

William R. Dickson Oral History Project
Interviewers: Stephen Immerman and Victoria Sirianni
March 16, 2005

Reengineering at MIT

SI: Wednesday, the 16th of March, 2:00 o'clock, with Bill Dickson and Steve Immerman, and we're talking about reengineering. So we're starting with how did reengineering get started?

WD: Okay.

SI: And we're trying to remember that.

WD: Well, in the mid-'90s -- I don't remember exactly what year it was -- so there was a lot of discussion at the time about different ways to do things. I remember we had a meeting at Endicott House in a snowstorm, where about 20 people or so came to listen to some of the people that had participated in reengineering. It wasn't reengineering by name. It was really some quality programs, and we had some alumni that had participated heavily in them. I think, if I'm not mistaken, Alex D'Arbaloff was one of them. At the time, he wasn't chairman, I don't believe. I think he was just an interested alumni. In any event, it was decided that significant changes in the administrative structure throughout the Institute were probably in order, and that one of the key things that was decided is that in no way would we mess around with the academic side of the institution. In other words, we would have nothing to do with how education was performed. But we would have everything to do with the way the Institute, in general, and the academic departments also, were administered by their administrative structure. Now what I mean by that is that some departments - - particularly the larger ones -- had grown their own sort of central resource. They had a finance officer; they had an administrative officer; they had a purchasing officer. In the case of like LNS, they had several. They had a department of purchasing people. And it just seemed that over the years, as the Institute grew, duplication of effort and lack of reliance on a --

VS: Hi, Bill.

WD: Hi. Here's Vicky Sirianni joining us -- came into being. And so it was decided that we would implement a reengineering process, a word that came to be very disliked by a lot of people, and not particularly thought of as bad or good by whole groups of other people. But for better or for worse, that's what we called it. And we started a reengineering process. We really had two leaders. I was the overall leader of the process. But an equally important role was played by Jim Bruce, particularly when the decision was made that in order to do business in a better way, that we had to upgrade our financial systems -- that is, the central systems for the institution, so that we worked together as a team, throughout the years of reengineering. I had more of a part in certain things, and he had a big role in others. [Phone rings.] Let's wait till this is picked up by the machine.

VS: Okay.

WD: Okay. We hired a couple of people to work on the project with us. One of them, Jennifer [Dowling-Doherty], came from Coopers & Lybrand, where we had first been introduced to her, and she had worked on a similar project for about a year at some other university, I believe on the West Coast, but I don't remember the name of at this time. And so she joined us and participated heavily in some of the things that we did. Now naming a few of the kind of things we attacked: I had working for me, or under my umbrella, Graphic Arts and the Office of Laboratory Supplies. Taking Graphic Arts first, Graphic Arts developed in the long-ago past, because of a need for, I think, primarily things like lantern slides that could be used in the instructional arena of the Institute. I can remember when I was a student here most every classroom had a lantern slide projector in it, and for those of you that are younger than most of us, a lantern slide was a glass slide -- 4 by 4, I believe -- that had material either printed on it, or etched on it, so that it could be reproduced. Of course, eventually, the photographic slide -- the little 2 by 2 slide, or something from the photographic process replaced all of these, and so that the -- over the years, and I think in the final few years, Graphic Arts probably had produced zero lantern slides. However, as the operation grew over time, it became a full-time printing operation with three or four printing presses, and a couple of binding machines, and they used to produce reports, etc., for both the academic and administrative communities. It also ran once Graphic

Arts photo service, where they had two or three photographers that would do various things, including taking the pictures that were in the faculty yearbooks from time to time. So once again, as we abandoned the production of faculty picture books, we had less of a need for photographic services. They also then, in recent years had come to run the quick copy centers. I forget what we used to call them, originally, but of course with the advent of the copying machines, it was before they became cheap enough that most departments had their own, and for high-volume work, they ran a full-fledged copy business, which was quite well run, and quite modern. To make a long story short, we disbanded Graphic Arts and went out of all of those businesses, except for the quick copy business, which we went into in a bigger way. And I believe till this day we still run the copy centers, and they're quite a successful business, to where people can go and make copies or have bulk copying done for reports and other things. So one of the first results of reengineering was the disbanding of Graphic Arts. Fortunately, it was an organization with a lot of older employees, and we didn't have too much in the way of layoff problems. Most of the members of the administration that were there were at or past retirement age, and they retired, and many of the employees also retired because of their age. So even though we disbanded a department of many people, it was not too painful.

VS: It was in the thirties, wasn't it?

WD: Probably, at least thirty.

SI: Yes. Somewhere around there.

WD: And of course, as I said, we kept the copy centers, and eventually, even expanded them.

SI: And I think, at the same time, created the brokers, the Publishing Services Bureau.

WD: That's correct. I was going to say that we still had a need to have things printed, other than the quick copy method, and so we went into the Publishing Bureau, which was a new entity that dealt with an experienced set of publishers' material, and so if you needed something published, instead of going to the Graphic Arts, you could now get assistance from the people from the copying bureau, the publishing -- what was the name of it, Steve?

SI: Publishing Services Bureau.

WD: Publishing Services Bureau. I recall they were initially located down in the bank building --

VS: That's right.

WD: -- next to the Ford Building.

SI: It's still there.

WD: And -- are they still there?

SI: Um hmm.

WD: So that was one major change in the Institute's structure. A second change -- for years there'd been the Office of Laboratory Supplies. And they ran stock rooms for the various chemicals, etc., that needed to be purchased by the -- mainly the academic community. And I think they also went into sort of the office supply business to some degree.

VS: They also bought furniture.

WD: And that's correct, Vicky, they bought furniture also for -- under the auspices of Purchasing, so that over their history they had done several things. The question was, once again, at this point in time did we really need to have this activity? Or had just in time Purchasing gone far enough, so that with the proper setup, we could order chemicals, etc., one day and get them the next, and therefore be able to either reduce or close the laboratory supply outlets? Again, I don't want to go into detail on everything that was done, because frankly, I don't remember it all. [Laughter.] But we did disband the Office of Laboratory Supplies, and went into the partnership business with outside vendors to take advantage of the so-called just-in-time delivery of materials. We did that with office supplies and we did it with laboratory supplies and eventually with laboratory gases -- three separate vendors, I believe. This was a little more painful because of two respects: One, there were several union employees in the Office of Lab Supplies, and also the staff was not of the same age characteristic as Graphic Arts. So they would have to either be laid off or found some other worthwhile adventure at the institution. One of these people, I think, was Diane Shea, who eventually became Director of Purchasing -- not right away, but upon the retirement of Barry Rowe, I think she was put in that position. I think that, because I think I did it.

VS: You did. You did do it --

SI: Right.

VS: -- shortly before you left. Skippy [Shea] was another really long-term employee.

WD: Yes. Skip Shea -- no relation to Diane Shea -- was a long, long-term employee. And frankly, I don't remember what happened to Skip.

VS: Well, I can tell you what happened to him.

WD: So that will be helpful. Anything that you guys have to add.

VS: Yes. He ended up becoming one of the supervisors for Mail Service after we created Mail Service.

WD: I see.

VS: And he stayed there until he retired.

WD: Good. Good. Skip was a good man, if I remember.

VS: Um hmm.

WD: So those were two departments that sort of went by the boards. And in the meantime, however, we had to develop mechanisms for -- that everyone could use to take advantage of ordering supplies, and as the Institute was prone to do, we didn't really tell anybody they couldn't do anything else. [Laughter.] And most people tried to move along with the changes, and did. There were a few holdouts. I suspect some might even be there today, although I doubt it very much, as times have changed, and people have changed. Now as I said before of the problems was we needed new systems to do some of this stuff and to keep track of everything -- financial systems mainly -- business systems. And under Jim Bruce's auspices, we looked at a couple of potential vendors. We probably looked at a lot more, but narrowed it down to two in quick terms -- quick time. One of them was SAP, which was making a name for itself in the business community, not necessarily in the educational community. And the other was -- who knows?

VS: Was it PeopleSoft?

WD: No, no. PeopleSoft was a brand new --

VS: It came afterwards?

WD: -- gleam in somebody's eye. A big name in the business.

VS: Oracle?

WD: Oracle. And we had interviews and onsite demonstrations with both units, and decided to go with SAP.

SI: What was Strehle's role?

VS: Yes. That's exactly the question I wanted. Could you clarify where -- what Glenn's role was, compared to Jim's role?

WD: Well, Strehle -- Strehle participated.

SI: [Inaudible words.]

VS: [Inaudible words.]

WD: We had a committee that I can't tell you who was involved now, but there was -- I can remember the interviews well, and we probably had 15 or 20 people at these interviews of varying kinds. And Strehle was certainly one of them.

VS: But Strehle was not the driver?

WD: Strehle was not --

VS: Somebody just asked me this question last week. So that's why I want to know.

WD: Strehle was not the driver.

SI: Well, when the note came out -- when I really believed it was going to happen -- he was one of the -- on the memo that we were switching to SAP -- he was one of the signatories.

VS: Yes.

SI: And it seemed to be important -- I don't know -- at least to the community, or you must have thought it was important to have it go over your signature and his signature to [inaudible words]?

WD: Well, of course it's important to have the chief financial officer recommend what it is we're going to do. Suppose he sent his own memo and said I think this is a big mistake?

SI: And that would have been Phil Keohane. [Laughter.]

WD: Well, Keohane participated, also, and the good soldier that he was, I think he probably wasn't too much in favor of this at the beginning, but never spoke publicly, and I think gradually came around to never loving it, but being willing to accept that it was a matter of fact.

SI: Everybody thought it was reengineering for the SAP, but it really wasn't, was it? It was the need to change our financial management system.

WD: Well, yes, but it was also the need to be able to do some things that we had no systems in place to do.

SI: Oh, yes?

WD: And we figured that SAP had some of these in place, not for educational institutions, but for places like the Ford Motor Company, where they cut down on inventory, etc., by sort of having systems where they could order materials, and get delivery by arrangements with vendors in a very short time.

VS: Yes, Bill. As history writes itself, when you say the words reengineering at MIT, more people than not equate reengineering with SAP.

SI: Yes.

VS: They don't even remember Graphic Arts, or mail, or any of that.

WD: Probably today that's true.

SI: Is it also true that we got a real cut-rate deal from SAP because they wanted to develop the product for the educational market?

WD: Well, there's two sides to that. We got a cut-rate deal, but it was very expensive, so that I think --

VS: Wasn't it in the \$6 million range?

WD: Well, I don't know now.

VS: How do I know that? It was somewhere --

WD: I mean, it sort of never ended, and so I --

VS: Right.

WD: -- but I'm sure we could have got a so-called cut-rate deal from Oracle, also, whose chairman was a graduate of the Institute.

SI: Yes. A lot of alumni at Oracle.

WD: Right. So that it is true, because they figured if they would be able to deliver with MIT, that the university market which they wanted to go after would be much wider open than it was at the time.

SI: Yes.

WD: Because I think very few people were going to gamble on SAP. They had no qualms about the fact that SAP might be a terrific vehicle for the Ford Motor Company, and I don't think they thought that running a place like MIT was anything like Building automobiles. Frankly, they're not too far different --

SI: Right. I think the biggest -- the biggest -- I don't know -- disappointment is the wrong word, but something like that -- that people didn't -- that across the Institute, really, I don't think ever appreciated how difficult it was to cut over a system like that, and how incredibly well it was done.

WD: Well, it was done well, I think, but you're absolutely right. And I was probably the one -- one of those who didn't realize how incredibly difficult it was.

VS: Do you want to talk a little bit about that?

WD: Sure.

VS: Because I think it would be very, very valuable to understand what was going on in your mind; what was going on in Jim's mind. And that's why we were also questioning you about Glenn, because in the absence of really knowing what happened, history is going to write it --

SI: Yes.

VS: -- in a way that may not be totally correct.

WD: Well, let me clear the issue on Glenn. Whether he was involved at first in the reengineering decision -- on't believe he was, other than being a high-ranking officer of the Institute and a member of the Executive Committee. I remember then I think he was treasurer.

VS: Um hmm.

WD: When it came to supporting SAP, after the decision was made to go with SAP to develop financial and business systems, he was enthusiastically supportive. Again, one never knows what's deep down in anyone's mind, but he was an enthusiastic supporter and I think made sure that the people that worked for him worked diligently to bring it about, even though some of those may not have been that interested.

SI: Yes.

WD: I think Phil Keohane, who developed most of the systems that were in place, was not that interested and thought that with a little tinkering we could keep those systems

alive and do what we had to do for reengineering, also. But it was a very difficult transitional thing. I'm used to -- you know, designing a building, and when you put the last line on the paper, you say, "Well, there, it's done," even though you want to continue and make a lot of changes. It seemed we could never get to that point in some of the things we did with SAP. We had several partial cutovers that were extended in duration due to problems that we had. But eventually we got there, and you'll notice we didn't try and pick off everything we could bite or chew at the same time. We purposely decided not to attack the Human Resource problem until after we had the financial system and the business systems to the degree necessary up, proved, and running.

SI: Right.

WD: Then they did go and attack the --

VS: [Years later.]

WD: -- the Human Resource problem, and it became a big, big endeavor. I mean, it seemed to me it matched the original financial endeavor. I think they also, as an aside, finally decided to install SAP at Lincoln Lab, and I assume that's been done?

VS: Right. Two years ago.

SI: Right.

WD: And so the Institute in its entirety is basically operating under the SAP umbrella.

SI: And I think the final cutover for HR is before the end of this fiscal year, right? Yes.

WD: Yes. HR and Payroll.

VS: [In years.]

WD: Payroll was the big stickler.

SI: Yes.

VS: Yes.

WD: Because I think we had good people; you'd never -- very seldom ever catch Fred Crowley's crew not paying somebody. And they were sticklers for detail, and they had a smooth operation, and they really didn't look forward to changing that operation to something entirely different.

SI: Right.

WD: However, Fred being the good soldier, again, I'm sure participated in any changeover that finally took place. Now we talked mainly about Graphic Arts, Laboratory Supplies, finances, and some business systems, we now want to look at the departments. Perhaps the biggest department in participation, as it should have been, because it was the biggest department administratively, was Physical Plant, now Facilities. And most of the things that were done in the Plant were done under the auspices of Vicky Sirianni, who is present here today. So I'm sure she knows more about what I'm going to talk about than I do. One of the early things we did, because of a separate study -- a study that I commissioned before we got into reengineering -- was to look at Mail Services. You recall that -- or you may not recall -- but we used to have a collection of so-called head janitors, who worked during the day shift, and Building Services, and while they were available to do other things, such as modest setups, etc., clean-up of spills, or other things to keep the place in order, their main duty was to deliver mail. So they were really mailmen, or mail people. There probably were a few women at the end. And the mailroom, so to speak, was in Building 24, and they would receive mail throughout the day, and night, sort it by staff in the mailroom, and then at opening bell on the day shift the various people would go to Building 24, pick up the mail for their routes, and go and deliver it. Some were spending the better part of the day delivering mail, often to every office in the place. It was done differently in some areas. Some areas you couldn't walk up conveniently to the mailroom, like the Sloan Building, and so we used to deliver bags of mail to the Sloan Building, and then the head custodian there would sort -- and it was either sorted, or he might have even sorted it, and delivered it throughout the building. And there may have been other places where that took place. The question was, did we really have to deliver mail to everybody's office, number one? And number two, was it smart to let everybody in the place buy stamps, post mail, including the Filene's bill and the Jordan Marsh bill, using MIT postage, which we all knew it was going on? Not to a wholesale degree, but there are those people that would take advantage of that situation. Also, we didn't really have uniform dealings with the US Postal Department, although the head of Building Services, or the second in command, Ted Doan, I remember at the time, did get to know the Cambridge and

Boston postmasters fairly well. In any event, after a considerable study, it was decided to set up a series of mailrooms, which in itself was no small task, getting the space. [Laughter.] And to let people -- I guess we must have sorted the mail in the mailrooms, because people would come in, and -- my theory was, on the way to work, and they would pick up mail for their office, or however they wanted to divide it up -- their laboratory, their office, their department in some cases, I'm sure, with small departments. But it got -- our people -- and I say that -- the Building Service people -- out of the distribution of mail.

VS: But it got the institution into the process of sending mail out in a unified way so that there would be some economy of scale, right?

WD: Yes. We hired a Director of Mail Services, also. I think a woman named Penny Guyer was our first one. And we eventually vacated 24, thinking it was better space for academic use, and took up space for an expanded mailroom down in WW something.

VS: 16? 15?

SI: WW15?

WD: Yes. Which houses a couple of other enterprises, including at the time the Women's League Furniture Exchange.

VS: Oh, that's right. I forgot!

WD: Yes?

VS: Yes. We put them in NW30. No. Then we moved them out of NW30. So we moved --

WD: Back.

VS: -- into WW15.

SI: Because then NW30 became a residence hall.

VS: Oh, yes. It's much smaller --

SI: Right.

VS: -- parcel of space, yes.

SI: And the other thing that's in there is the reconditioning program for computers that we give to schools.

WD: Oh, yes.

SI: Schools. So --

WD: Vicky, can you talk a little about centralizing outgoing mail?

VS: Well, that initial report suggested that we were actually losing a great deal of money because we didn't centralize the mail that went out, and so the idea was that most people -- had centralized mail going out, and perhaps did not centralize mail coming in, totally different from what we were doing. So the idea was to do -- to have dedicated staff that would do two pickups a day. They would pick up US mail, and they would pick up interdepartmental mail. The interdepartmental mail would be -- they would have two pickups, and two -- they'd pick up twice a day. They would go -- they would process it, they would send it out bulk mail, they would get their discounts, they would work out their -- they would work it all out with the USPS in terms of a rate, and then those very same people would be engaged in two deliveries a day. Interdepartmental mail, as long as you put it in the mail for the 5:00 o'clock pickup, would be there waiting in the morning for people, so we guaranteed better than 24-hour delivery on interdepartmental mail. And on USPS mail, we'd guarantee it within 24 hours.

WD: Right.

VS: Because we were dealing with two -- two pickups [inaudible words]. So also, as part of that endeavor to centralize by the outgoing mail, then we had to buy a mail sorter; we had to buy a lot of equipment that enabled us to act in a way like a small post office.

WD: Yes. That's right. Is that still working well?

VS: I think it -- yes, I think it's still working well. I think we did diminish service a bit, when we took our last cut last year at this time. We diminished the pickups, I think, to one a day.

SI: The difference is, though, is that everybody is used to it now.

VS: Right.

WD: They don't complain about it?

SI: No.

VS: No. No one complains now.

SI: Now it's just a normal part of business. You go pick up your mail.

WD: Now that was a very -- among some people -- that was a very controversial thing, when we opened the mail rooms.

SI: They thought it was cost shifting.

WD: Right. To them.

VS: And there was a sense of loss because many people loved their mailperson -- you know, their mailperson would come in in the morning, would say hello to them. So I think there was a lot of the de=human --

SI: -- humanization?

WD: Yes.

VS: -- de-humanization, and that's when you began to get a lot of criticism of reengineering because we were shifting work, and we were becoming more automatized.

WD: Another big change took place in the area of the maintenance services. In previous times, you didn't have heat, you called Heat and Vent, or whoever you knew at the Plant -- the Physical Plant, not the power plant -- and depending on who you were, and how bad the situation might have been, you eventually got service. You never knew who was coming.

VS: Because it was completely centralized.

WD: It was centralize to the nth degree, and if you tried to give good service, you'd pick the first person you could see available, and send them, whether they'd do anything about that particular Building system or not. And, similarly, electrical, although to a much lesser degree. I think we'd have to agree that the most complaints around the institution would come in the area of environmental control --

VS: Being cold.

SI: Right.

WD: -- as opposed to no electricity, or a bad plug, or something. That was a workable situation. So that Vicky and her people arranged that we would work in teams, and divide the campus into areas. I think at first, four -- A, B C, and D.

VS: Right. A, B, C, and D.

WD: And then we would have a team of people that would work in that area, basically, all the time, so that if you had a little heating problem, you'd probably get a person that

you knew, or had seen before, and if you were lucky, perhaps even somebody that had solved the problem before, and it might have re-occurred for some reason. And we had a team supervisor, and some Heat and Vent employees, and --

VS: We put a plumber in every team, initially.

WD: A plumber, yes. A plumber in every team.

VS: And an electrician.

WD: And an electrician, so that I think -- I think it worked pretty well. It worked better where you had the better supervisor, frankly, I believe. And of course, times have changed. The Institute has grown larger. I'm not sure whether we still operate in this fashion or not, and Vicky could probably tell me that.

VS: Yes. The initial design was a hybrid, [because we had] a series of zones -- A through D -- and about half of the staff was in zones. The other half were in a central organization. So it was a hybrid.

WD: Right.

VS: It wasn't fully centralized; it wasn't fully zoned. The idea was that the smaller work would be done in the zones, and the larger system work would be done out of Central. And that was the concept of the design, which is pretty complicated. It's a pretty complicated thing to manage, and I think what happened over time -- and Steve, you probably know more about it than I do at this point, but I think what happened over the time, as we saw our staff diminishing, and remember we created those maintenance mechanic positions -- that's a whole other topic --

WD: Right.

VS: -- but was we had fewer and fewer -- less budget, and fewer employees, what happened is the zones became smaller, Central became larger again, and I think that's the way it is right now. The zones still function, but they do less work than we originally envisioned them doing.

WD: Of course, I think that brings up a good point because once you make a change, that doesn't mean that that's the way you're going to go for the rest of your life, and some of these things have to be reviewed from time to time. I'm sure we're not going to install another Office of Lab Supplies or another Graphic Arts. But in something as touchy as this, there are some people that are very centrally-oriented, that would say,

oh, let's get away with the zones and go back to a fully central organization. All I can advise them is that it really doesn't work very well. You have to have people that are familiar with the territory and the people.

SI: I think if anything, it's going to get built on -- that model of the zone management, that at some point I could imagine where the Campus Police, and Facilities, and Environmental Health & Safety all operate together out of a zone office.

VS: And that's the idea.

SI: Yes. And I think that it still --

VS: Go where you were going.

SI: -- I think that still is the hope that we get to that.

WD: Well, that's a good possibility.

SI: And certainly it's being more or less tried out, and [stayed there], more or less.

VS: More or less.

SI: Yes.

VS: Not to the degree that I'd like, though. I think the other pertinent thing when you talk about Physical Plant is that the reengineering effort eliminated 65 union positions -- [bargaining unit] positions. So while this sounds as if it just happened, and it happened easily, it was far from easy because eliminating that many positions in a union environment is not the easiest thing in the world to do.

WD: However, it was done without --

VS: Yes. It [inaudible words].

WD: -- disruption of work or anything.

VS: Um hmm.

WD: I think, obviously, to the highest degree possible, we tried to take advantage of retirements, and --

VS: Vacancies? Um hmm.

WD: -- open positions. But that didn't do it all. And we did have to make some substantial changes. Two other areas in the Building Service area -- again, rather than having a person assigned to do floors six through twelve in the Green Building, we went into a team concept, where I think the leaders of the teams rotated and were actually custodians, and I know that -- I happen to know one of the custodians fairly well. I

often talk with him to this day, and I know it worked reasonably well for the most part. I asked him just the other day whether it was still the team concept and he speaks Portuguese for the main part, and --

END OF SIDE ONE

SIDE TWO

VS: And we never realized the goal of having the keys -- performance management. We never got the HR system to enable us to put any pay at risk or to put some teeth into the teams.

WD: Yes.

VS: And I think that -- in my estimation -- the biggest failing.

WD: Do they still work within team [kinds]?

VS: They still work within the teams, but there's not a lot of initiative to do anything more, or to do anything better. There's no sense of self-worth. And the idea was always to have a little bit of pay at risk to do things like have Team of the Month -- you know, to really force people to think over and beyond; to do better and better. That just didn't -- that never came about.

WD: I guess we also finally attacked the Grounds --

VS: Yes, yes.

WD: -- area, and went again in the assignment of areas.

VS: Yes, um hmm.

WD: And I haven't the slightest idea how that's working now.

VS: Well, it got stopped, as well, because part of the idea of the [long-term design] was to change the classifications so that you would have someone come in, as a grounds person, and then we wanted things like step-pay; so in other words, people could work their way up into the system, to make more money, to become gardeners, or whatever. And none of that was realized, again, because we were unable to change the HR system.

WD: I see.

VS: I would say Grounds was the least successful of them.

WD: I've got two other areas that I want to cover: One of them was Student Services. Do you recall, we had a Bursar's Office and a Registrar's Office and what other kind of office, Steve?

SI: Student Financial Aid.

WD: Oh, Financial Aid. A big one. And we put a team together to try and streamline that whole operation, and I believe Steve was on that team, and so I'd like to have him talk about what we were able to accomplish, what we weren't able to accomplish, and whether there's things we still ought to do?

SI: I think the biggest accomplishment was that students interested to deal with their issues of student registration and get their bursar bill figured out right, and get whatever support and help they needed from the financial aid officers had to go from one end of the campus to the other, and --

WD: Right.

SI: -- there were three separate offices, and you had to sort of -- you could get your physical requirement fulfilled by getting back and forth among all these offices. And we thought, first of all, that they ought to all be in the same place, at least from a service standpoint -- you know, if you're thinking about how you're providing service to the student population. And Jim Bruce, God bless him, made the decision -- I'm sure in consultation with you, Bill, and others, but that we would use the Building 11 -- what was then an Athena cluster -- as the space --

WD: Yes.

SI: -- which caused all kinds of hue and cry across the campus because we were giving this iconic cluster, but I think we prevailed because we said it was -- we'd get another cluster, which we ended up doing in 12.

WD: Right.

SI: And that we'd be providing a lot of service. Anyway, the concept was that Bursar, Registrar, and Financial Aid, in terms of the front desk, customer service interface, I guess, was our buzzword at the time -- that interface should be the same for a student, regardless of whether their question was a financial aid question, a bursar question, or a registrar question. And the model was that we were going to -- we were going to

cross-train all three of these staffs of this operation, and we'd give them opportunities for more interesting work, and certainly mobility if they wanted to leave MIT, they were trained, and that we had much more efficiency in terms of the customer interface.

WD: Well, let me interrupt.

SI: Sure.

WD: Did you put the student pictures down there, too?

SI: For a while, that's right, we did. And we have since moved them. But we had an outpost for the student ID pictures.

VS: I'd forgotten that.

SI: I had too.

WD: It was up in the left-hand corner.

SI: You're absolutely right. [Laughter.] That's all back now centralized over in E32. And now with digital photography, we actually import student pictures from their own -- from the freshman picture book, and it gets actually imported to the database in the card office, and when a student shows up on campus and checks into their residence hall, because it's a legal document, we have to validate that they are who they say they are -- the house manager of the residence hall checks their other identification, typically a license, and they get their student ID as soon as they check in.

WD: Good.

SI: Anyway --

WD: And I interrupted you.

SI: Anyway, we were successful in renovating Building 11. It was beautiful.

VS: It's still beautiful.

SI: A beautiful student services center --

VS: Oh, thanks.

SI: -- and consolidated all those office, and --

VS: It's a very public space, I might add. It really [does things].

SI: Central -- central and public, and it was a huge success. Students just loved it. Of course, the second year, the incoming students always assumed it was there. Right?

They didn't know that it had been all over the place, but the cross-training and the melding of the offices of Registrar, Bursar, and Financial Aid never really totally stuck. First of all, the Registrar wasn't all that interested in this model, and there was almost open opposition to it. Financial Aid and Bursar were much more aligned, and still are to this day in terms of student financial services. And so that did stick. But in the final analysis at this point, they are back, really, in separate operations, even though they're co-located.

WD: Didn't we move the Registrar and Financial Aid and the Bursar to Building 11?

SI: We did.

WD: So that the backup offices, or the -- are in Building 11, also?

SI: Right. And at this point now, the Registrar is now back in 5, mostly.

VS: Yes. And of course, when you look at that -- there are so many operations which are back at the house operations, and they're now sitting in really prime real estate. I mean, we moved them, but it's not working the way --

WD: That's why we built the Ford Building to move all of those people out of the main group.

VS: That's right.

SI: Right.

VS: That's exactly right.

SI: But in terms of the customer, what the customer experiences as an individual walking into Student Affairs, it's still very much there. And of course the biggest part of all that was it enabled us to develop WebSIS, which is a student Web interface for all those interactions, and that works marvelously. So most of the student interactions around checking their bursar bill; about their parents putting money on the bill from their credit card; about checking their grants in progress; about online checking their registration, and progress -- degree progress; all that is done on the Web now.

WD: That's terrific.

SI: It can be done on it. So I think that was -- aside from the co-location and the symbol that it represents in terms of student service, and the fact that a customer can walk up and still get what they need to get done in one place, and the wonderful Web interface

that now is available to students -- there were huge, huge changes that were very positive.

WD: Great. Can you -- did we have to reduce any staff when we did all this?

VS: [Inaudible words], Steve?

SI: I have no memory of that, whatsoever.

VS: I do. I do.

SI: We were supposed to but didn't?

VS: You've got to remember by that time, there's a new -- we consolidated -- you've got a short memory.

SI: I try to forget.

VS: But at that point, we had consolidated the Dean of Students and Dean for Student Affair positions.

SI: That's right. That was the other big recommendation.

VS: Along with -- right, so the consolidation happened, and the original plan suggested there was going to be a reduction. I remember this; unfortunately, I remember these things -- that there was going to be a reduction of 20 or 22 people in that group. But then at that point -- you also have to understand, we are now three-four years into reengineering. If it started in '93 -- you and Jim were talking in '93. [Break.] We started the process in '94.

WD: Is it off?

SI: No. It's just misbehaving.

VS: The process of Student Life, and that reengineering effort, and then there was some hangers-on, like Grounds, or whatever -- that was happening about three years later.

WD: Yes.

VS: So -- and you also had this SAP being integrated.

WD: Right.

VS: And people yelling and screaming about that. So that whole -- [Break.] -- end of the road. And -- are we off or on?

SI: We're on, but the tape is sticking just a little bit.

VS: Okay. So that never happened.

WD: Can anybody tell me how the electronic catalog finally came out? That was one of those things that they never could seem to finish. [Break.]

VS: -- [happening] in the background, that really, we're preventing people from being as aggressive as they might have.

WD: I actually had a different opinion of sort of why --

SI: I think we cannot tape anymore.

WD: Okay.

[End of interview]