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Supporting Information Technology at Emory University

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I. Background

More than twenty years ago, Emory University created a fledgling computing center to support the growing needs of computing-intensive departments across the institution. Within a few years, the newly named Emory University Computing Center (EUCC) was supporting the mission-critical administrative jobs, such as registration and payroll, and the academic needs for statistical and time-sharing computing at a rapidly growing university.

By 1989, the increasing need for desktop support and the desire to integrate voice, video, and data technologies became the driving factors in Emory's creating the position of Vice Provost for Information Technology and molding EUCC into the new Information Technology Division (ITD). In the early 1990s under the direction of the new Vice Provost, ITD began studying and implementing a Total Quality program. As part of that effort, staff from senior management to data center operators were trained in facilitation methods, customer service, and decision-making. Task forces and working groups across ITD were formed and began using the principles of focusing on the customer, making decisions based on data, creating a team environment, and striving to continuously improve. The practice of listening to the customer became a priority; no longer was ITD willing to act as the sole center of computing expertise at Emory. Slowly ITD was being transformed from a hierarchical to a flatter organization, with more self-directed teams of employees. Although this new-found flexibility to customer requests improved the quality of service, it was not enough to keep up with the number of requests for computer solutions -- Emory had become a community of 25,000 computer users.

Rapid growth was now a fact of life. In just a few years, the campus had moved from a centralized, mainframe-based computing organization to one that supported a variety of desktops, network connectivity, and software. The explosive distribution of computing technology across campus was straining ITD's ability to provide central support -- backlogs for hardware repair, software installation, and consulting were reaching two weeks or more. Campus-wide surveys that analyzed the state of support for desktop and departmental computing told the tale: customer satisfaction with ITD was dropping, and in many instances, departments had hired their own "computer experts." Although this departmental expertise varied widely, it had become apparent that ITD's role in supporting office systems had changed forever.

In some cases, ITD employees feared this loss of central control and the possible loss of their jobs. Would the existence of local support mean the dissolution of a central computing organization? What was ITD's role in a campus of more independent and
more knowledgeable users? How would ITD meet these challenges?

II. Reorganizations

These questions and concerns culminated in a division-wide reorganization in January of 1995. In a presentation to the entire staff, the Vice Provost articulated his vision of a new and more responsive organization. Among the reasons for reorganization were the overwhelming demands for service and the need to support those persons in their departments who provide front-line computing support. In other words, local support personnel were to be our colleagues and not to be seen as threats to central computing. Part of achieving these strategic goals was the creation of the Indirect Support Team.

The initial charge of the three-member Indirect Support Team was to put processes and procedures in place that would help local support staff be successful and computing users on campus become more self-sufficient. During the three years of this Team's existence, their goals and accomplishments were many. Ranging from the startup and facilitation of several user groups and hosting four half-day conferences for more than 150 participants to working with local support on salary and job description issues, the Indirect Support Team were major participants in changing the atmosphere of ITD and computing at Emory to reflect the new, shared partnership among computing professionals across campus.

Like many university IT organizations, the Information Technology Division was pressured to reorganize yet again. Beginning in March of 1996 a "Design Team" of thirteen ITD staff worked full-time with the Miller-Howard Consulting firm for seven months to redesign not only the structural organization of the Division, but take a hard look at the actual work: what should be outsourced, redeployed, added, or even removed from ITD's "portfolio" of products and services.

A major change in the new organization was the creation of four "core" teams: the Computing Support Center, a consolidated helpdesk, training center, and customer relations point; Teaching & Research, devoted to the needs of faculty and researchers; Learning Technologies, designed to enhance student computing and Emory's learning environment; and Administrative Services, responsible for the computing needs of Emory's administrative staff.

Each of these core teams is charged with keeping their particular group of customers informed about their work, new technologies, and better ways to use information technology to enhance their "business," whether that business is teaching, learning, researching, accounting, or facilities management.

In addition, the new redesign called for the dissolution of the Indirect Support Team - not because it had failed, but, in fact, the opposite. It was recognized that there was a need to disseminate the work and involve more than just three staff members in maintaining the collegiality between ITD and local support. In the fall of 1997, the Local Support Networking Team began its work. Comprised of eight staff from all of ITD's newly-formed teams, this Team would not be the full-time "home" of the staff, but rather a forum for these staff to share information, assure consistency in ITD's
dealings with local support, and make continued recommendations about working with local support to enhance information technology at Emory.

Starting with basically the same vision and mission as the Indirect Support Team, this new Team was faced with a difficult, time-consuming, and very public transition process. Several areas of work had already been defined by the Indirect Support Team and these areas would now be the responsibility of the new Team.

A major part of the transition has been to answer these questions: What were the areas of work already defined by the Indirect Support Team? What had the Indirect Support Team tried to accomplish? As we continue the success of the team into the new organization we will strive to answer these questions: How successful has the Local Support Networking Team been in their new roles? What impact does ITD’s new organization have on its partnership with local support?

III. The Indirect Support Team: Mission and Transition

The first activities of the Indirect Support Team had been identifying and then documenting all the staff at Emory who defined themselves as local computing support for their departments. Surprisingly, they found nearly sixty campus units already had such staff. In many cases, these people had not been hired as computing experts, but rather had been “assigned” computing support tasks. A WWW-accessible database was created that included information about these local support, their computing environment and their areas of expertise. This database also populated a listserv distribution list that served as a forum for local support staff to share information on current problems and ask questions of their colleagues.

After identifying the names and numbers of local support personnel across the Emory campus, the Indirect Support Team turned toward building a community of local support personnel with an eye toward the central goal of improving communication. The Team decided that the focus in building a community or communities of users would be establishing user groups, which might be user groups that actually meet face-to-face, electronic user groups that only “meet” in e-mail conversations, or special interest groups that meet infrequently.

By the end of their tenure, several user groups were meeting and successfully functioning, including:

- Emory Apple Community
- Emory Digital Users Group
- Emory Computer Lab Managers Group
- Emory Data Warehouse Users Group
- Emory LAN Administrators (ELANA)
- UNIX System Administrators Group at Emory (USAGE)
- Emory Windows NT User Group
- Emory WWW Developers Group
The largest and most public means of informing local support personnel was the semi-annual conference hosted by the Indirect Support Team. These conferences generally attracted 100-150 participants, began with a luncheon and presentations by keynote speakers such as the University President, University Provost, and the Vice Provost for Information Technology, and then participants would attend several presentations during the remainder of the afternoon.

The Indirect Support Team worked to empower the local support community by acting as an advocate for local support with regard to ITD procedures and policy issues. They helped to focus the voice of local support personnel and thus gain it significant influence throughout ITD. The primary means of doing this was the creation of the Technical Advisory Committee (TAC). Comprised of the managers of the large-scale distributed computing environments on campus (professional schools, libraries, research centers, and affiliates), they met monthly with ITD senior staff to discuss high-level policy issues as well as ways of integrating services and cooperating on projects.

In early 1995, not every department or organization was in a position to hire local support staff and quite often these units didn’t see why they should be spending money on something that they thought should be provided free of charge by the central computing organization. For those departments, however, that expressed an interest in establishing local support, the Indirect Support Team worked closely with them and Emory’s Human Resources Division in identifying job requirements, choosing appropriate job titles and grades, and, finally, interviewing likely candidates.

As a direct result of this work, the total local support community at Emory grew to nearly 120 people. Included in this number are the local support staff in the Emory College that were hired by ITD to support faculty in Emory’s undergraduate College. Although these local support people formally report to ITD, they are in practice the responsibility of a partnership among ITD, Woodruff Library, and Emory College: ITD provides the salaries, the Library provides a staff person to work with faculty on electronic information resources, the College provides office space, and all three entities participate in the evaluations of the local support person’s performance. In addition, ITD also manages close to 25 students that live in the residence halls and support the ethernet connections and information technology needs of Emory’s residential students. While these students are not full-time staff, they can still be considered "local" computing support for an important group of ITD’s customers.

IV. The Local Support Networking Team and 4 Core Teams: Continuing success

The Local Support Networking Team had a few critical areas of defined success to transition into its new group and are still working to define goals and continue the success of the former goals of the Indirect Support Team. Since the user groups that were facilitated by the Indirect Support Team were continuing to meet and grow the first mission of the Local Support Networking Team was to continue these meetings with a smooth transition. The Local Support Networking Team has been quite successful in the transition and the facilitation of Emory’s user groups. In many instances, members of the Indirect Support Team had allowed a user group to rely
upon the Team member for program ideas and meeting facilitation. With a new Team in place, the overall goal of having user groups maintained and grown by the users themselves more likely, and there will probably be at least one or two new user groups formed in the first year of the Networking Team's existence formed from the cooperation with the new core teams and their dedication to their customer groups.

Another hallmark event sponsored by the Indirect Support Team was the biannual Local Support Conference. After only a few weeks on the job, members of the Networking Team hosted their first conference with only limited help from the ex-Indirect Support Team. The conference was a great success and the added numbers of the Networking Team meant that they didn't have to rely upon other staff volunteers to help with logistics and support during the conference.

However, there is still room for improvement in the transition. Areas that have not been identified as top priorities of the new Local Support Networking Team are the local support databases and the listserv distribution list. After three years, the community of local support has become rather stable in numbers and is recognized as a legitimate and professional community by ITD staff. Perhaps a sense of urgency is now missing and this explains why the Local Support Networking Team has not been eager in attacking the maintenance of these areas. As of the time of this writing, ex-members of the Indirect Support Team are still doing the maintenance on this database and the Networking Team has not yet taken over the responsibility of maintenance nor the job of proactively seeking out and documenting new hires in the campus community. The distribution list is, however, still used to inform the Emory local support community about ITD news and activities that may affect them. In addition, ITD's four core teams have assumed a major part of the responsibility of communication with their individual customer groups, enhancing, and in some cases, superseding the work of the Local Support Networking Team.

The empowerment of local support has become an effort of ITD's core teams by involving them in project teams, decision-making, and the strategic planning activities of the Information Technology Division. While the Local Support Networking Team may be willing and able to help in these areas, it is no longer a major effort of theirs.

V. Next Steps: Continuous Improvement

The next steps for the Local Support Networking Team now fall into five categories:

1. Repair

This applies to the aspects of Emory's effort which have fallen by the wayside as the Local Support Networking Team made the transition from the smaller, full-time efforts of the Indirect Support Team. First among these is to resume the proactive efforts in identifying and including local support staff. They should not have to come to ITD, but vice versa. ITD should welcome them to the computer support community and familiarize them with the resources available to them from the rest of the local support community and from the central IT organization. In addition, ITD must reconnect local support's lines of communication with the central...
organization, by informing them of what is going on, what is coming up, and what is being discussed in ITD.

These informing and explaining roles, critical to the feeling of involvement for the 150+ local support staff, were casualties of the transition to a team of coordinators, none of whom served as the single point of contact and communication for a segment of the local support population. The solution likely lies in the involvement of the members of ITD who provide desktop support on a regular basis, who are quite likely the natural first point of contact with ITD. In this fashion, ITD would be expanding the intersection of local support with the central organization from 3 people in the past to 8 people in the present to 16 people in the future.

2. Maintenance

Some aspects have fared well in the transition to the Local Support Networking Team, including the roles of building and growing the local support community. The user groups continue to be popular and the conferences still draw a wide segment of the local support audience — local support's involvement with both has only increased.

3. Development

One aspect of growing the local support community received a shot-in-the-arm when the university administration, in an attempt to better align its salaries with the marketplace, considered not only the salaries of ITD and Healthcare IS staff, but all of Emory's IT employees including local support in the academic and administrative departments. That this was done without stiff resistance from Human Resources or resentment from staff of the central organizations, was a clear signal that local support had arrived and been accepted at Emory.

Training is one aspect of the work of the Indirect Support Team which was unfinished business. As might be expected, the range of expertise in the local support community is considerable. It varies from highly trained, highly skilled staff, knowledgeable in the substance of the work of the people they support, to those who are reluctant, intimidated, and without a clue as to how they might resolve a wide variety of support issues.

ITD can add a great deal of value to the support community and the university as a whole by providing the training and professional development needed as part of a larger development and, perhaps, certification program for those people on the support frontline.

On the flipside, there is value to be added by working with the various departments to establish realistic expectations of what local support will be able to do and how many workstations they will be able to do it for. Unfortunately, in addition to the problem of lack of expertise in some local support personnel, there is, at the other end, a problem of the competent being over-extended.
4. **Involvement**

The distribution and involvement of people in the local support community in their community's health and well-being is a major goal of the Local Support Networking Team. The appointment of local support to ITD's Year 2000 Desktop Project Team is an example of this level of involvement. They will help develop the plan for assuring Y2K compliance of desktops and will be the direct beneficiaries of desktop disaster prevention. Their involvement in the user groups, conference, and the Local Support Networking Team itself should all be increased.

5. **Management**

Finally, improved management comes to play in two ways. First is the establishment of clear short and longer term goals for the Local Support Program. Heretofore, creating the community was paramount and any sign of interest of participation furthered that goal, while disinterest was a threat to the vitality of the program. In this second phase, with the community already in existence and showing signs of flourishing, there are a variety of possible, critical directions to take the program. As the rest of the central IT organization concentrates on goals and the measures to meet those goals, the Local Support Networking Team will need a means of assessing its progress as well.

The second element of better management is periodically revisiting the larger questions of providing support. What is the appropriate mix of distributed, local support staff; centralized desktop experts; and traditional HelpDesk personnel? Where are the appropriate boundaries among these groups, and between them and network experts?

We have no pretense of having answers to these questions at this time, but we do know that answering them well will determine the future success of Emory's local support program and Emory's attempts to support its 25,000 technology users.