

Caleb (00:00):

All right, so as we wrap up, I want to talk about some of our longer range sort of future initiatives, keyboard respond. Here we go. Okay, so in the opening session I talked about this diagram around where content or where Typefi fits in growing that influence and where we start to increase the edges of Typefi. And a big part of that theme is collaboration, doing more together. But one of the things that I put together recently for internal use that I thought I'd share here is just sort of like what's all behind the scenes in Typefi. And so this is sort of a product stack diagram and we sort of read it top down. So everything that is in a sort of a solid fill is a Typefi product. And either white outlines or the white boxes are sort of ancillary pieces.

(01:29):

So we've got the Designer and AutoFit plug-ins, Typefitter for InDesign, Writer for Microsoft Word on Windows. We support math composition either using the native Microsoft Word or using MathType from Wiris, the Typefi Server and AssetFlow. You can see how they sort of nestle into one another. We also have a connector that works as part of Adobe Experience Manager Guides. And so if you're authoring structured content in DITA within Guides that you can publish from AEM directly through Typefi Server into Adobe InDesign Server, which is a unique offering that still puzzles us as to why Adobe doesn't actually provide that connectivity. The big purple bar across the middle is Blinkenlights. This is a load balancing and queuing system that we created to allow us to make multiple InDesign Server instances appear as a single instance from your jobs. And then we just iterate through round-robin the jobs that are queued up so that we can reduce that wait time.

(02:52):

And then back off to the top right hand side, you can see the Typefi RunScript, which kind of operates on its own, separate from all the rest of the Typefi products. And this is really geared towards developers, people that want to build custom integrations around InDesign Server as a service. Another view that I put together is just looking at the various technology, what is underneath our products, whether it's C#, C++, Java, Node, there are a lot of different languages and technologies that enable what drives and powers Typefi behind the scenes. So here's sort of the obligatory disclaimer around roadmap discussions that anything and everything that we talk about in a roadmap is subject to change at the whim of me because I'm the Product Manager. Ha ha, no. Basically this is just saying this is what we think is going to happen, this is what we hope is going to happen.

(04:09):

But obviously things change and stuff happens that can adjust schedules or plans or thoughts around this sort of stuff. But the major themes of what we are looking at over the next several years of time. First, we talked about in the earlier session, Typefi Cloud 3.0 and a big part of that is AssetFlow and this just beautiful, fast collaborative environment for working with your content on top of InDesign and Typefi servers. Collaboration, that's a pillar in and of itself wanting to enable you to publish from anywhere, anytime. And we talked about it a little bit in a breakout, but generative AI and AI in general is a big part of everyone's conversations. And what does Typefi think about AI? How are we looking at this targeted implementation and enablement of AI? And then I think the fourth sort of initiative is really taking this mindset of "yes, and" and looking across what we do and what others do and how we can bring others into work with us so that we can create integrations and expand the offerings and make things more seamless, more integrated, smoother across the board.

(05:59):

All right, so we talked about this before. The big idea here is we want to take a critical look at what Typefi is currently offering. Look at the lessons that we've learned. We launched Typefi version 8 in 2015, so it's almost 10 years old now. And Cloud 3.0 is the first major re-imagination of what that is and what workflows are. And so we're excited about the next decade of Typefi. When we think about

collaboration, so Guy's talked about the Advanced Engine and being able to recompose documents and sort of replace pieces within a document. This allows sort of a faster way of working. It allows you to work in sort of a hybrid fashion where you can run content through Typefi. You can actually take those InDesign files and you can make hand edits into those documents and be confident that when we update content, as long as you're updating content that doesn't touch where you made those edits, then those edits will be preserved.

(07:22):

And that's been one of the big complaints around the tradition of Typefi, sort of generating a brand new InDesign file for every job. That you had to sort of had to defer or wait to make sort of content changes or layout changes to your documents until after you have finalised all of that content, and Advanced Engine gives you some flexibility back. And so that's sort of an exciting thing. And we have a lot of plans as far as where this is going to go. The ultimate end game is can we actually start thinking about, well, we're replacing this content, this content had a material enough change in the layout that now maybe I want to reevaluate some of the layout rules that you were using from the beginning and have it sort of look at what's on that page and say, is there a better way to arrange that content and sort of reassert your layout rules?

(08:29):

And so that's something that might be coming in the future around Advanced Engine. Skywriter. So when we think about the authoring experience within Microsoft Word, because of the technology that is built on, it only operates within Word for Windows, that Word on the Mac or Word in the browser just don't have the same APIs to do the things that we're doing on the desktop. Skywriter is taking a critical look at what are we actually doing and sort of this continual engagement with Microsoft on their APIs and how we can create a version of this authoring environment that functions wherever you happen to be, whether it's on a mobile device, on a tablet, on a Mac or Windows. And so this is a way to sort of think about a new authoring editorial experience within an across platform sort of space. Asset workflows. So Typefi for the last 20 years has all been about automated composition.

(09:52):

This is a way to take your content, whether it's in Microsoft Word or in an XML format, and publish that largely through Adobe InDesign to produce your output. And when we think about the collaboration opportunities with AssetFlow and what Toni showed with the commenting and the previews and this sort of stuff, how can we start to look at workflows that have triggers based on document state or assignment so that when your team is set up in AssetFlow that someone assigns you a task, a content file, that there's a job jacket that goes along with that. It says, here's what I want you to do to this file here is your timeline, your deadline, here's who it needs to go to next, what does that process look like? Who are the approvals going through? So this is the next thing that we're looking at and building out what AssetFlow is and we're excited about this foundational collaboration model that we have with AssetFlow. The last thing in this next is looking at Project Orion. This is something that Lukas mentioned in the opener with Inera eXtyle, which is an editorial and XML tool for publishing that Wiley purchased several years ago and they just announced in August that they're discontinuing it in two years. And so this is where Typefi is looking at and saying, okay, this is a problem. We want to help solve this problem. What can we do to bridge this change and this transition away from eXtyle into something else?

(12:01):

Alright, Gen AI. So in many ways, the way that Typefi is approaching AI is one, there's a sense of awe that the promise of AI is really about how it can deal with massive sets of data. Data that exists at a scale that we simply can't operate at. But we're looking at it in a hybrid sort of model where you can choose your balance between the efficiency of a lights out automation and the full creative editorial freedom that you have to make changes and be in control. And so we are looking at ways to integrate AI into our workflows, into our solutions to make work more efficient and streamline some of the aspects of content

creation, content preparation, content delivery. So one of the first initiatives that we're exploring is Project RAGtime. So RAG stands for Retrieval Augmented Generation. This is a natural language processing, NLP, technique in working with large language models that combines the strength of the generative AI with a retrieval based AI.

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And the big benefit of this is there's a lot of discussion around the hallucinations of AI and the generative side of things. And especially when you are asking AI to expand an image or replace a background, well you have to have it hallucinate that background. It's making something up to fill that space. But when we're talking about text and the content, we want to make sure that it's not just making up information. And so RAGtime is about building an AI that can also look at existing sources of content in a much more detailed fashion. It's a way of sort of feeding, for example, Toni's documentation into Project RAGtime so that you can ask questions and say, how do I do this? And RAGtime will respond with direct quotations from Toni's documentation. And so this is something where we're looking to sort of build into each of our individual products. And so whether you're in Designer or Writer or AssetFlow or Server, that when you look at the help the onboard help that you can ask it questions and it will respond with very pertinent, relative responsive, information. So that's Project RAGtime. Project Hemingway is sort of looking at sort of building contextual tools within InDesign. And so this is looking at this idea with Typefitter. Typefitter is a tool that we've had for many years. We actually acquired this technology from Teacup Software back in 20...was it 2016?

(15:51):

I think so, maybe 2016, 2018, somewhere in there. And so Typefitter is all about, I want to squeeze or expand the space around my type to make, typically speaking, justified text fit better, eliminating widows and orphans or runt lines. But there's some times that no amount of adding space or tightening that space can actually resolve the issue that you're trying to resolve. And so Hemingway is looking at, how can I take my content and again, in a very targeted, limited fashion with as no hallucination, be able to copy edit that content and finesse it to substitute shorter or longer words in without changing the original meaning, but still making sure that we have sort of a full audit trail with the undo stack. And so you can see the history of what it was before, you can change it back if you don't like the way that it's modified, it giving you those options to still be in control as the content is adjusted or copy fit into that text.

(17:14):

Maestro is a project where we're looking at a larger set of Adobe Sensei services and these are generally around image manipulation and image analysis. And for example, when we think about the traditional way that you place an image in your content that's then placed into InDesign, that the traditional way we think is that those images, the frame, the box that's going to contain that image is going to be resized based on the dimensions of that image. And Maestro, one of the ideas here is to say, I want to apply an overlay on top of that image placement to say a automatically crop or zoom the image, scale the image based on the subject and have Sensei identify that subject and potentially produce a more pleasing overall layout that eliminates excess. And so you may not need to do pre-processing on your graphics to crop and adjust them, that Maestro can handle that automatically for you.

(18:40):

Project Titian is the most, the furthest out in thinking about this and looking at this chat AI, conversational based interface. That there are times when even I, I'm a trained graphic designer, get frustrated with the amount of time it takes to tweak or adjust a template. And wouldn't it be nice if I could just say tell InDesign the same way that I might talk to Siri or something else. Hey, can you change all the point sizes down by half a point or can you move this box over here or something along those lines and have that conversational art director based design work or even thinking about can I use text to automatically generate an entire InDesign template? So that's looking at how we can start to leverage a

conversational front end with InDesign's really robust scripting architecture in the background to drive and manipulate how a file might be created or modified.

(20:03):

So those are sort of the high level projects we're thinking about with generative AI. So just to sort of recap, right now the big push is Typefi Cloud 3.0, launching that with single sign-on, with AssetFlow, getting fractional engines and getting all that available to you as quickly as possible. Second major pillar, collaboration. Just leaning into collaboration and how we can start to widen that scope and bring more people into it so that more eyes on your content and not having to switch different tools and lose momentum. And then looking at this, how it can amplify and augment your existing team and technology through AI in a very limited controlled environment. And then looking at new partnerships and opportunities there. So now we're transitioning into the big one. I wanted to highlight going from, what is Project Orion? So August 13th of this year, Wiley announced that they're ending development and support for all eXtyle products in two years.

(21:31):

Now it's important I think to note Typefi is not directly connected at all to eXtyle. We have partnered with eXtyle for many years. We were very close friends with Bruce who founded eXtyle before he passed a few years back. And this is something that when we look at what eXtyle represents, while Wiley is saying that the workflows may not be reliable after August 13th, 2026, the big things that we would be concerned with are any of eXtyle's external integrations. And so when we think about eXtyle's ability to process references or to submit metadata, or if there are material changes in Microsoft Word or Windows that break something in eXtyle, that's where it will stop working or not be as reliable. But everything else around eXtyle should continue to work even after August 13th, 2026. But this is where Project Orion comes in. So this is something that we in the immediate aftermath of that conversation around the discontinuation or the deprecation I guess really of eXtyle with the discontinuation happening in two years, we kicked off a series of round tables and one-on-one conversations with many of our customers. We're continuing to have those conversations. And some of the things that we heard in those conversations were concerns, that now not having control and not liking that, that their destiny is complicated by this announcement. Concerns about tables, tables have been a sore point I think for many people for many years. And the way that eXtyle processes those, how it handles really long documents, and I'm talking 200 plus pages long, and then also just concern around will I lose any of my advanced processing rules?

(23:56):

So trying to put this into a visual form because I am inherently a visual person. I was trained as an architect and then switched careers and trained as a graphic designer. So I like visuals. And so here's my little plot diagram. eXtyle, sort of the full support, middle of the third quarter of 2024, we are in that yellow dot and then it's sort of fading away in that two year period. And if we had to encapsulate some of these concerns that we were getting from customers, it's what does this timing look like? What kind of transition is there going to be from eXtyle to whatever other thing there is, and what's the training going to look like to relearn or rethink our workflows?

(24:59):

So Typefi looked at this and said, well, what is eXtyle? eXtyle is a plug-in for Microsoft Word. It provides editorial cleanup tools, it provides what they call auto redact, which is a really expansive find-change engine. It has the reference processing and linking, it does citation processing, and obviously the XML support. And so looking at those features, Guy and I have been working on building a project plan. And so if we are kind of reducing this down into three main pillars, that semantic structuring is a key central point. Content validation. And this is not simply about is it right, is it in the right order, is it structured according to your editorial standards? All those sorts of things. And then you've got your XML standards because the reason why people are using eXtyle is because this enables you to create standards

compliant XML that can then be exchanged with different repositories and research. And it's really critical to think about these three things as this is the baseline, this is what we have to provide.

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And so our approach. I've been with Typefi for almost 20 years, Typefi has been around for just over 20 years, and we want to leverage the experience that we have both from supporting people using eXtyle to create that XML that then feeds into Typefi, but also from the experience we have for customers that are not using eXtyle that are in the travel space or manufacturing or other industries that are authoring in Microsoft Word. We also want to lean into sort of this hybrid processing model, that Typefi has a very strong team of XML developers, XSLT developers, how can we sort of look at the positives and the negatives of eXtyle and address those in the Typefi way using the sort of a hybrid model of both on device and cloud-based processing. And I think the third thing here is that when we took a critical look at the way that eXtyle operates, that it has to transform from the Word format into sort of this internal proprietary structure that is not XML and then produce XML from that.

(28:11):

And that creates some inefficiencies in the way that content is processed, especially around tables. And so we want to lean into these things that we see as strengths within Typefi, but we also want to make sure that we can do this in a rapid fashion because even though eXtyle has given us a two year window, we have to be able to deliver something faster. We have to be able to deliver something to you to evaluate it so that you can make a determination without the stress and anxiety of the software is officially going to be discontinued tomorrow. And what am I going to do now? So here's a very high level roadmap of what we're looking at with Project Orion. So phase one where we are right now is defining the project scope. Guy and I have had a number of conversations and like I said, we want to continue having more conversations with you to plan out what are the highest priority features, what can be deferred to a potential later release, what do we need to make this viable?

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And then we're going to wrap that up by the end of this month and move quickly into execution and development. And we're giving ourselves about eight to 10 months to realise something so that we can then launch this by the end of next year and give you a full eight plus months to evaluate and respond to this. But it's not just about, okay, we're announcing this now and then in 10 months from now you'll see something. When we think about that roadmap and those concerns of timing transition training, I want to add a fourth one to that of transparency. In how we are engaging with you as a start, first with those roundtables and those one-on-ones, but throughout this development cycle. So if we look at this plan of building out Project Orion, we want to have regular touchpoints and regular sort of show and tells to give you a chance to provide us with realtime feedback and help us to sort of see where we might be going down our own path or where we're doing something really well.

(31:06):

So that's something that we're going to continually reach out to you throughout this next year. And this just kind of fits into, again, I've said this several times across today, I've been with Typefi for 20 years and one of my favourite things about this job is the interactions and working with you. And when I look at the product that we have today, what Typefi is offering on the shelf right now, I can just walk down feature after feature after feature that have been contributed by internal recommendations from staff as well as the majority from direct requests and sort of engagement with you. And so this transparency aspect and being able to feed your stuff back into Typefi to drive us to do more has always been part of our culture here.

(32:05):

So to get into this a little more detail sort what we're looking at as far as this sort of existing technology, so number one, Typefi Writer. This is a tool that we built many years ago and have rebuilt and rebuilt and evolved, and we think it actually provides a really nice foundation for Orion. Writer already has this



dynamic interface, meaning that when you first launch Microsoft Word with Writer, it doesn't do anything until you attach a project to it. But once you attach a project, the interface comes alive and all the paragraph styles and elements and sections and things that you have that are the characteristics or attributes of your layout become available within Writer. And we can leverage that same technology and thinking about, well, the requirements for JATS or BITS or STS, they're related but they're different, and different implementations have different requirements and different needs and this is something we can start to look at how we can use that to enable this customizable interface to address your publishing needs.

(33:31):

Something else we did several years ago that is very fortuitous is that we integrated with Edifix. Edifix is an existing continuing developed product from Inera and Wiley that provides that reference processing and so we can leverage that directly to enable direct access to Cross Ref and PubMed for the reference cleanup and so forth. Now to be honest, Typefi Writer today lacks editorial cleanup tools. And so some of the things that you might be doing within eXtyle of cleaning up double spaces and em dashes and inserting non breaking spaces around SI units and that sort of stuff, that's not something that Writer has right now, but it's not something we can't add and it's not something we can't augment through other third party tools. We've heard from a number of you that are already using a third party tool like PerfectIT in addition to the auto find-change tools from eXtyle. And so that's something that we're looking at as a potential partnership.

(34:49):

The DOCX converter, so this is something I mentioned earlier that we just remastered this and it is under continual development. One of the really cool things about the DOCX converter is that we can take the DOCX, which is an XML format, and we can transform that into other XML without having to go through this very costly, time intensive pre-processing or flattening of tables into, well, I don't really know what you would call it, but that doesn't have to happen with our DOCX converter. The other thing about it is that our DOCX converter is extensible and bi-directional. We can move back and forth between XML and DOCX very easily, very reliably with great predictability. And so that's a big win as a foundational technology.

(35:54):

The other thing we're looking at in this is that again, Typefi, when we started 20 plus years ago, we just happened to decide, hey, we're going to use XML as our main interchange format. And we started our XML built around DocBook and we've expanded and extended that schema over the years to support new things like Guy was just talking about the status attribute and so forth. And this is something that we're looking at in a similar fashion. If you are familiar with eXtyle, you know that the JATS or the BITS or the STS exports are additional transforms that internally eXtyle produces their own proprietary, well-formed XML and then they transform from that into JATS, BITS, or STS. And so we're going to be taking a similar sort of approach with Content XML, which already is what drives our InDesign composition. And so there's an analysis project going on internally to figure out a standard tag suite for attributes within CXML and what are some additional tags or elements that we need within CXML to support a full and robust experience.

(37:23):

And one of the things related to that is looking at right now in the eXtyle way of doing things, you can't use change tracking. You have to instead use document compare. And so you're comparing a snapshot in time to see, okay, here are all the changes between this action and this other action. How can we through our XML, because of those native transforms, enable direct change tracking and inline commenting within that? And so that's a big thing we think will be a nice win for all of you. And finally, from this existing sort of foundation of technology, Typefi workflows, all of our XML workflows are built on a high performance Saxon XSLT processor. It's standard space. We also support Schematron and that can

include Schematron quick fixes and regex. So it's infinitely extensible and gives us a lot more flexibility in both how the various rules are authored and maintained, but also just the speed at which we can deploy these sorts of changes to you not necessarily requiring brand new builds of the desktop product because of that hybrid on device versus in cloud based processing. So this is some of the technology that we're looking to leverage across the board for Project Orion.

(38:58):

Okay, another view of this sort of timeline of what we're looking at. So again, the initiation of the project, it was in August, literally on the heels of Wiley making that first announcement that they're deprecating and then discontinuing exiles on August 13th, 2026. Guy and I have been almost exclusively focused on the planning around Project Orion over the last month. And the goal is to wrap that work up and then hand over to our Dev team to build that. It doesn't mean the Dev team hasn't already started. They actually have, they've been doing all sorts of experiments to figure out what looks promising, what looks something that we can actually deliver within this very aggressive, some may say audacious timeline. We want to hit that control point in the October timeframe of next year. This is when Toni and the QA team sort of take ownership and say, Caleb, you've got back off and let us document, let us test, let us QA and verify that what we've built is actually going to work and do it in that predictable, reliable, bulletproof sort of fashion that you expect from an automated platform like us. And then finally, delivery. The target is to deliver by the end of next year and give you months of time to evaluate and look at what that transition might be between eXtyle and Typefi.

(40:48):

Then just to again, at a glance sort of overview of what we're looking at, it's Typefi Writer+. It is, we want to be able to clean up, style and review your content within the familiar environment of Microsoft Word, but have that environment be custom tailored with knowledge, skills and process automation to fit your unique publishing requirements. Looking at the hybrid processing so we can leverage both rules-based methods and the adaptability of AI, machine learning, like named entity recognition to be able to identify a first name, last name, affiliations, journal, all that information around that content to help you style, structure and validate a very diverse and complex collection of content. And then from wanting to make sure that we just sort of nail this point around, it's native XML. That it's standards based, that the way that we're looking at doing all of these things are based on, it's just based on versatility, it's based on extensibility, it's based on maximising reuse and interchange of that content. We want to not get in the way of your working but enable you to work more easily.

(42:22):

And that sort of is the wrap up where we talk from, first Typefi, it's about doing, it's composition and then do more. We're expanding that role into this editorial space and we are looking for you to join us and to guide us, to challenge us in this process and help us as we strive to do more for you. And that is the wrap up of my presentation on the longer term future initiatives of Typefi. And so I hope this has been interesting to you and I look forward to future conversations and what we can do more for you next.