Lukas (00:00):

You see the PowerPoint?

Don (<u>00:01</u>):

Yep.

Chris (00:02):

Alright. Yeah, yeah. Cool. Great. Yeah, I'm excited about this because PCI, what they do overall is really cool, and what they do with Typefi is also really pretty unique, really cool. But it can also potentially help people who aren't using it the way that PCI does to think about, oh, maybe there's a different way we could kind of combine XML and InDesign automation to make things easier to let you guys do a little bit more. So first I want to introduce Don Moody, and he's the VP of Production. And Don, if you could introduce yourself, say what you do at PCI and so on.

Don (01:02):

Yeah, so I'm really pleased to be here today. We've got several people from our company here, so from our tech team and our design team. And so yeah, I'm responsible for creating our publications, getting them printed and mailed, as well as our digital versions. And that includes directories, which the best way to explain is kind of like a phone book for an organisation. And then also our Oral History Project. And we also produce apparel, t-shirts, sweatshirts, travel bags, backpacks, et cetera, for the organisations that we work with. So we're a hundred, if we can flip over to the next slide, a hundred year old company and we capture and create the world's stories. So we have had over 2.2 million stories collected since we started this process three or four years ago. We're a best place to work winner and our values, if we can go back, our values are really the key part of our organisation.

(02:10):

So you see there, we pursue excellence purposely, unlock human potential, act with integrity, innovative a culture of relationships and fun, and lead with a servant's heart. And we're also a servant leader organisation, if that relates to anybody. So that's some of the core of who we are as a company. So the next page. So we use Typefi for our Oral History Project. So this is a fairly new product for us. And essentially what happens is as you're a member of a college, university, a member organisation, which could be like a car club, military, Greek organisations, you would call in and we'd verify your information, but then we would ask you some questions to collect a story about when you went to whatever university or college or private high school. And then we take those, turn those stories, take the transcript, and turn it into a story. So to date, we have helped over 300 schools reconnect with their alumni and helped our partners raise over \$70 million.

Chris (03:32):

Do you have any idea how many individual stories you have?

Don (03:37):

Yeah, over 2.2 million that we've collected. Now, we do not print a hundred percent of those stories, just economically not feasible. However, they are available digitally. So if you had called in and given your story and purchased a digital copy, your family can listen to your story at any time in the future. So it's a really cool way to collect information keepsakes. And we also, all of our books, the publications are sent to the Library of Congress, so they're maintained forever there.

Chris (04:17):

So all the books go to Library of Congress?

Don (04:19):

Yep, yep. They sure do. Yep.

Chris (04:24):

And then do they cross-reference? So you say you have Greek organisations. So if I was a Fiji at the University of Richmond, would there be potentially a Phi Gamma Delta thing where I could buy it throughout Phi Gamma Delta, but it would also show at the University of Richmond?

Don (<u>04:51</u>):

Well, so good question. Our original product that we started with Typefi, we had one index, which was by last name and first name. We're in the process where we recently added a second index so that you can cross-reference by the chapter that you were in. Or for example, in military, we could have last name, first name in one index. And second index could be by branch of service. Or if it's a car club, you could do by the years of the car, or college or university, it could be by class year for that second index. So that's a huge lift for us and increases the functionality of our products tremendously.

Chris (<u>05:40</u>):

Yeah, we jumped ahead a bit. Do you want to talk a little bit about why you started to look at Typefi and...

Don (<u>05:50</u>):

Yeah. Let's jump right into the book examples. And this is for, you see here as you scroll through, Typefi, so let's stop here. Typefi allows us to take stories and the pictures sent in by individuals and lay them out on the page. So every book we do is customised. No two are alike. So it's not like we're producing the same book over and over because we get different input from every organisation. So I know one of the things we want to talk about was productivity. Our first book we did manually was, it was a hundred percent manually, it took like four designers six weeks to create it. It took us another week to manually create the index. After Typefi—sorry about that.

(07:05):

First rule of being on a conference call is to mute your phone. After Typefi, we can create one book and the index within a couple of hours running it, and we can run several books concurrently. So we had built up a backlog and we could run as many, if we had the books ready to go, we had the XML ready, we could run up to five books per night and have those ready for what we call cleanup the next day. So if you go back to the book example, cleanup for us means where we put a quote as you see there, or a design element, which you see with Amy, her story. And so it allows us to, the designer has the creativity to put, wherever they have enough white space, they can fill the book in. So if we go to another page, let's see what else. So we also fill in the colours around the stories, and all this is done automatically with a combination of a manifest. We could talk about that in just a second. And then as well as, the designer has some flexibility. So as you kind of go through here and go and flip through, you'll see everything's a little different.

(08:36):

Pictures are put in different ways. Like the page here on the left, we really didn't determine there's enough white space, so we left it alone, and go from there. So one of the keys here obviously is Typefi templates. Another key is, it's the manifest. So what the manifest does is it takes the size of the picture, takes the length of the story and creates 10 different versions or 10 different ways that you could present that on a

page. And then as it's creating the book, it's putting those stories and those pictures on a page that optimises usage of the space that we have. So we average about two and a half stories per page. So you can kind of see how there's different ways that it can wrap or change colours.

Chris (09:43):

So the manifest is really the key to be able to get not only the variability of the page, but also to maximise space on pages. Is that right?

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Don (09:58):
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And I think a key word, Chris, you just said was variability because as you flip through, you see no two pages look alike and you don't see a pattern of pages. Everything is random. And one of the things that, this is where the index becomes critical, because you can't look by, in our classic directory, we list people just their name and address, but it's listed by maybe where they live. That may be one section, their class year and last name, first name. So adding a second index has been critical for us because it allows us then to, in this example, we would have a second index by class year. So you could find everybody from 1969 that's in the book, find what page number they're on.

Chris (10:57):

And then you have different types of stories. So it's not just, I went here, it's like maybe you met somebody or I got my job, or, right?

Don (11:09):

Exactly. So the book is broken up into different categories. So what you're seeing here is Student Life. We may have relationships, which could be you met your spouse or your best friends, and the partner has some control over that, that we allow them to set up the book the way they would like. I mean, we obviously have a standard that we prefer, but we can set up by legacy where you're...yea so here's Student Life. So it just continues on. So yeah. So we have broken up into several sections, which is essentially categories of stories.

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Chris (11:53):
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Yeah, it's really neat.

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Don (11:57):
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The other thing is, so the big thing is where we get the combination of the XML where we can change the categories in the XML, rerun the book, and correct. We try to avoid rerunning a book because we've spent time creating the layout with the quotes and the design elements. But if the partner makes drastic changes, it's a matter, we can rerun it instead of recreating the whole book. And it's an overnight process.

Chris (12:31):

And then you don't have the whole reorder, redoing indexing and all that kind...

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Don (12:38):
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Yeah, that's a huge one. Good point.

Chris (12:41):

So let's talk a little bit about implementing Typefi and what was that like and what were some of the things you had to work on and challenges?

Don (12:55):

Yeah, I mean, first of all, the team is great and still continues to be great to work with. I will give a shout out to Eric Damitz. He knows our business now and is extremely supportive. During testing, the team was responsive because we were learning the product as we went. So the support was over the top good. And it continues to be as we continue to implement, we're looking at moving our classic directory over to Typefi as well to update the process there. So huge shout out to Eric and the team. And one of the things, the manifest, full disclosure, it took us a year to create that. And I think if we had to do it again, we would probably dedicate, we were working on other things at the same time. If we had to do it again, we would dedicate a person and/or the team to get that manifest done in one quarter as opposed to taking four quarters to get it done. That was a big learning point for us because all the time that we're working on the manifest, our backlog is increasing because we can't keep up manually. So that was probably a big thing. If we had to do it over, I think we would focus on and really dedicate, because that manifest is the key thing to creating success for us in this process.

Chris (14:37):

And that's probably the manifest is really what makes it unique. I think, in terms of relative to our other customers, where in a way the XML is just a straight through process, where you built a lot of logic within that manifest to determine how things are sized and placed and those types of things. And then Typefi kind of supports the, okay, here's what you can get on a page to be able to run it again.

Don (<u>15:16</u>):

Yep.

Chris (15:17):

Yeah. So yeah, I think we talked about the processes, and I think you've really kind of talked about some of what you're looking to do in terms of future type stuff.

Don (15:36):

Moving our, so our classic directory is really what it sounds like. So we list people by last name. It's 20 pages of history of the school. The rest of the book is a listing of names and addresses and locations. So that's the foundation the company was built on. But the tools that we use for that are very old and we really, that's why we're working to move that to Typefi so we have a consistent use of tools across the company when it comes to publications. And then the second index has been a big boost so that people can cross reference with other people they know or find out, like we talked about for military, for Greek organisations, for class year, you can find people a lot easier than with just one index by last name, first name.

Chris (16:45):

Nice. All right. And I think that we got into the process improvements, the big changes. Now might be a good time to see if anybody has any questions that they might want to throw out to Don, maybe about the manifest and all those types of things. That's sort of always the neat thing about XML is sort of the pliability of it. When you can manipulate it to do what you will. Does anybody?

Don (17:31):

If I can't answer the question, we've got some of our key people, they can answer the question as well.

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Chris (17:37):
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You could always, I guess maybe put it in the chat. If something pops up.

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Lukas (<u>17:47</u>):
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Actually, I have a question, Don. As you were talking about how Typefi creates multiple versions of the page for each page, how is the final version of the page chosen? Do you guys choose it? Does the software pick what it thinks is the best? How does that work?

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Don (18:11):
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So my understanding is that, yeah, the software will pick the best layout. We only see one version.

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Lukas (18:19):
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Ok.

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Don (18:19):
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The manifest kind of lays it out and says, we need to put this one here, this one here, this one there, and then it goes into the Typefi template to get placed on the page. So the manifest, my understanding is that manifest creates a, it says this is going to be a two by four use of space for this picture and story. So then it finds another like a three by five and a four by six, or if it's the whole thing, it does eight and a half by 11 and it blocks it off and then places it on the page to maximise usage of the real estate.

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Lukas (18:59):
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Cool. Very cool.

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Hugh (19:02):
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And how is that different than how Designer works today with the ability to identify elements and balance page composition?

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Don (19:15):
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Speed is the biggest thing.

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Hugh (19:17):
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Okay, got it.

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Don (19:18):
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Yeah, I mean, we can have a designer, the first several, first probably 50 books we did was manually designed, and it just takes forever to do that manually.

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Hugh (19:28):
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No, in this case, I meant the Designer software. Yeah, sorry about that. Yeah, I meant Typefi Designer.

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Eric (<u>19:36</u>):
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Chris, Don, do you want me to jump in for a second?

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Don (19:39):
Yeah, please.

Eric (19:40):
Sure. Hi, Hugh. Hugh used to be my boss at my last job.
(19:46):
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Old reunion day today. There's actually two steps to this workflow. All the data is XML, and each story is a separate XML file. And what we actually do is, or what PCI is doing, is they run what we're calling the analysis workflow, which runs each story through every possible layout that it could be. So there's something like 15 different widths or things like that. During the analysis process, it'll run all the stories. You'll get 15 or 16, whatever it is, versions of each story, and then a script runs that measures them. You're running it through the same template that the book will be in. So you're using the same fonts and all that kind of stuff. Your margins and your column depths are all the same. The whole point of that process is to get the numbers. So every story gets a measurement, and then each version of the design is logged.

(20:38):

So this version of the story with this width is this tall, this other width it's taller, and this other width it's shorter. At this width it's too long to fit on the page. So that one's kicked out. The images are also resized. They want the pictures to be as big as possible, but the resolution has to be correct. So it'll measure if the picture gets too big, the resolution's too low, so that one gets kicked out. So at the end of the analysis process, you have a whole list of possible stories that will work in that particular design. The manifest is the next stage of that. What PCI built on their end is a tool that analyses all of those measurements and it figures out how to put the pieces together to make the shortest possible book, which is amazing, and it's why it took a year to build that.

(<u>21:25</u>):

That's a lot of concept that you have to figure out, how do I make numbers do that? So the manifest is literally just a list of, this book has this many pages. On page two, column one, put this story; column two, put this story; and use this design for it. So when the book gets published, they know everything will fit where it's supposed to fit, because all that analysis was done to figure out all the possible sizes. And then the manifest process does all the math to figure out where each thing will fit correctly. So when the files come out of Typefi for the book job, all the pages are fine. Everything fits exactly where it's supposed to fit, because that was the whole point of doing that manifest step. So I love this project because we are using Typefi in a really, an interesting, unique way that is not typical, but our partner in PCI and our client, they figured out a huge portion of this too, because they're the experts on their data. They're the experts on their product. So it made a lot of sense for them to try to figure out, well, how do we make all this business logic work to make these books work? So they, putting that manifest tool together, it was really impressive, and now it's all working. So that's the exciting thing too. It's really cool to see pages. And I will just one quick thing. The examples you showed, I didn't know you were going to do this. That's actually where I went to school,

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Don (22:58):
Did you call in and buy one?
Eric (23:00):
I did not. I apologise. I am mortified.
Hugh (23:07):
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Yeah, no, it's an amazing process and the layout and the variation and the optimization provided, I guess in the offline logic, it's really impressive. This is really cool to see.

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Chris (23:19):
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Eric (24:26):

Yeah. Yeah. I mean, and that's stuff that you think about it, somebody who's doing textbooks or something like that, there may be an application where you could have a manifest like that for laying out books. I'm not really sure how that could end up working, but...

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Hugh (23:42):
I'll tell you, that's certainly where my mind went. Yes.

Don (23:46):
Right.

Chris (23:47):
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The other reason I was excited about this case study was because it is unique at this time, but I feel like, oh, we could take this concept farther. The great thing is that you're not going to be ever competing with PCI. They have a very unique thing, which is really cool, but the concept could really carry through. And the PCI team was always great, smart people to work with.

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Absolutely.
Chris (24:27):
Our favourite type of customers. Were there any other questions?
Don (24:35):
Thanks for clarifying that, Eric. Go ahead.
Eric (24:39):
No problem.
Chris (24:41):
No, everybody's might be ready for a quick break then.
Lukas (24:46):
Yep.
Chris (24:47):
Is next, right?
Lukas (24:48):
Yep. So yeah. Thank you, Don. Thank you, Chris. Really interesting.
Don (24:54):
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Yeah, I'll be glad to if anybody has any questions you can email me or love to talk more about it or get you in touch with our team, with the experts. Yeah, I know everybody saves... One of the other things that's unique here is, everybody saves money on having this stuff automated, right? But because of maximising the stories on page, that also created a savings for us in terms of paper, which is, as you can imagine, is a cost that continues to increase. So it's more than just the automation. But by doing this with optimising the pages and the stories, I mean, we have...to give you a sense, I'll kind of show you this. This book was the biggest thing we've ever produced, which is Purdue. You can see it.

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Oh, wow.

Don (25:56):

But you can also see this book is three and a half inches thick. There's only one place in the US that could bind it. So we have, because of using Typefi, we can go with producing multiple editions and breaking the book up, which is a huge cost saving for us as well. And it's fairly easy to do. So if you'd be glad to entertain any other questions and if that can help anybody out.

Chris (26:27):

Or if you want to get your university or group signed up to use PCI.

Don (26:31):

Oh, yeah, yeah. No. Yeah.

Chris (26:35):

All right. Great. Thanks Don. Really appreciate it. Thank you.

Lukas (26:39):

Cool. Yeah, thanks.
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Lukas (25:55):