

[00:01] Anum Siddiqui: Hi everyone, on today's episode of the podcast, I sit down with Equity Analyst, Mike Vogel, to talk about technological shifts, which impact a variety of business models outside of the technology arena. While the topic doesn't dominate the headlines, Michael talks through why it's worth spending time thinking about technological change, as well as the importance of being flexible when accounting for these types of shifts.

On that front, we dive a little deeper into what we mean when we say, "we hold things lightly," and how our thinking translates into portfolio decision making. Finally, we talk about how we deal with the uncertainty that inevitably comes with continuous technological change.

As always, I hope you enjoy the conversation.

[00:49] Disclaimer: This podcast is for informational purposes only. Information relating to investment approaches or individual investments should not be construed as advice or endorsement. Any views expressed in this podcast are based upon the information available at the time and are subject to change.

[01:06] Anum Siddiqui: Today on the podcast, we have Michael Vogel. He is an analyst on our research team. Thanks so much for joining us today, Michael.

[01:14] Michael Vogel: Of course. Happy to be here, Anum.

[01:16] Anum Siddiqui: The last couple of months, or really since the beginning of the year, artificial intelligence has really dominated the headlines and the markets. You recently pointed out that beyond AI, there are a lot of other types of technological shifts that are worth discussing and exploring as an investor. Why do you think it's important for the Research team to spend time on technological shifts that could impact the portfolio?

[01:40] Michael Vogel: Teams might have an analyst who is focused to certain technological areas and would compare competing product features, say, which telecom equipment company had the fastest router. Or they might have macro strategists trying to weigh on corporate and consumer appetite for spending in these areas. Our bigger concern is how our portfolio companies' competitive advantages, especially the non-tech companies, might be affected by changes in technology. Two examples listeners might be familiar with would be Blockbuster Video and Eastman Kodak. Both of these were never considered tech companies. Both of them really never had any tech analysis on them until it was, unfortunately, too late. Now, I know those two examples are quite ominous. That isn't always the case with technology's influence.

[02:22] Michael Vogel: For instance, in both Canada and the U.S., we own electric utilities, which historically have been very low growth. Recently, demand might be picking up with electric cars and heat pump adoption. So it can be both a positive and a negative. I can discuss different companies, and just to be clear, it's not me exclusively doing this work. It really is the entire Research team. We own a company called **Bakkafrost**, which fishes for salmon in the ocean. There's been a couple of startups in Europe that are trying to do land-based aquaculture. They would build big tanks, and they'd be able to breed salmon at competitive prices.

[02:55] Michael Vogel: This is hardly a tech company in the traditional sense, but there's certainly a big potential change here. Also, in the [Mawer] Global Small Cap portfolio, there's a car dealership called Bilia. And what some of the car companies, not the dealers, but the car companies themselves, have been doing is trying to sell cars directly to consumers rather than negotiating on the spot at the dealership. Some other types of traditionally non-tech businesses were reviewing these kinds of trends would be telecom companies. A lot of them still sell traditional cable TV. As we know, there's a move away to streaming services. We had a



company called <u>Charles River Labs</u>. One of their product lines is breeding mice for pharmaceutical testing and now toxicity testing directly on samples of human tissue that might displace the need for these animal tests.

[03:43] Michael Vogel: So across all sorts of different sectors that were never considered tech in a classic sense, the whole team is reviewing these threats or possible opportunities for these companies to thrive.

[03:53] Anum Siddiqui: Tech is all around us. It impacts technology companies as well as ones that are not within the technology space. I am thinking about the fact that there are different categories in terms of technology, most prominently probably being software. Does the team kind of look at different types of categories within technology—software being one—or other categories that come to mind?

[04:18] Michael Vogel: Software is the most obvious one. For the past ten years or so, the software industry has made huge strides, became a lot more user-friendly, became a lot cheaper to host, say, this car dealership, that's basically a software displacement. Telecom companies possibly losing cable TV; that's basically software related. The other ones... I'd say we want to keep a wider scope than that. Again, with the fish farming one, there might be some software controls on the fish tanks and whatnot, but we want to keep a wider view than that. As far as different categories, I think we want to stay as flexible and creative as we can. Some things we weigh are, for instance, what's the proportional impact on a business. On the car dealership one, this is a possible threat, but the car dealership actually makes most of their money in the garage, not the actual sale of cars.

[05:02] Michael Vogel: So the impact is limited there. Other spectrums we would look at is how mature is the technology. Other examples might be something like quantum computing. That's pretty far out. And then just what's the pace of adoption, which is, again, like the telecom example.

[05:14] Anum Siddiqui: Well, you already alluded to this a little bit, but does the team use a particular framework when assessing these different types of shifts?

[05:23] Michael Vogel: On one hand, our researching on this translate quantitatively impacts on the portfolio. Or if there's no really formal quantitative scoring system, why bother? What I'd say is, let's take a step back and say, "what really is our best tool that we have to handle these kinds of risks and opportunities within the portfolio?" I'd argue that our strongest tool actually isn't some current scoring system, it's actually a cultural one. I know on other podcasts, people have mentioned this idea of holding our views lightly. This sounds easy. Who wants to be in holding shares of Kodak? Nobody wants to do that. But think about how hard this really is. Imagine being in the 90s and a friend comes to you and says, "hey, look, there's these image sensors. They're made under a microelectronics process."

[06:06] Michael Vogel: "Every year, there's a good pattern of getting more pixels on them and scale manufacturing, bringing down the costs. And if I were to extend that pattern over ten years, I can get to the point where these image sensors are so cheap Kodak's business is going to be meaningless." So you're there in the mid-nineties, and a year goes by, and Kodak sales go up, and the share price goes up, and then another year goes by, and Kodak sales go up, and the share price goes up. You see this friend again, what's your reaction? I think the natural human reaction is to tell the friend you were wrong. "I misjudged this." This is all theoretical. What we really try to do within the team is avoid that reaction and instead ask, I guess what we call a Bayesian inference, the more statistically accurate question, which is "hey, two years ago you said there was a ten-year cadence for these image sensors to become competitive."

[06:53] Michael Vogel: "What's the news over the past two years?" That's a hard question to ask. Like I said, when you're watching the share price go up, when you're watching sales go up, it all feels like misinformation in the past. If the friend then responded to you, "two years ago, I said it was ten years away, the industry has made 20% improvements, and if we keep this linear path, we're now eight years away." Well, that's actually a valid statistical update. And as an investor, you can start to say, "oh, maybe this risk is getting a little closer to the horizon. Maybe I shouldn't add to the Kodak position. Maybe I should check in with my friend maybe every six months instead of every two years now." So that's a very hard thing to do.



[07:30] Michael Vogel: If I can expand even further on this—holding our views lightly—this is a personality trait that's discouraged in every other aspect of society. We think about political leaders. They may have lived through over a generation of social changes, and if they change their mind even slightly on something, they're somehow seen as untrustworthy, fickle, or worse. We think about our legal system, the common law system. It's really based on what was said last time. Stick to that prior view. And even in commerce, we certainly expect a level of consistency.

[08:01] Michael Vogel: I think all of us would be uncomfortable if our insurance companies called us up every week trying to renegotiate something. I think the same with telecom providers. We expect a certain consistency in commerce as well. So it's not easy. It's something we put a lot of effort in culturally to say: don't point to right or wrong; you had your past view, you had the past information. When new information comes to light, of course, you want to adapt to that new information as best as you can.

[08:25] Anum Siddiqui: Holding our views lightly could take us a long way. Even beyond investing. In respect to how you evaluate, you talked about creativity versus following a framework. We looked at some companies that are impacted. Can you talk a little bit about how all of this will perhaps impact portfolio decision-making and trading?

[08:44] Michael Vogel: The previous comment about holding our views lightly, that might seem like it would lead to excessive trading, that portfolio managers are constantly changing their minds. In practice, this hasn't been the case. Our turnover is quite modest. The question might be, well, how do you do this? For the most part, we're not dealing with very dynamic situations. We tend to seek stable companies. One example I can think of is we have a company, Martin Marrietta, in the U.S. that sells crushed rock for use in concrete. There's just not a lot of technological dynamism around this company. The other part about this in portfolio construction is we're very comfortable with what can seem from a high level as a contradiction or somehow a cancellation of investment opportunities.

[09:23] Michael Vogel: In Canada, we have electric utilities, where I mentioned there might be benefits from electric car adoption, and we also have gas stations, which seem really at odds, and it seems like kind of a zero-sum game between the two. But that's not the case because each of these companies individually might have unique things going for them. In the case of gas stations, first, electric car adoption could be great, but any new gasoline car sold today is going to be on the road for nearly 20 years. And just within the gas station market, I think we've all experienced the number of stations with only one or two pumps shrinking. No one's going to drive many kilometres to find another gas station. So, within gas stations, we've seen the pricing that they can earn increase per litre of gasoline, along with the convenience items they offer in the store. Are these things directly at-odds with each other? I'd say not necessarily when you get down to the company level, although at a very high level, it can look like they might offset to some degree.

[10:17] Anum Siddiqui: My next question, and perhaps this isn't the case, because, as you mentioned, different technological shifts can affect companies outside of the tech space. But are there certain types of regional biases that are an outcome from doing this type of research?

[10:33] Michael Vogel: If we were always looking for the technological winner, and we placed a huge emphasis on that, we would probably accidentally end up with an unreasonable bias towards the U.S., particularly the Bay Area. We're looking for all the different ways companies can have a sustainable competitive advantage. And we're looking at not just software, but all sorts of changes in the world. And you're better off going globally. In Japan, we have some great industrial equipment companies that make industrial production far more efficient every day, everything from pneumatic equipment to industrial sensors. We've had great success in pharmaceuticals in Europe. So again, keeping a little more general view on how these companies progress can prevent us from getting an unfair U.S.-bias in our portfolios that do have flexibility around geographic exposure.

[11:17] Anum Siddiqui: There are many different sources of information you and the Research team will use when it comes to evaluating different technological shifts. But how do you actually account for those shifts when, a lot of the time, these shifts and trends are in such early innings of their use?

[11:35] Michael Vogel: We actually do have some tangible results in the portfolio, and I'll speak very frankly about both positives



and negatives. On the positive side, we own two companies, Thompson Reuters and RELX, that provide research and software tools for lawyers. One of the products they've always been selling is the idea of these templates to speed up lawyers' time. So, for instance, if you need a marine shipping insurance contract for the state of South Carolina, you could download it from either of these companies' products. Now, with some of these new language AI tools, they're able to pre-populate a lot of these templates on behalf of the user. You still need a lawyer to check everything, and it's really just a rough draft. But for any of us who've ever hired lawyers, I think we're all very well aware that time really is money for them, and this is a more efficient tool for them to do their work. So, it really is an enhanced product that, ultimately, these companies should be able to charge more for.

[12:33] Michael Vogel: How do we research this? We invest in independent research. We talk to lawyers directly, we interview them, and say, hey, how much time can this really save in the course of your work? Have you been happy with the accuracy of this pre-population? And so far, the results seem pretty positive.

I said I'd be totally honest about some of the negatives across the different portfolios. We have investments in a few outsourced call centre or contact centre companies. It's a little more uncertain if there will be a bigger displacement of these Al language tools compared to some of the services offered by these companies. We don't quite know yet what's just the nature of the business and what is permanent disruption. We're holding our views lightly, and when new information comes, we don't point fingers. We don't say anyone was wrong.

[13:16] Michael Vogel: We just take the new information we try to go forward with that. Besides that, I think the greater the widest uncertainties would be around some of the software companies themselves, like Google. Is the whole nature of the search somehow going to be reimagined? Companies like Adobe, where there's a lot of graphic design, is there just a change in how graphic designers spend their time developing these things? Those are still some pretty wider bands. This only does affect a certain percent of the portfolio. We're trying to keep a very wide eye on potential risks and changes for the balance of the portfolio.

[13:49] Anum Siddiqui: Your comments in regards to the lawyers and speaking to people that directly use that software make me think of scuttlebutt and how that's an important part of our process. In terms of your comments around that wide variation, is that something that we can account through valuation as well?

[14:06] Michael Vogel: Yeah, and I think this goes back to the other discussions we've had about what we call the investment matrix, where on one end, we're looking for quality, a certain level of defensiveness, very engaged management, well-aligned management, and on the other hand we're considering valuation and any asymmetries and how the world could really evolve for these businesses. I think these technology shifts are pretty well captured in that. And I'd also add, besides this idea of scuttlebutt on the lawyer example, this is also an example of sharing research across the whole team. I did that call with a colleague. I was covering this on behalf of Thompson Reuters in the [Mawer] Canadian Equity portfolio, and he was looking at RELX in the context of the different European portfolios. So this kind of shared work, real comfort, trying out different ideas. I think a real advantage is cultural advantage at the end of the day, and hopefully, this is an example of how that works.

[14:54] Anum Siddiqui: Well, thanks for that, Michael. That was a great, intellectually honest conversation, and I really appreciate your time.











