Interviewer:	Today, I think, as you know, I really wanted to spend time with you, about an hour, on the topic of innovation. Did you have a chance to see the questions?
Interviewee:	I did. I confess that I glanced through them rather than carefully read them and thought up answers, but I've seen them, yes.
Interviewer:	That's actually fine - you can read them as we go, if you need to refresh or what have you. They really weren't intended, necessarily, for you to do homework on them or anything like that. The consent form that you signed, I signed that. If you want a copy, I can send one back to Person1 for your records.
Interviewee:	You probably should. Somebody might notice it's not there someday.
Interviewer:	Yeah, okay. I'll be glad to do that.
Interviewee:	Thanks.
Interviewer:	Let me just say a little bit more about my interests and my background that'll give a little bit of context here. I spent quite a few years in Org1, and in the later years there, we actually tried to stimulate innovation. Looking back at that, in hindsight, we weren't very successful.
	I brought this interest into library school. I'm fairly late in my entry into the library profession. I continued this interest in innovation really within the library context and thought it was something very interesting. I concluded that we really didn't understand it in my experience at Org1, so the last several years, not only in library school, but in my work as a librarian, I've continued to study this area.
	So the questions are focused on innovation and we'll get started here I just, again, wanted to thank you for taking time out of your schedule to do this. Do you have any questions before we just sort of launch into the $-$
Interviewee:	No. Go ahead.

Question 1

- Interviewer: The first question we start out with general questions and then proceed to some more specifics, but first question is one where I'd like you to just introduce yourself in terms of background, experience, your management philosophy, your perspective.
- Interviewee: So I have to start by saying I'm not a librarian. I am the university librarian and Dean of Libraries. By training, I'm an Discipline1. I've been a professor of Discipline1 for 35 years. I'm also a professor of Discipline2 and I have a courtesy appointment in the Org2. I have considerable management experience [background many positions]. I was director of the Discipline2 program that's now the Org3. I was chair of the Discipline1 department. I was Position1 of the university for budget.

I was then Postiono2 and Position3. I've run a few other little things along the way. Now, I am the university librarian, which job I got because I got very interested in libraries and what they do when I was Position2, and in a way, in the transformation that libraries are undergoing and a part of in scholarly publishing and related areas.

And so, but some of your question about sort of the history of innovation in libraries, beats me **[little library experience]**. I don't know much about the history of anything in libraries. So I've had just lots of management experience. You know, I could go on for some time about management philosophy. Go ahead.

- Interviewer: Well, let me just I'll have probably several follow-up questions. One of the – I'm guessing that you are one of the few university librarians without an MLS degree. I haven't actually looked at the statistics, but – so I'm wondering, you know, your experience, your profession as an Discipline1, can you comment on how that has either helped or hindered in your role as a university librarian?
- Interviewee: Well, I think that being an Discipline1 and a Discipline2 professor is extremely useful in my role as a university librarian **[other disciplines useful]**. The problems that the library faces are, you know, have a lot of economic content. There's a fair amount of money at stake. There are choices to be made. There are system and mechanism design issues of the kind that economists study and engage in, that take place in the library.

And I have always thought that Subject1, in particular, public Subject1, which is what I do or have done, provides a very useful suite of skills for really any set of policy issues, and the library is filled with policy issues. So I think it's very useful.

Of course, the hard part is that I don't know very much about how libraries work **[little library experience]**, but I do know quite a bit about the sort of broad architecture of how scholarship and scholarly publishing **[scholarly experience]** and access to scholarly materials work. I've actually been in that business for a very long time.

And I am blessed with the fact that the people who actually run this library, people who buy the materials and license them and run circulation and so on and so on and so forth, know what they're doing and do it surpassingly well. So I would be a terrible choice to head a library that was in distress. I wasn't called upon to lead a library that was in distress **[took over library that was doing well]**. I was called upon to lead a robust institution into a new age, and I've done a lot of thinking about that new age, and again, Subject1 is a useful framework for doing that.

- Interviewer: Okay. So I can also interpret your comments as you haven't found it to be a hindrance that you don't have an MLS degree.
- Interviewee: I have not found it to be a hindrance **[not having MLS is not a problem]**. I sometimes wake up in the morning and realize that I am responsible for processes that I have never actually engaged in.

Every other job I've had, right. I was a professor, but I used to be a graduate student. I was a department chair, but I was in the department. I was the Position2, but I was on the faculty. Every other job I've had, I've been able to look back on my own past and see what people who are subject to my leadership are undergoing. As librarian, I'm not able to do that. I do think that that is something of a hindrance. I'm not sure that's about the degree so much as the experience.

Interviewer: Yeah, of course.

Interviewee: Then there are some members of the library staff and some members of the national and international library communities who are not happy [perception of others about non-MLS] that there are a handful of people like me, who are leading major libraries,

who don't have the professional experience. I'm not the only one. Person2 at Institution1 and Person3 at Institution2, just to name two, there are some out there.

- Interviewer: I know. I don't know what the percentage is. Let me just one other follow-up question. This may seem obvious, but this is kind of a benchmark question for my interviews. How important do you consider it for the libraries to be able to innovate?
- Interviewee: You know, there's a question about whether libraries should be leading innovation or be very fast followers [method of innovation fast followers] in a highly mobile and even labile technical and resource environment, but if libraries can't innovate in their responses to very rapid change in the environment, they're dead meat. So really important would be my [inaudible, guess?].

Question 2

- Interviewer: Okay. Let's move on to number two, and here I wanted to just have you describe the management culture in your library. So this is a perspective of the library managers and the organization, and what the management culture is in the library.
- Interviewee: Well, you know, it's there are many management cultures in the library. Formally, and for most practical purposes, the organizational structure is quite hierarchical **[library organization hierarchical]**. So there's a layer of there's the associate university and librarians and then there's a layer of senior managers, and below them, there's a layer of people who have substantial authority and less authority. If you kind of view the organization chart, it has a sort of very classic pyramid shape to it. Wildly different, by the way, than being Postion2.

Interviewer: Say again?

Interviewee: Very different from the organization of the university as a whole, which is much flatter **[university management is not hierarchical]**, which is kind of interesting. So the culture that I try to – the culture around the table that you actually see, which is where the library deans group, as we're calling it, which is sort of the cabinet, meets twice a week, is one that is – there's a lot of delegation, autonomy and coordination. That's my preferred structure as a manager in all contexts that I've been in, although I will argue for there being different structures in some other contexts.

My preferred management style is you get good people who are passionately interested in solving the problems that you want them to solve, and you let them do it **[delegation/ empower subordinates]**. One of the roles of management in that context is to spend a lot of energy walking around **[management focus – observation – inward]**, figuring out what everybody's up to, so that you catch inconsistencies and you also catch opportunities, when different people are working on similar or related or inconsistent problems.

So a great deal of what goes on is communication. Then you provide a few overarching themes that you want people to be working on whenever it is practical to do so. You keep reiterating what those are until you actually start hearing them come back from people **[communication and repetition of message]**, and then you think maybe they believe and you go on to the next one.

There are contexts in which management strikes me as needing to be much more hands-on and formal **[different styles required]** than what I've just described. And when that's what you got to do, that's what you got to do, but in an organization that largely is run from the intelligence of the people who work here, you don't want to have to be in those circumstances. By and large, we're not.

If you're running the plant department, you want to be much more precise about what it is you want.

- Interviewer: Related to management, and actually a comment you made earlier, do you know what the current attitude is towards hiring a non-MLS as a professional librarian?
- Interviewee: Do I know in a library what that attitude is?

Interviewer: Let me ask you differently. Would your university library hire a person that did not have an MLS as a professional librarian?

Interviewee: Yes, we would. We do. We have. We mostly don't [will hire non-MLS].

Interviewer: Okay. But the university librarians, the management, has embraced that as a policy that you will, if it's warranted?

Interviewee:	The standard form on the posted advertisement says MLS or equivalent combination of experience and expertise. In fact, many of our subject specialists or selectors or that sort of high middle tier of librarians, who are the ones who really engage with the faculty, have disciplinary expertise in the discipline they're working in, and not an MLS. And many of them have the expertise and an MLS.
	More of the latter, the majority – the very large majority do have MLSs. But, for example, our collection development officer, Person4, he's ABD in Subject2 and everybody's – he's highly regarded in the library.
Question 3	
Interviewer:	Yeah, okay. All right. Let's move on to number three. The FA is sort of a member of a class of libraries that are similar, university libraries. As you look around at your peer libraries, there are similarities and there are differences. I'm wondering if you could characterize how the FA is different from other libraries that you see that are in your class, if you will.
Interviewee:	So our class is not big. There is a large handful of big libraries that aren't Institution2, and we're one of those [unique – large and not ivy league] . Big U.S. academic research libraries that aren't Institution2, because Institution2 is twice as big as anybody.
	We differ. I would say the biggest obvious difference that's salient right now, is that we have digitized more books than any library on the planet [single uniqueness] . So we're engaged in a project with Google and we are the most engaged of any library in that project. That stems from an early and powerful strength in the digital library phenomenon [early digital innovation] , so we are more digital than pretty much anybody in our class. I think that's fair to say.
	Then there are some other differences where we – this is what I've been thinking about and it's small, but not so small. We are not the university library of the university's own archives in history. So whereas many libraries, their special collections are built in no small part around their collecting their own local story, ours is not.
	There is a separate State1 historical archive, which is a mile and a half away. We're very friendly, but it's not part of the university

	library system [special collections don't collect state history], and that actually leads to a sort of empty space in thinking through special collection strategies.
Interviewer:	That's interesting. Does your digitization ever – it wouldn't cover special collections?
Interviewee:	It would and it does.
Interviewer:	Oh, it does?
Interviewee:	It does, but of course, we don't – we do have a special collections library, it just doesn't include our own history.
Interviewer:	Okay.
Interviewee:	It includes all sorts of, you know, we have the usual collection of old Bibles, that's pretty much there.
Question 4	
Interviewer:	Okay. Let's move on to number four. I think most people have a notion – have some sort of notion of what innovation is. Can you, in your own words, describe how you view innovation?
Interviewee:	You know, it is, in meaning, the making of the new. So it's making it new stuff. It's doing things that are nontrivially different [innovation defined] from what has been done in the past. That can actually be, I think, quantitative. So if you do a lot more of something that's been done a little bit, that can be highly innovative because you're bringing things to scale [scalability as innovation] , which often requires a great deal of new work.
	And sometimes, it's new invention. But basically, when innovation has taken place, the way in which things work, the structures that you're working in are materially obviously different from what they were before. That is, I think, what you're saying.
Question 5	
Interviewer:	Okay. We're going to move on to projects. So we'll get into a little more detail here on number five. I'm wondering if you could cite some projects that you consider innovative, either in your

library or in other libraries that you've seen, either current or historic projects.

Interviewee: Yeah. You know, although the fact that I'm actually not from the library world is going to make this list shorter than it would otherwise be, but there's no question that the mass digitization **[innovation – mass digitization]** that we are currently engaged in is innovative. There's never been anything like it before. Other places are now – are also doing it.

Prior to that, actually, the development of the digital library production service here **[organizational innovation]**, the creation of an associate university librarian for digitization initiatives, a whole bunch of things in the digital area certainly were, in their time, innovative. Now, they are more widespread, but notice that these things were explicitly innovative.

You create a new position and put money behind it, with a mission that hasn't existed before, that's sort of by construction an innovation. It could fail, although that particular one didn't. So I think those are reasonably clear cases.

There are a bunch of library innovations around the certification of acid-free paper. This is a while back, but I think very important. Changes in the industry of publishing, essentially dictated by libraries, with a set of standards produced. I don't know who did that, but someone did, and it was done in the library world. That strikes me as an innovation of a different flavor.

The invention of compact shelving **[building/space innovation]** is surely an innovation, as is –

A very important library innovation. It's been around for 40 years or so, but it changes the world. The more recent systems of identical-sized books in boxes with automated retrieval is again a library innovation. Faceted browsing is an innovation **[user interface innovation]**, which, I guess, I'm not quite sure who gets the credit; possibly North Carolina State. Anyhow, those are some.

Interviewer: Let me – the two that you mentioned that occurred in FA, the mass digitization and the digital library production center –

Interviewee: Sure **<inaudible>**.

Interviewer:	Okay. So FA was leading in these innovations, and I'm just wondering, typically it's difficult to get innovations started. Is there – can you cite any sort of management strategy or what were the unique aspects of the environment at FA that enabled you to really get these initiatives going?
Interviewee:	So I think it's fair to say that we have always been – well, first of all, both the university and the library like the idea that they can say, "This is new. No one's done this before. We're going to do it."
	And I should, by the way, add one more because this is one that I'm more responsible for, which is the building of a shared digital repository [IR innovation – a shared repository] that will hold the digitized content of many libraries that we are now building. In fact, we have about a million and a half books in already. So that happened under my watch.
Interviewer:	That's not Project1?
Interviewee:	No, that's not Project1. This is for the Google content and also other digitized content. Project1 is also a team division. Anyhow, there's a tradition here of giving innovation some private place [innovation – more autonomous] .
	There's a tradition of reward for people who come up with new and interesting things [innovation – award] . And there has been, I think it's fair to say, real effort to reserve out pieces of budget that can be reallocated every year. It's not nearly as big as you'd like it to be, but in good times, very much so, and even in lean times, some room to do new things is built into the budgeting [innovation – budget] process. As a principal of management philosophy, that waxes and wanes, but it's there.
	It's also I think fair to say that at least some of the time the library has been led by directors who wanted to make a mark, and you make a mark by innovating [personal motivation] . So that's also, I think, part of it. No question that Person5, who was director now quite a ways back, saw digitization. Saw digital libraries as the coming thing and hired two very strong people to get in on the ground floor of that [innovation – hiring policy] .

Interviewer:	So for these initiatives at FA, I mean, you mention the university was supportive. Did the germ of the idea come from the library, like on the [inaudible] ?
Interviewee:	Yeah, I would say so, yes. The ones I've mentioned all came from the library [innovation – germ originated with library] and were embraced by the Office of Academic Affairs.
Interviewer:	Okay.
Interviewee:	And the relationship, and this I think is important in FA, with some exception, but not much, the relationship between the library and the provost, for almost as far as I've been aware of the relationship, which is about 20 years, has been very good [external management relationship] . So we've had a number of provosts who like librarians and librarians who were comfortable in going to the provost and saying, "Here's a cool thing I could do, could I please have a million dollars?"
Question 6	
Interviewer:	All right. Let me see. I think we're doing okay on time. Let's move on to number six, and just a little introduction here. You see in the literature very little about innovation failures. Innovations or projects that were claimed to be innovative, if they don't work out, they seem to just blend into the background or they continue on and on and on. Can you identify, in your own experience or with other libraries, innovations that you thought were promising and didn't pan out?
Interviewee:	Well, again, my lack of library experience makes this a short story. There is the failure of the famous conspectus [innovation failure - collaboration] , which was an effort, as I understand it, across many academic libraries to sort of divide up the territory with respect to who was going to be good at collecting what, to sort of reduce competition and have a more coordinated national strategy for research libraries. As push came to shove, everybody kind of dropped out of that. I
	can think of lots of reasons why, but it did not succeed. We'd be much better off if it had.
Interviewer:	Would you care to speculate on why it didn't succeed?

Interviewee:	The technical answer is private production of public goods doesn't always work very well. It was in the interest of no particular library to be willing to cede parts of the collection [loss of control] that were important to their faculty to other places, is the heart of the problem. I think, at some point, we're going to have to revisit that and get it right because we can't all afford to be collecting each other's stuff.
Interviewer:	I actually read one of your First Monday articles about the libraries focusing too much on collections.
Interviewee:	Yes, I would have said that.
Interviewer:	Okay.
Interviewee:	Let me just follow – I mean, I want to be clear about that. So at the heart, collections is all there is, at one level. The question is should we be focusing explicitly on our own collection or rather on the collection of things that our faculty and students [strategy – focus] have easy access to. I assert we should be focusing on the latter. Sometimes that's in our own collection and sometimes that's at FB.
Interviewer:	Well, we'll come back to this a little bit. I mean, my experience in Org4 is that, you know, we tried lots of innovations and there are lots of ways that you could fail. I'm actually trying to dig up a little history on this.
Question 7	I have spent some time looking at libraries in the 1950s. There was a big effort to use operations research and quantitative methods to apply to libraries, and that has totally fizzled, almost disappeared by 1980s. So there's interesting processes. People start to get innovations and they fail. I'm really interested in this and it's hard to find a lot of good information on it.
	Let's move to number seven. Here, I want you to just look at your own library. You may have touched on this already, but policies and practices that you think have been successful that stimulate innovation.
Interviewee:	Well, I think I have said the main pieces. We talk about it, we try to reserve money out [R&D budget] , we like there to be some slack in the system [management technique] that gives you room

to do new things. When I came in as director, I said that, in my view, the answer to most questions is yes. I think that's useful for people to believe, and I don't think I was saying anything terribly radical when I said that. There is a – again, the way you make your mark here is by doing something, is by innovating **[personal motivation]**.

So, for example, we have a group of librarians who are busily adapting and building Web 2.0 tools to be used first in the undergraduate library and then to extend. Eventually, it will extend, I hope, into the catalog. We have a very smart young science librarian who's taken it upon himself with a proposition that somebody ought to be collecting video games **[innovation – collections]**, so we are.

And so we happen to have, in the engineering program, a masters program in video game design, and those two things are taking off like crazy. Those aren't major innovations, but actually, having a good collection of running video games on their original hardware, which is what we will have, will be of considerable value, and people will come here to play them or to study them.

- Interviewer: How does an individual, let's say a librarian or staff member for that matter, how do they understand that they can actually take some time to spend on innovation?
- Interviewee: I think they just in that case and in some other cases, they say, "Here's this thing I want to do." And their supervisor says, "Wow, okay, that's cool. You know, we'll carve out ten hours a week and let you work on it." **[management approval of innovation proposals]** And if it begins to go someplace, it comes to the attention of the relevant associate university librarian who either allocates some money to it or comes to me and says, "Can we have some money for this?"

But I think that it tends to get there rather smoothly, at least if it's from the technology side or the public services side. Those systems are pretty open and transparent **[technology innovation easier]**. There's a general sense, again, that the right answer is yes, and if it's no, it's no.

But I don't get much – I have coffee with anybody who wants to have coffee with me, about once a month **[management technique** – **coffee]**. Although I get the usual round of complaints that some

supervisor is or isn't behaving well, I don't get sort of, "Here's this thing I wanted to do and I was stopped." What I get a lot of is, "Here's this thing I wanted to do and something's happening. Here, let me tell you about it."

Interviewer: Well, this is interesting. I get the impression a lot, in various libraries I've had experience with, that this notion of feeling like I can actually take some time to innovate has not been distributed through the organization. It sounds like at FA people feel comfortable taking on something that's maybe not in their direct line of wok.

Interviewee: You know, so of course, I'm the last person you should ask because people want to tell me the good stories. But my sense is that the staff with a little bit of – who have some, you know, who have some creative spark, get to do things, and feel pretty good about that.

Question 8

- Interviewer: All right. Let's go on to the next question, number eight. And this is sort of continuing with this notion of innovation and people doing innovation. In the literature, there's a lot of phrases. There's one that I picked up, called creative deviant, is one way people have viewed those who come up with new ideas. There's a phrase that was frequently used in the environment at Org4, called skunk works. I picked up another one called heterogenous engineer. So I'm wondering if you have seen particular kinds of behaviors that you view as innovative.
- Interviewee: The most important part here, which in your in the setup you've given is closest to the engineer. There's an attitude in the library, and I think this is an attitude across most academic libraries, "Gee, is there a way we could do this a little bit better?" [engineering mentality for innovation]

Librarians are continually asking themselves, or at least our librarians are, "Gee, is there a way we could do this better? That we could serve the patron," who's now the – people are uncomfortable with both the word patron and the word customer, so I'm not sure what that critter is anymore. "Can we serve a person who comes in and wants to do some work in the library better?" And they keep tinkering **[incremental innovation]** with the library's own systems.

When library systems are really difficult to tinker with, for example, the big **collegio pack** [OPAC???] itself, they can't do very much. But then they build little toys around them and they show off their toys and there's sort of small bits of innovation taking place all the time because people are thinking of ways to do things better.

It's very service-oriented. It's not a great – you know, this isn't Leonardo DaVinici thinking great thoughts to nouveaux. This is engineering tinkering at the margin [margin – place where innovation occurs], saying, "Gee, I wonder if you can make the windshield wiper run off the vacuum advance." Right. That kind of thing. In the library, the library is absolutely filled with that kind of behavior.

Then there's a more self-conscious group. On the technical side, the digital library production people, their peer group is software engineers and they want to be building cool things. That's what those folks do. So they innovate in a more planful way. They are more likely to build things **[engineering mentality]** that actually aren't of any interest to anybody, but they're just kind of cool things. Some of those things turn out to be very useful.

Then the -I wouldn't quite dignify them with the term skunk works. They're more integrated into the system than a true skunk works would be, and I don't think we have any equivalent to that.

- Interviewer: Well, let me come back to something you mentioned earlier. We, a lot of times, think of innovations as being technology-based, but innovations can be process-based. I'm wondering, in sort of the area of collaboration, if you are again, I think this is something you referred to in your article, your First Monday article, about collaboration. The project that you mentioned failed, I think probably had something to do with collaboration. Are you seeing innovation in what I would call the area of collaboration at the FA?
- Interviewee: I am not sure I would call it especially innovative. We try hard to make it easy rather than difficult to collaborate. I'm not sure that we're creating any – that we have managed to create any really novel processes [difficult to do process innovation] out of that, except just sort of doing things better

So an innovation that I would like to generate, which would involve a collaboration with some faculty, would be to create some courses that required very high quality of bibliographic scholarship by students using digital materials, so students could learn the difference between sort of any old thing that they pick up digitally and materials that are well-authenticated.

I've been trying to find the right partners to make that happen for a year or so. Haven't found them yet. This goes back a little bit to my management philosophy. You may have a wonderful idea **[management initiated innovation vs. employee initiated]**. If you can't find somebody who will actually do it, who thinks it's a wonderful idea, let it go and wait for the next one to come along.

- Interviewer: How about collaboration with other university libraries?
- Interviewee: Well, there's a lot of ferment in this area right now, within the Org5, which is the Org6. We're talking about some shared print collections and some shared digital collections, and we're developing this shared digital repository [shared repository collaboration with other libraries a possibility] which will be for real. That's a pretty powerful collaboration.

We're involved in a number of projects with other libraries around the country. We have not gotten as far as I would like to in collaborating around scholarly publishing, where I think we should actually collectively take over parts of the business from commercial publishers [innovation – take over business from publishers]. I think that's a difficult thing to organize, but maybe some progress will be made.

So, you know, it's an open question. University librarians spend a fair amount of time on it. I keep thinking that the way to make it happen is to find a couple of meaty projects and get three or four or five, but not thirty or forty or fifty, libraries willing to build something that's big enough so you can look at it in those areas. I think that shared print and digital collections [a collaborative innovation], those are the directions we're heading. Stay tuned.

At one level, a shared digital repository isn't very innovative. It's just a repository with lots of names on the letterhead. At another level, it's highly innovative, because people begin to think of where they want to deposit their material is not locally, but in a shared facility. I think we'll actually get there.

Question 9

- Interviewer: I think, you know, my own view, is this is going to be critical area. Okay. Number nine, we in the university refer to these classic groups, undergraduates, graduates, faculty, staff, our divisions by disciplines, humanities, social science, science, are you seeing any changes in these classical divisions?
- Interviewee: Well, no. I think those divisions are all still pretty applicable. The relationship between them and the library is changing a lot. In particular, undergraduates view us as being pretty high bound, whereas they used to just view us as being a library. Sciences had gone completely digital and are completely journal-based and actually don't understand their relationship [confusion scientists relationship to the library] to the library. They actually the stuff sort of materializes rather than gets bought.

The library's utility and well-being depend on having a happy faculty and a not too unhappy undergraduate body. I think those two things have always been true. Still are.

- Interviewer: We worry here about our undergraduates because if you look at, like, reference desk statistics, you don't see a lot of undergraduates coming to the reference desk. The whole nature of the physical building is beginning to change quite a bit.
- Interviewee: That's true for us too. And indeed, part of the reason I wanted to create these undergraduate courses that use digital library materials is that. In order to make that happen, faculty have to be persuaded that this is a problem. At reference libraries, to believe it's a problem doesn't get you anywhere.

Question 10

Interviewer: Okay. Let's move on to number ten. I've picked out three quotations here, one from Jesse Shera, who historically has written a lot, sort of comments on the library profession. The second one is kind of a comment on our organization. This is by a university librarian at Arizona. And then the third one sort of relates to services. So I'd be interested in your comments on these, whether you have any specific comments you would like to make on these quotations.

- Interviewee: So I actually am in a good position to comment on this because I did come into the library business as an outsider. I am struck over and over again, I have no doubt in my mind, having been Postion2 of the university, that the density of understanding [libraries understand technology better –quote this] of how to use information technology in the academy is far greater in the library than in any other institution on campus, including the computer science department.
- Interviewer: Really?
- Interviewee: It's not even a close call. The vast majority of practicing librarians have adapted their own work and their work with students and faculty to a very high level of delivery with respect to digital materials, database searching, blah, blah and blah. I mean, all the sorts of new things that technology makes available.

They've built very powerful reference tools and ability, electronic reference collections that faculty and students can put on their own institutional file spaces, which makes them richly powerful and portable, easily searchable. Quite extraordinary. And I think the vast majority of our faculty and students have no idea that these tools exist or that they're produced in the library [however, not used – a marketing issue], but it makes the first comment, in my view, just totally wrong.

- Interviewer: Let me just follow up on this one because, I think, there's a perception that a lot of the librarians are sort of technology phobic. How do you attribute the trend at FA, where librarians have really embraced information technology?
- Interviewee: Well, I'm not sure they've really embraced it. They just think it's part of their job. Librarians are highly bibliophilic, which is different from being technology phobic. If I posed the problem in the library as, "We're going to choose between printed text and digitized text," they'll lynch me. Right? They're going to say, "Well, then it has to be printed."

But if instead I pose it as, "We're a library. Some things are digital, some things are printed, but what our customers want is to be able to reach things, get at things quickly, and that means, generally, digitally, because they want to do it distantly as well. We need to have tools so that they can use all these new materials and technologies well." Everybody says, "Well, yeah. Of course we have to do that."

There's a big, hotly contested terrain around whether, for example, when a journal produces its current copies digitally and digitizes its back files, dare we get rid of the print? That's a big battle. But there's no question that we would rely only on the print. That would be moronic and **[inaudible]** our library. So even, you know, there's a handful – there are 120 professional librarians in this library. I would be surprised if – there are probably 20 who really will steer away from the computer at all costs, but it's not 30.

I don't have any problems with – so I agree with the second bullet, but so do the librarians here. And I think I agree with third one, but so do the librarians here.

- Interviewer: It's interesting. The second bullet, the article was written in 1996.
- Interviewee: Uh huh. It's 2008 and we should have done it.
- Interviewer: Do you think there's been a lot of, you know, examination of every assumption, task, activity, relationship?
- Interviewee: Well, that **[inaudible]**, yeah. No, there hasn't been **[the examination has not occurred]**. Not as such. Again, it's more derivative than that. It's, "So how do we deliver the service that they want?" And along the way, we're willing to make a lot of changes.

In a way, so anybody, any competent professional in any organizational setting, any competent professional with some autonomy, which librarians have some, in any organizational setting, should be asking the question from time to time, "Why do I do it this way?" That's actually not new. That's not driven by information technology.

If you're not asking that question at least every couple [need to reflect on purpose] of years, it's actually probably time to retire. So if that's what the question means, I think we're there. You know, examining every assumption, task, activity, relationship for structure happens. A self-conscious program of redoing big strategic plans around all those things every three years I think is too much.

I think you should ask the question, we often do, "We have all of these databases now and they duplicate large factions of our print serials collections. What does that imply about how we ought to work the reference desk?" Okay. Those questions got to be asked and dealt with.

- Interviewer: The last bullet there, the phrase, "Services unthinkable in the 20th century but mandatory in the 21st century."
- Interviewee: Yes. So I got the bullets in different order, but yeah. Well, so I think we're doing that, although I note that the issue isn't only librarians. So there's some higher-level organizations of scholarship [external environment] that are necessary in order to reach the full potential of technology, and there's some higher-level organizations of rights management and possible legislation that are necessary. I don't want to make librarians I think the Congress would probably be more effective if it were staffed entirely by librarians, but I don't think we can be held responsible for what Congress does.

Question 11

- Interviewer: We're close to running out of time here. There's one more question where, which is just a final wrap-up. So looking at the university library, what do you view as the major threat or threats to the continued success?
- Interviewee: Well, so here it matters a lot whether we're talking about the academic library at large or a particular academic library. I think that the there will be, for as long as there is scholarship, a robust authoritative system of collecting and making accessible the works that scholars produce and use. That may be in a very centralized setup. That may be in a distributed setup with lots of different libraries.

I'm worried that, in the past, that system has rather fortuitously been produced – by fortuitously, I actually mean fortuitously, not fortunately, although it's also fortunate – by the action of dozens of individual libraries doing the best they could for their own campuses. The economics of the digital age [need different organizationin digital age] is such that that will no longer do it.

There'll be tremendous opportunities to free ride on other people's work, so we're going to have to organize ourselves to get that done **[technology transfer – mimetic force]**. So I guess I think the biggest threat really will be that there will be a failure of the great research institutions of the world, and perforce their libraries, to organize at a high enough level to make sure that somebody's getting all the work done. Because once you have it done once, once something is on a server and well cataloged, it doesn't make any sense at all to have lots of little copies **[need to organize to reduce redundancy across libraries]**. Don't need them.

- Interviewer: So the threat or the challenge is at the university level? Is that how
- Interviewee: It's at the set of university level. It's at all so at some point, the provost at FB is going to figure out that in a world where all of the current literature is available as a licensed product in digital form, or even more so, almost all of it's available through some open access product but let's leave out the open access version. That there needs to be one copy someplace and his faculty can get at it somehow. Why does he bother to spend money for FB to have a copy, and FA also has a copy, and FC has a copy, and all those. It made a lot of sense with print, because actually the local copy was much easier to get than a far away copy.

How we're going to organize it in the future **[unclear future re: organization]** is, I think, much less clear. What it's going to mean for individual libraries? It doesn't make sense for individual libraries to have very different collections from each other of most material.

So there's a higher-level organization problem where libraries have survived because libraries compete **[inter-library competitionhas been a problem]** with other. And actually, the grand collection of currently published works, where published means put into electronic form on a server someplace, will, I think, become a much less important element of competition in the future. So we have to somehow organize ourselves to make sure that it does get created.

Now, we will get competition in service layers and expertise of making sense of all this, where I think librarians' expertise continues to be very, very important. But it's all been built around collections, and the economics is going to make that, the business

	of publishing and collecting [publishing and collecting become very different] , very different and much broader scale than it has been in the past.
Interviewer:	All right. Well, I have 3:00, so we've been at this about an hour. I want to just thank you again. I had one other really quick question for you. I read your newsletter from the spring of 2008. I was wondering how the Project2 was working.
Interviewee:	We got some stuff, so it works fairly well.
Interviewer:	Does it?
Interviewee:	I remember what was on it, in the spring of 2008. In the fall of 2008, we put an Project3 on it and we raised the money for it, so that's pretty good.
Interviewer:	Thanks again. Are you interested in seeing the transcript?
Interviewee:	You know, probably not.
Interviewer:	Okay.
Interviewee:	No, I should $-$ I'm not going to edit it or approve it. I might hand it to one of my staff to see if there are pithy quotes that we might want to pull out of it.
Interviewer:	I can – I will get the digitally recording transcribed and I will forward you a copy, and you can do with it what you would like.
Interviewee:	Okay.
Interviewer:	And I will also – I will just forward to Person1 the signed copy of the consent form.
Interviewee:	Sure.
Interviewer:	She can put that in her records for it. Okay. Thank you very much. We'll sign off then.
Interviewee:	Thank you. It's been a pleasure.
[End of Audio]	

Duration: 62 minutes