

OFFICE HOURS

PODCAST

The AI-Native University: Rethinking Learning, Data, and Student Success

[Phill Komarny] (0:00 - 0:16)

People don't realize you have the answers in your data center. It's your data. It literally is.

Everybody's waiting for a SaaS company to come in and solve it for them. That's not it. It's literally the data and affording yourself a new way to use it is the answer.

[Marni Baker Stein] (0:18 - 2:04)

Welcome to Office Hours, the show that brings you candid conversations between innovative academic leaders, sharing actionable strategies for tackling higher education's toughest challenges for the new era of learning. I'm your host, Marnie Baker Stein. And today I am joined by Chief Innovation Officer Phil Komarny and President Daniel Shipp from Maryville University for a conversation about what it truly means to build an AI-native university.

I am super excited for you guys to be here today and to dig in together into how Maryville is thinking about AI and the changing role of the university and what it means for learners, for faculty, and really just all of the interesting innovation work that you're doing that's sort of focused on making the university a lifelong companion in a learner's education. So let's just start with the big picture. A lot of universities are experimenting with AI as a tool.

We're talking to many of them here at Coursera. Maryville seems to be doing something that's, I would say, way more ambitious, using AI data and skills mapping to make learning more relevant to each student and to really extend Maryville's role from a place that one attends for a few years

to a lifelong learning companion. So is this the right frame for the work you're doing, guys?
And what are you, can you tell us what you're actually building as you're moving this work forward?

[Dan Shipp] (2:04 - 3:29)

So I'll just share a couple of things. And then Phil, I think he's our magic eight ball to shake up and make all this happen. But maybe a fun way to talk about, right, is this lifetime learning journey, right?

How many years has higher ed really talked about that? And yet we still keep running into the same results, right? For the most part, we graduate 50% of students that start with us over time and the rest leave maybe frustrated and disappointed and out of the game.

So how do we create, you know, a Super Mario pathway for all of our learners over a lifetime where they can receive an achievement and continue to the next achievement and to the next achievement that fuels their personal and professional success? I think it's always fun to talk about stuff like that at conferences, but it really, no institution has really, this is going to sound really harsh, cared enough to take it on in the way we are to ensure that every student achieves and is set for their next achievement when they attend Maryville. So there's a lot of architectural work that goes into that achievement game board, but that's really where Phil and the work he's doing around a data first strategy matters most.

So maybe, Phil, if you want to chat a little bit about that.

[Phill Komarny] (3:30 - 4:51)

Yeah, that's brilliant. It is data first, Mario. We think AI native university, I don't think that's it.

I think that's the icing on the data cake. We've really taken about four years to really think about what data affords us, where it's stored currently, what silos it's in, and really how can we move

that into an asset, a resource, not a master data management layer like you have. It's like eating broccoli if you want to really think about master data management.

And it's fun. We need to eat our broccoli and stuff. But I think there's ways that we can utilize this technology, and AI affords us a lot of that to be able to create this data layer that lets us really get to that place where Dan's trying to get us to.

It's a lifelong engagement. There's no reason this piece of data lives in this table, in this database, because this student is this type of student. That's hindering our ability to reach everybody.

So as we unveiled our data strategy, we started to understand it more, and now building a capacity behind it with our people really involved in that. So there is no IT at Maryville. It's called CT, or collective technology, because it is an extension of our data strategy that builds the culture that can actually afford this for our students.

So I think it's – I'm very excited about what we're about to show people. We've done a lot of the work. We've done a lot of baking.

The cake is ready. The icing's on it.

[Marni Baker Stein] (4:51 - 5:38)

And not only do you have cake, you have your broccoli too. So you got it all. You got it all.

I mean, I love this because, as we all know, a lot of students experience college as a maze. You know, they've got their courses over here, their advising systems. Maybe if they're lucky, they have some career services systems that they can log into.

And their own data. Like their own data that's just basically scattered across these systems and really hard to make sense of. So what I'm reading into what you're saying, Phil, is that Maryville's AI work isn't really about AI.

It's about fixing the broken relationship, essentially, between the students and the institution.

[Phill Komarny] (5:39 - 6:23)

That's right. That's exactly it. I think we can afford ourselves that ability by treating the data better.

So we see our base layer as a data counseling system. That's literally counseling this data out of its current confines into an asset that we can extend to our customers, our people, our faculty, our staff, our alumni, our students. That's an asset.

And now with AI, we have different affordances because of what it allows us to do. You couldn't do this five years ago. It would be impossible to maintain it.

But now you can. And there's really elegant ways to do it. And once students experience it, because we've been doing a lot of student-focused stuff, like I don't want to build this.

I want students to tell us what to build. It's been very interesting to see where they take it.

[Marni Baker Stein] (6:23 - 6:41)

Well, let's make this real for a moment. Like let's imagine I'm a student. If I'm using this system or

I'm experiencing it in some way, what changes for me with this work that you've been doing?

Like what can I see or what can I do or understand that I couldn't do before?

[Phill Komarny] (6:41 - 7:19)

Well, like one experience is like I don't think many schools in the country look at an unofficial transcript for much of anything. It's noise. It's too much work.

So that's one document that most students have. They don't have their official one. They have their unofficial one.

So we opened up a new front door that takes that information in 60 to 90 seconds, converts it into a pathway for them. There's an example of their data really affording them an ability to interact with us or us to interact with them in a better way. So just using data in a different way, Marnie,

it's just putting it into those places and really affording ourselves new ways to interact with it is what we've been able to do.

[Marni Baker Stein] (7:19 - 7:51)

And it sounds like some new assets for learners as well that could be really valuable. Oh, for sure. Yeah.

Daniel, from the press, from your seat, like because we all know that to drive this kind of change, the foundation is always having the leadership support to do it. Why did you make this institutional priority? And, you know, what convinced you this wasn't just an IT initiative, but like a core strategy for Maryville?

[Dan Shipp] (7:52 - 10:13)

Man, when you say IT initiative, it kind of makes me want to vomit in the corner. So, yeah. How do you build an architecture that ensures that all students achieve, right?

I think I would go back to, you know, the only reason I've ever wanted to be in a job like this is to finally get the keys to the car to create with students and your faculty the kind of future that's worth having. Right. So if you do go back to kind of the historical batting average of higher ed where where persistence and graduation rates.

I mean, I can't tell you how many either board or, you know, at the at the public or private level meetings I've been to where you'll get a group of people in the room, really good intention people. And we'll celebrate. Hey, our graduation rate went from 52 to 54 percent.

Like, how is that a worthwhile endeavor? Right. And we all have kind of we're on the zombie treadmill where we believe that that we should celebrate that.

I think it's always frustrated me. So I've always wanted the keys to the car to be able to change that result in a really profound and significant way for students and communities. And so how do

we create and design an architecture that allows a personalized learning journey over a lifetime that really isn't a lot of talk, but it actually happens.

And your question around what is it what's different for a student? Well, think about it. I

mean, a student will not leave here with maybe half of the students receiving one tired bachelor's degree in six years that may or may not be relevant to the job market today.

They'll leave Maryville in the future with one, two, three, four, five, six, seven, eight, nine, 10 and beyond achievements that will equal degrees, but also confirm the skills that they've picked up both in and out of the classroom during their time here. That's a radically different world that we're designing at Maryville.

[Marni Baker Stein] (10:13 - 10:34)

I love that. So this achievement architecture, basically, as you called it, it's like a personalized map of who I am as a learner, what I've done and achieved and you've verified that I've done and achieved it. And also, though, what I need to do next.

Right. It's definitely forward looking. How does that work?

[Dan Shipp] (10:35 - 11:26)

Yeah. And how great to have an agent that's right there with you. That's prompting that that's helping support that learner's journey over a lifetime and saying, hey, guess what?

You're in Baltimore now. You move from St. Louis and you're at this company. So this is always in your pocket.

We're always with you. And to say, hey, if you'd like to advance in this company, here's what the next positions will require in terms of skills. Here's the courses that you can enroll in at Maryville or here's the degree pathways for elevation in that current career.

Or what if you want to stay in Baltimore? Here are the other companies and here's their skill

requirements. And here's how we can support your learning journey.

I mean, what a different day to be alive to have that type of superpower in your pocket.

[Marni Baker Stein] (11:26 - 11:49)

Yeah. And more important than ever, I would say, then. I mean, it's always been important.

I wish I would have had that superpower in my pocket when I graduated from my undergraduate experience. But today it seems like the workforce and like starting out and it seems just so much more complex than ever before. I think this kind of guidance system is is really, really powerful.

[Phill Komarny] (11:49 - 12:49)

I think so too, Maureen. I think it affords us a new way to talk to our workforce partners, too. So this Rosetta Stone that we've always searched for, we've mined it out of our curriculum and now we're interacting with our faculty and having them validate that.

So we're not saying it's right. We're just saying it's here, right here. And now making that into an asset that we can create a data product out of that our friends in the workforce now can speak the language with us.

So it's not courses and degrees and programs and credits. It's skills and things that move their needle is in that data. Yeah.

And that's the integration point that students love that they got a degree. But when we start to show them a translation of that through a skill search in any job board and letting that data help them understand where they're deficient or how to help them rate the resume or what thing they need next. That's, again, data following data that we afford them or we help them afford that.

And those experiences last across a lifetime, not episodically when they're just with us for four to six years.

[Marni Baker Stein] (12:49 - 13:47)

Yeah, I love that. That's so empowering. And not only does it point out gaps, but it also, I think, really underscores things that that students can be perhaps more confident in than they ever were before because they can explicitly understand it.

I have these skills. These skills matter. I just I love that.

Now, we like when I'm out talking to universities, you know, I hear a lot about faculty anxiety when it comes to the integration of AI into university systems and and processes. You know, they they get nervous about that. They may feel like part of what they do is being replaced.

But but your model seems to have somehow put faculty in the loop from the beginning and they're really engaged in sort of this skills mapping exercise at the very least. What what does that partnership look like and how did you how did you nurture it?

[Phill Komarny] (13:48 - 15:17)

I was there for the start of it didn't come in a little bit later, but we started this thing four years ago.

It was more about being having them at the table. We started with our faculty.

We started there, brought in Beth Rudin, who's now on our board. She worked at IBM. She was a cognitive data lead for them.

She expressed to them what data was. It's an artifact of a human experience. I even broke my frame.

I was like, wait a minute. That's a really interesting way to think about this. And when you layer on AI, when you think about it that way, now we had now we had lowered the fear, I think, a little bit and really brought up the affordance.

And people are now are like, hmm, not blocking agents. Now we have over a thousand of them.

Our faculty and staff have built for themselves, like enabling that and showing them how we protect the data, how it's safe.

That's what we really did. The data strategy afforded them the ability to be vulnerable with this stuff. And experiment and find where those really good niches are.

So it wasn't like one AI, one big strategy across. We're just going to pay some big company all this money and just have it here for us. We did something really different and used a bunch of different models and used a company called U.com to kind of allow our faculty to explore a bit. So I think those things are really important. You can't dictate it. You have to kind of allow it to be, you know, do dangerous things carefully.

I always go back to that. So let's create a sandbox so we can do these dangerous things carefully. And everybody seems to be working together.

[Dan Shipp] (15:17 - 16:36)

Like, I think, I don't know. Right. These are sometimes the answers are really pretty simple.

Right. If you lead with a learner perspective and you value your faculty to help create that future.

So it's the cliché of progress moves at the speed of trust.

Right. So I think too many times that colleges and universities, we've created these top down mandates that just don't ever galvanize and build the support to really advance an initiative in this way. But when you really respect and include folks from the beginning, I found, you know, again, I've been here a year.

I don't know if that equates to dog years, but it feels like maybe seven years at the speed that we're moving. But we're moving this intentionally and purposely forward with faculty, you know, for students. And they're really excited about it, I think.

And we're giving ourselves permission to not get some things right. And we're going to make some mistakes and stumble a little bit. But we're doing it with our students as the core to creating this whole new architecture.

And faculty have been wonderful to work with here.

[Marni Baker Stein] (16:36 - 17:27)

Yeah, it sounds like incredibly learner centered and faculty enabled, which is, I think, just a really powerful combination. And it's not just talk. I was reading about how you have had some really great success on this faculty initiated work in a couple of your very high attrition online graduate nursing courses.

And you saw an attrition drop from like 40% to 10% over a given semester through implementation, I think, of some AI tutoring capabilities. That kind of number either makes people like incredibly excited or incredibly skeptical. Like, what do you think actually changed for students there?

Like, how is that even possible? That's really fast change and very impressive.

[Dan Shipp] (17:29 - 18:46)

It's connected to the faculty, right? So rather than just putting a generic layer on top of a course, I mean, it's the faculty who worked to develop those agents that were responsive to their syllabus, right, to their learning outcomes. And so it was brewed up and has been continued to be improved upon each semester by those faculty.

And so a student, I mean, you know this, right, Marnie, that it's how great. I wish I would have had this. I mean, I was definitely a challenged learner to have, you know, that tutor in my pocket 24-7, right, that is going to be helping me navigate the learning agenda within that course.

That is almost going to be speaking as if that faculty member was sitting in her pajamas or his pajamas with me in my room at 1130 at night, going over things, concepts that are really tough for me to understand and presenting it in a visual form or maybe in a written format that's different. It's totally game changing. And I love the, I think it only works because of the faculty,

their adoption and use of those tools.

[Phill Komarny] (18:46 - 19:18)

Yeah, to making it safe for them so they could see it and get engaged in it and see the feedback loop and make it transparent and make it safe. That's all we did. That's all we did.

They did the rest. And now we have students building those social learning companions, not just, you know, our teams don't build them anymore. We have a whole lab of students in great learning experiences, learning about AI, learning how to protect it, how good guardrails are, all those things.

So it's become something, you know, more than just a social learning companion, but actually a learning experience.

[Marni Baker Stein] (19:18 - 20:47)

Yeah, learning experience. And I think that the safety point is key, not only for faculty, but for learners who are using these powerful tools that really are helping them to learn, that are helping them to build their confidence, but they don't have to be worried that they shouldn't be. It's part of the, it's a sanctioned part of the experience that comes from the instructor.

And I think that safety point is really key and it sounds like it's kind of driving a flywheel where this is flourishing. I love that. I love that.

I love that. And so you've got your achievement architecture, which is like this persistent progressive record of learner achievement that takes them even beyond the university. You've got this sort of flourishing community of creators, both faculty and students who are creating these new, what are you calling them, Phil, social learning experiences?

Where the social part is that social experience that you have with the AI itself. AI is part of that social experience. So this is sounding like incredibly robust.

Like if Maryville is right on these fronts, like what does higher ed need to learn from this? And if higher ed doesn't learn from this and sort of ignores this shift, what breaks first in higher ed as we move forward into the coming years?

[Phill Komarny] (20:47 - 21:37)

From the technical part, and I'll just talk about that. Dan could talk to the structural part. But I think that like if they don't, if people don't realize you have the answers in your data center, it's your data.

It literally is. Everybody's waiting for a SaaS company to come in and solve it for them. That's not it.

It's literally the data and affording yourself a new way to use it is the answer. And that's really what we're proving here. And what we've done is that's the real magic is we didn't go out to find this.

We looked inside and found it and treated it better. And now it's affording us this conversation to be able to really see where education is going and meet it where it is. I don't think it's, we can drive it to where we think it's going to go.

But I think right now being flexible enough and having something can answer those questions outside of just degrees and programs is a benefit. And that's a data play at the end of the day.

[Dan Shipp] (21:37 - 24:30)

But go ahead, Dan. I think it's the obvious. We just won't be around as institutions.

And maybe that's okay. Maybe the real truth is that if we don't do a much better job, then we probably shouldn't be around. And when we as a collective celebrate 50%, 60% graduation rates, I've never even understood that.

And so the social contract expects and needs us to do better. And so I think that that's whether

you're at a state institution, a private institution, you know, I was recently at a state institution, Pittsburgh State, shout out to the gorillas out there if they're listening. We did something really simple, but we put a automatic associate's degree in place for students that complete through 60 units of their undergraduate program.

And that's, I don't want to act like that's the end all be all, but think of what that does to your achievement rates. Stop thinking about even graduation rates. I mean, you'll have significant, gigantic improvements in students earning at least one achievement.

And what's important about that, I mean, just go to that whole social contract, right? The wanting to do better, the giving oxygen to your personal and professional life. I think I shared with you some some time ago that, you know, when we left the celebration where, you know, now 80 some percent of the students are achieving at least there are receiving their first achievement as an associate's degree.

The one student stopped me and just said, you know, I'm going to get my bachelor's next year.

So this was really great. I guess I get two degrees for the price of one.

Right. But what's great about this is I get another five dollars in my part time job because I have an earned achievement. This associates degree and my mom and I are sending money home every month to my grandmother who's had lost her spouse, this young woman's grandfather.

And this is trying to keep grandma and her family home. And now I have more money that I can send home to grandma. And I mean, just that's one story.

But my goodness, we have a combined, what, 43 million people in this country with some credit and no completion, no achievement that gets you into the game and activated in your life. Look what we're doing. I mean, in many ways, we're poisoning our own well, community after community.

So we can do much better. And we should. And if we don't, we shouldn't be around.

[Marni Baker Stein] (24:31 - 25:19)

Well, I love it and I'm inspired by it. I really thank you guys for coming to talk to me today. I, I love that you're really centered around this simple but radical idea.

It's still a pretty radical idea that learners should be at the center of everything we do. They should have more ownership of their data. They should have more visibility into their learning. They should understand the value of their achievements on the way to degree. They should get more personalized support. And I think that relationship with their, their university should be very different than it is today.

And I can see what you're driving forward in this front. It's very exciting. You got some lucky learners there at Maryville, and I can't wait to see where you go next.

Thanks. Thanks so much for joining. Thank you.

[Dan Shipp] (25:19 - 25:21)

Thanks, Marnie. Appreciate you.

[Marni Baker Stein] (25:21 - 25:48)

To learn more about how institutions are navigating this shift, please visit us at Coursera for Campus. And if you want to go deeper, explore our resources on AI powered learning and skills based education. We'll have lots of resources there for you to check out.

And thanks to all of you for joining us on Office Hours, where we have candid conversations for a new era in learning. We'll see you next time.