto. I mean those are people who so influenced me from an intellectual standpoint about how to do analytics that was so collaborative and we talked things through and we worked things through and that was just a great experience. And I think all of those people shaped so much of the way I think about digital analytics and continue to do so. But yeah, that you're absolutely right. I mean, when you go out and work, most of the joy of work is the people you're working with. And when you're working with good people, that's like nothing else and it makes the whole experience so much better.

Melinda:	And that we'd like to ask people too...We maintain a bookshelf on Goodreads because we've been fascinated by this question. We ask people to tell us about one or two books that changed their life. Pass on The Bible. Okay. I think it's pretty safe to say religious texts have their place and for people, but just in general outside of religious texts, what are a couple of books that stand out?
Gary:	Well, I'm totally non-religious, so you would have been safe from me in that respect. Anyway, I'll talk I guess through a couple things that I think were pretty formative for me. I know the text that first gripped me from a philosophical standpoint, and this is not at all an unusual answer, but reading some of the Socratic dialogues. Those are a profound intellectual experience. I think as dated in many respects as they are, they uncovering world of how you can think and precision in thought that, if you're like me and I think like almost every other college student, you just never encounter.
Gary:	That idea of how you can, in an argument and in a conversation, unravel a way of thinking and come to something that in most of the Socratic dialogues come to nothing more than a state of doubt. But a state of doubt that's vastly better informed. So I would encourage anyone who's intellectually curious and has never read them to go back and read some of those earliest Socratic dialogues by Plato. And those were incredibly shaping for me. And I think were a lot of what appealed to me about philosophy. And I still go back and read them periodically because I still think they are amazing and really insightful.
Gary:	And it's not like you're going to learn how to be a better person, but you are sure as heck going to learn how sloppy most of us are in terms of our thinking in our conversation, in our arguments. So that was pretty impactful. I think from an analytics perspective, this is a long ago book, but it was pretty impactful for me. It was Stephen Gould's Full House, who wrote, Gould's a great science writer, a really good popularizer and I think a really enjoyable writer, but Full House talks a lot about certain ways of thinking about analytics in some respects, not our kind of analytics but analytics in a broader sense, that are very powerful.
Gary:	And I think reading that book I think got me thinking more intellectually about the discipline of analytics and how it works. And that's a book that I highly recommend too, just because it's so engaging. He was a super writer and he was really able to take pretty complex topics and make them clear and easy. Mostly I'm a novel reader. So I mostly read novels, not business

books and things like that, but at least in terms of influencing me, those two books. One more from an analytics perspective, one more from a life perspective or just a thinking perspective. Those are two that really stand out.

Melinda: Great choices. And last question and it's turned out to be a doozy. We get great answers. So no pressure. What's the best advice you've ever received?

Gary: I'm going to take this, because I think it was a legitimately important piece of advice. When I was graduating from Duke University and I had my degree in philosophy and I had no idea what I wanted to do. I really had no ambitions, no particular career track. And, like a lot of people, I was kind of panicky. And I wrote a letter. We did this back then, right? There was no email. I wrote a letter back to my parents and saying, "I'm really not sure what I want to do. I'm kind of thinking about, maybe I'll apply to law school." And I got a call, which was very unusual, from my mother. And she said, "Don't do it." And I think that was profound advice because I think she knew I had no interest.

Gary: I was just flailing for something to do. And I think that idea that a parent would actually call you up and have the guts and looking back on it, my parents were not super... They weren't controlling. They weren't that hands on. And to have the guts to say, "I know you and I know that's not what you want to do. And I'm just going to tell you, don't do it just because you have to do something." And I think that was a terrific piece of advice and a rare one. My parents are, and I always say, they were great parents but they were pretty hands off about giving me pointed advice, like I think most good parents are.

Gary: But that was a case where my mother just laid it out and said, "I know you don't want to do this. This is just something you're killing time with. Don't do it. It's not worth going off and spending years of your life doing something you really don't have an interest in." And I think that was great. I've always appreciated that. I know a lot of times we don't want our parents to be involved in our life, but sometimes they know us pretty darn well and that was a piece of advice that I have never regretted and I think was absolutely spot on.

Melinda: Gary, thank you so much for taking the time to speak with us today. I have so enjoyed hearing your story and I can't wait to share it.

Gary: Excellent. It's been great chatting. Really enjoyed it too.

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