

**School of Computer Science
Course 15-391**

Spring 2006

Final Consulting Report

**Central New Development
Corporation**

Conrad Woodring

Central New Development Corporation

Executive Summary

Student Consultant, Conrad Woodring
Community Partner, Bruce Powers

CNDC is a non-profit organization located in the Hill District. Their mission is: "To provide charitable economic, social and educational services to the Hill District community." The key program that I worked with was CNDC's Centre Stars. This program is a small-business incubator for entrepreneurs interested in starting a business in the Hill District. Centre Stars was started shortly after Bruce Powers became the executive director of the corporation this past November. Bruce has started his own business, done various non-profit and volunteer work, worked as an executive for Cisco, worked as a consultant for Adobe and more. He is a very highly skilled person. Bruce, like Centre Stars, has only been part of CNDC for a few months.

My work at CNDC was focused almost entirely on Centre Stars. While I gave Bruce advice and acted as a backboard for his ideas on other things, my main work was in expanding the capacity of Centre Stars. This was accomplished through two different tasks.

The first task was creating a file server for the Centre Stars participants. This was done using the help of two other CMU students with very advanced skills on Linux-based systems. An unused computer at CNDC was upgraded with more storage space, and converted over to a Linux-based system. Separate accounts with separate space quotas were setup for each of the users that Bruce identified as having need of file server space.

Before the creation of the file server, CNDC had to save files to a portable storage medium (either DVD-R, CD-R or a flash drive) in order to move files to another computer with the needed software. Now, with the file server, Centre Stars members can simply store their files on the server and access them from anywhere, not just while they are at Centre Stars. An unintended consequence of creating the file server that we only realized after the fact is that now entrepreneurs can access their files from an offsite location. Since Centre Stars cannot be open 24/7, this may play an important role in the future (although it has not yet been observed).

Centre Stars is essentially brand new, there was no plan outlining how exactly Centre Stars would operate. Thus, the second task was to develop this plan. Things like what services would be offered, for how long would they be offered, who would be needed to offer special services and what criteria must be met to join Centre Stars were essentially open questions. The plan that we created answered many of those questions. It outlines what someone would have to do to enter Centre Stars, and what would be expected of them while they were in Centre Stars. Descriptions of each service and how it would work were covered. I had originally planned to setup a business-mentoring program, with volunteers from another non-profit in Pittsburgh, and an evaluation board composed of a few members of CNDC's board of directors, but due to time

constraints the partnership ended before that could be done and those two bodies rest as recommendations for the future.

At the beginning of the consulting partnership, a plan had been in place to setup a web server to host the websites of all of CNDC's startup companies. However, investigation into web hosting costs revealed an excellent service at extremely low prices. Thus, instead of creating a web server, I have merely pointed CNDC in the direction of a fantastic service.

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I. About the Organization

Organization

CNDC is a non-profit organization located in the Hill District. Their mission is: “To provide charitable economic, social and educational services to the Hill District community.”

Reverend Victor J Grigsby of the Central Baptist Church of Pittsburgh created CNDC and is currently its CEO and president. Grigsby created the organization along with other members of the church in 2001 and officially incorporated in May of 2003. Although it is an independent organization, CNDC still has strong ties with the church. The church owns CNDC’s office space and members of its board of directors are also members of the church.

Until about a year ago, the organization was completely exhausted from the construction of a new building, called the victory Victory Centre (completed February 2004), according to current executive director, Bruce Powers. There was not much of a long-term plan as all of the organizations resources and attention had been put into finishing the Victory Centre. Bruce, who became executive director in November of 2005, is trying to revive the organization by giving it a solid long-term strategy and raising the necessary funds.

Facilities

CNDC has its office space in the basement of the church. They have a community computer center and one office in the church, both of which have an internet connection either via Ethernet, or via the wireless network they have set up there. The organization’s ISP is Wireless Neighborhoods, an organization that specializes in providing service to other NPOs.

Across the street, they own a newly renovated building (The Victory Center) that they intend to move minority owned businesses into, as part of their strategy for redevelopment. Two of the three floors of the building are occupied. Their *Centre Stars* program operates out of the top of that building. Until recently there was no Internet connection in this building.

Programs

The Centre Stars program is designed to train local people interested in being entrepreneurs in some technical business. There are classes two times a week (Tuesday and Sunday evenings), run by either Bruce himself, one of the board members (Dr Brown), or a volunteer from one of

the local business leaders. The program also provides space and computers for the businesses to operate in.

The goal of the program is to spur economic development in the area. By getting new businesses to move in, and commit to operating out of the Hill District, they hope to turn the Hill around. Tech based businesses have the advantage of having very low operating costs, and often need few personnel.

CNDC currently has one group of individuals they are training through the Centre Stars program that acts as their test group. It consists of young people between the ages of 16 and 26 that have an interest in technology. They all are members of Central Baptist Church.

CNDC also has the Victory Center and other construction projects. They are currently planning to renovate other buildings in the area and turn them into offices for various social services, a community center, an arts center with a theatre, and offices for local businesses and medical services. They currently do not have the money to do all these things, and are fundraising for them, but the hope is that by renovating the area, and giving the space away in exchange for part ownership of the various businesses and programs, the CNDC can maintain a position of strong leadership in the community as well as eventually being able to support itself financially.

As stated before the Victory Centre houses the Centre Stars program, and has a business moving into its ground floor. The second floor is currently empty.

Staff

The organization consists of six employees, only one of who is a full time employee – executive director Bruce Powers. The others are either volunteers or paid as part-time employees. There are members of the board of directors that take active roles and offer their expertise when it is needed, but are currently stretched a bit thin, according to Bruce. CNDC is planning to add a few new board members.

Bruce does mostly everything. One of the board members, Dr Brown, who has a lot of technical skills, acts as somewhat of an ‘accidental techie.’ Brown works mostly with the Bruce in the Centre Stars program showing people how to do various things, and setting up equipment (with Bruce) when needed.

There is also a part-time volunteer of the Centre Stars program, Jim Gibs, who is very well technically versed (he was brought in specifically for his technical skills). Jim and Dr Brown help out with making decisions relating to the technical environment (including purchasing equipment), but there is no formal process for decision-making. Bruce is currently planning to use Jim to develop a website for CNDC as well as creating any necessary dynamic web content for businesses in the centre stars program.

Fortunately, Bruce has a lot of technical experience. He has 15 years of experience working for Loral Space systems, and some experience at Cisco.

Technical Environment

In the Centre Stars program office, there are four new dell computers, which connect using CNDC's wireless network. They use external wireless cards that were donated to them by Linksys. They have plenty of new equipment and software there that are essential to the various businesses that use that space. Each station is set up a little differently. One stations is setup with lots of sound editing software, headphones and a microphone. Another station is setup with lots of video editing software, a third with many office applications. Because of this, data often has to be moved from one computer to another, as different software may be needed to work on different projects.

Also at Centre Stars they have a high-speed dell laser printer. This printer however is connected to only one computer and is not shared.

In the main office, they have a community-computing center with eight older computers (Pentium IIs), all of which are connected to the Internet via an Ethernet connection to a router. The executive director has a computer and a printer in his office and is connected using the wireless network in the church.

There is Compaq computer, which is not being used at all. It is quite new and runs well. It has a 1.5 GHz Pentium 4, with 256 MB Ram and a 20 GB hard drive. It currently runs Windows XP.

The current Internet connection they have is via an antenna on the roof that was set up by Wireless Neighborhoods. It connects with several other organizations in the Hill District and is slow from what has been observed (it's rated as a 125 kb/s connection).

Technology Management

Bruce does pretty much everything. Bruce and Dr Brown handle all routine operations like installing new peripherals, installing new software and updating software. If a problem arises, Bruce fixes it the best he can. In the event that he cannot fix it, he has Jim do it. However, there is no formal process for handling problems, nor is there a formal process for doing updates.

Technology Planning

Until recently, CNDC had no technology plan. As a result, they recently completed construction on the Victory Centre without wiring the building. Now however, Bruce is trying to turn that around. He has recently implemented the Centre Stars program. They also are planning to upgrade the computer systems in the community computing center as well as getting Internet in the Victory Centre.

Bruce also plans to eventually set up a database for all of CNDC's files as well as having their own website so that they can get their message out more effectively. Right now, the CNDC only has a small blurb on the church's website. Furthermore, they plan to build a server to support the businesses they start through centre stars. They want to be able to provide web hosting, an email server and file space for them. They also plan to help them to create their websites.

Internal and External Communications

Currently, the CNDC has very basic communications. Most of their computers are connected to the Internet, and they have a phone system, but beyond that, they have nothing. They don't use a server to keep track of shared documents, and although all their computers go through the same router, they don't use their network for anything other than connecting to the Internet. In other words, their internal communications consist of mostly face-to-face meetings and phone conversations. This is sufficient at the moment because the organization is so small, but things will have to change as the organization grows by adding new programs.

Since it is for the most part just Bruce doing everything, a simple email system may be sufficient for now. As the organization grows and gets its various programs and businesses started, a better method may have to be used.

Information Management

All files for the CNDC are kept on Bruce's computer in a disorganized filing system. Most records are simply kept on paper, including valuable records about donations and expenditures. They have no file server or central archive. Files important to the organization are kept on the computer of the executive director and are not backed up. Files belonging to members of the centre stars program are simply kept on the computers they were created on, or burned to DVDs if they need to work on the file at a different work station.

II. Major Consulting Tasks

Task I: Centre Stars plan

At the beginning of the consulting partnership Centre Stars was still in its infantile stages. Even now it is still a very young program. It has been running only a few months and is only just getting its first businesses going. Because of this, CNDC had been making up a lot as it has been going along. Questions have been coming about like; “what kind of services do we give to these businesses we are incubating? For how long do we give these services?” In other words, what kind of support will CNDC be giving the companies it starts?

Criteria for how one enters the Centre Stars program, how a business graduates from it, and when a business should be kicked out of the program was needed. Who would be evaluating the businesses for these various criteria and how often they should be examined, is also addressed in the plan.

A specific written document stating what services are provided to businesses in the program was needed. Things like space, utilities, computer hardware, computer software, internet connection (including speed), phone, postal management, financial advice, business training, legal advice, fee structure, fax services, aid with capturing funds... and the list can go on.

The document answers all of these questions. The original plan for this task included creating a similar document for potential entrepreneurs to read. This document would be a kind of brochure advertising the programs services, expectations and structure. However, time ran out and the document for CNDC was created but not the document for those interested in Centre Stars.

This plan not only gives CNDC a written document of what they should be providing, and how to evaluate businesses in the program, but it also lets businesses looking at the program know what to expect. This will help CNDC better match up with the right kind of potential businesses. Entrepreneurs can see what the is expected of them and know

Part of the sustainability of this document is that a lot of it came from Bruce. Bruce had thought of many of these questions and dealt with them in the past on a case-by-case basis, but he had not typed an outline up of how things should run. He just made on the spot decisions.

The sustainability of this document is at risk because of the programs youth. Things are changing rapidly in the organization and a lot is still being found out through trial and error. Since Centre Stars still has a long way to go before it becomes what Bruce and CNDC’s board envision it will be, there is a risk that the outline here will not be useful after some amount of time. However, with Bruce’s experience, he will be able to make necessary changes in the future, as he discovers what things don’t work, and sees opportunities to make things work better. Thus, for this document to be sustainable, it will have to be flexible.

Task II: File server

CNDC currently has its first business really getting off the ground through the Centre Stars program.

Part of the answer to the questions raised in the *Task I* is having a secure place for CNDC and its various programs, as well as the businesses in the Centre Stars program, to store their important files. Not only does this provide a safe place to store important files, but it makes it easier for people when they need to switch files to a different computer to use the other computers special hardware or software.

A second advantage to the file server comes from the fact that not all of the computers are set up in exactly the same way. Each computer has specific software and hardware unique to that computer. In the event that software from two different computers is needed for various stages of a business' project, the file server helps them more easily move the files to the other computer.

There were several basic steps to creating the server. First of all, CNDC had a computer gathering dust in storage that was used. It is a new Compaq computer that was donated to them recently. It didn't have a very big hard drive, so it was decided that it should be upgraded with two new 250 GB hard drives. Holt Wilkins and Phil Lawson, two CMU students with strong computer skills, did the setting up of the software for the server. The following goals were created and accomplished:

1. Erased windows and install Linux. Linux was chosen because Phil and Holt's expertise is on Linux based systems.
2. Connected the server to the network using one of the external wireless cards that Linksys donated.
3. Installed two new 250 GB hard drives in the computer. The two hard drive system is used to set up a RAID system in case a hard drive fails.
4. Set up the computer as a file server. Accounts each with its own quota were created using the Linux administrator account.
5. Installed a user-friendly SSH client on all of CNDC's computers so that the file server can be easily accessed from any of the computers.
6. Set up the printer so that any computer on the network can print to it via the server.

III. Results of Consulting Work

Task I: Centre Stars Plan:

Outcomes:

A written plan for how the Centre Stars Program operates has been created. The plan describes the entrance criteria for businesses wishing to take part in the program, the criteria for leaving the program and going alone (graduation criteria) and the criteria for removing a business from the program because it has failed. Secondly, it lists what services the program will provide and how it will provide certain ones. Finally, the plan details out the evaluation process of the program and how it will go about providing various services.

At the beginning of the semester Centre Stars was in its infantile stages. The program began operating when Bruce arrived in November and is slowly increasing in size. Basically, Bruce has been figuring things out as the program moves along. He has been acting mostly on his thoughts about each member's work in the program.

Bruce assisted in creating the plan by answering the key questions that he had already answered before I brought them up (questions like who will offer legal and financial advice to the entrepreneurs?). Unfortunately due to some problems at CNDC, Bruce and I did not have time to go over the plan and work closely to create it together. A good part was done without the input of Bruce and then presented to him towards the end of the partnership. Bruce was almost surprised by the plan. For him, it offered an approach to certain issues, or outlined better ways of doing things, that he had not thought about.

Having this document expands Centre Stars' capacity in several ways. First, it allows Centre Stars to better find people for the program. Both potential members and the Centre Stars Program can have a better idea of whether or not a given business is a right fit in the program. Furthermore, Centre Stars now has criteria for evaluating businesses in the program. This makes it possible for them to get rid of failing businesses, or give constructive feedback to a business that is floundering. Without a structured evaluation process, businesses could take advantage of Centre Stars for an extended period of time without accomplishing anything. Having a structured process for evaluating businesses streamlines the program allowing Centre Stars to not spend its limited resources on dead-end businesses, and pick out the ones that are heading for success.

The main risk to this document is that assumptions and criteria that were made in creating this document are wrong. Thus, for the purposes of sustainability, Bruce and the other volunteers involved in the program will have to be aware that this document is meant to be flexible. Not only must Centre Stars evaluate its members, but it also must re-evaluate itself from time to time. This document was created with several assumptions that may turn out to be incorrect or bad assumptions. Bruce and the other volunteers will have to keep this in mind as the program develops.

The second danger to the sustainability of this document is losing some of the volunteers who play important roles in the program as outlined in the document. A specific danger to the sustainability would be the loss of Jim, who plays a significant role.

Recommendations:

Organize a business-mentoring program

Seek local business leaders who are willing to volunteer their time in a sort of mentoring program for each business in the incubator. Having some sort of mentoring program where each business is given an experienced mentor who can help guide them with creating and following a business model.

Each company in Centre Stars would be assigned a mentor who would meet with them once a week. Mentors will help businesses develop their business plan and adhere to it during their time in Centre Stars. Mentors will give business advice to companies and be there for the companies to simply be a backboard to bounce ideas off of as well as providing general guidance.

CNDC can look to setup a partnership with one of the following groups to setup their mentoring program:

Pittsburgh Social Enterprise Accelerator – This organization works out of Pittsburgh providing help specifically to non-profits in the form of financial advice, helping secure funds and develop connections with key organizations.

Small business development centers (at UPitt or Duquesne) – Both of these programs run workshops on business basics and offer free counseling advice.

Urban League of Pittsburgh – The urban league is currently developing a similar incubation program.

Senior Core Of Retired Executives (SCORE) – This is a national organization of retired executives (hence the name). They specialize in giving free financial and business advice to entrepreneurs. They give counseling and run workshops. There is a SCORE office here in Pittsburgh, and they have already agreed to give financial advice. There is the potential to receive volunteers from here to participate in the mentoring program.

CMU MBA or undergraduate entrepreneurial clubs – These are two clubs run by students at Carnegie Mellon University. These two clubs do various entrepreneurial projects throughout the year and manage an entrepreneurial competition. There is a potential here to set get free help from one of these two clubs.

SCORE Pittsburgh 411 7 th Avenue	Phone: 412-395-6560 Email: info@scorepittsburgh.com Website: www.scorepittsburgh.com
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University of Pittsburgh Small Business Development Center Wesley W. Posvar Hall, 1st Floor Pittsburgh, PA 15260	Phone: 412-648-1542 Email: ieeinfo@katz.pitt.edu Website: 64.226.232.47/sbdc
The Urban League of Pittsburgh, Inc. One Smithfield Street, 3rd Floor Pittsburgh, PA 15222-2222	Phone: 412-227-4802 Email: NA Website: hungerservices.org
Pittsburgh Social Enterprise Accelerator 1224 East Carson Street Suite 300 Pittsburgh, PA 15203	Phone: 412-325-2202 Email: info@pghaccelerator.org Website: pghaccelerator.org
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One desktop per business

Provide each participant of the Centre Stars program with his or her own desktop computer. At the moment the computers are not strictly assigned to one company. As a result, people jump from computer to computer as they need various software that is only installed on one computer. They store their files wherever it may be convenient for them. One business in particular has been monopolizing the storage space.

It would be advantageous to CNDC to have one computer for each participant in the program. That computer should be setup with all the necessary software that the company needs or thinks it is going to need. The software can be obtained through CNDC's partnerships. Assigning a computer to one person puts some of the burden of responsibility on the business. Since it will be theirs to use, they will be responsible for keeping it operating properly, or seeking out help from Bruce or Jim should something go wrong. Furthermore, they will have to manage their storage space both on the computer and the file server effectively as it is a limited resource.

Upon graduating from the Centre Stars program, CNDC should give the company the option to buy the computer from them. Otherwise, CNDC will simply keep the computer and set it up for the next user. In the event that a company is asked to leave from Centre Stars, the computer will simply be setup for the next user.

This will solve the problem of companies having to share computer time, and having to move from station to station to use the software they need. Whatever they need, will always be at their dedicated workstation. They will also have to learn how to take care of the computer themselves, an important skill for when they graduate from the program.

Task I: File Server:

Outcomes:

A Linux file server has been created and set up on CNDC's network. Linux was chosen as the platform because of the skills of the outside help that was enlisted. KDE was used because its resemblance to Windows would be easier for Bruce and Jim to use. The operating system was compiled from source code and then the computer was upgraded with

Seven accounts have been setup on the file server by Phil, one for each business, with a quota set by CNDC based on the needs of each business. Each account had to be separately evaluated, and an estimate was made as to how much server space would be needed. The needs of future businesses will be determined by CNDC when the business enters Centre Stars based on their business plan. Jim is capable of changing quotas, creating accounts and deleting accounts.

Creating the file server for CNDC does a few things for CNDC. First of all, it creates a secure place for CNDC and any of the businesses in the Centre stars program to store their files. Since there are many people using the four computers in the Centre Stars office, it is important for each business using the computers to have their own file space. No one computer is exclusively for one person, so it is helpful to have file space so that when users cannot get the same computer as the previous time they were there, they can still access whatever they were working on.

An unintended outcome of creating a file server came about only after starting to think about the Centre Stars plan. As the businesses take off, they will need more and more time at Centre Stars using the computers there. It is not possible for CNDC to have people at Centre Stars all the time, or have someone around to open Centre Stars for the entrepreneurs. Because of security issues, CNDC is not willing to give out keys to Centre Stars members. Thus, the file server gives

entrepreneurs the ability to access their file space from a home a computer, or another computer lab. This gives Centre Stars entrepreneurs the ability to get their work and work on it whenever they want.

Before the implementation of this system, files were kept on the computer most used by each person in a personal folder that was accessible by anyone using that workstation. There were not even individual windows accounts on each computer. When someone needed to move a file, it was saved some sort of portable storage (USB drive, CDR or DVD-R) and then saved to the other computer to be worked on. Because of the very specific work that each Centre Stars member has been doing, this has not come up very often, but it has the potential to a significant obstacle to the smooth running of the centre stars program.

This new system grants Centre Stars more flexibility by allowing multiple people to use the computers simultaneously without the problem of having to stop someone to get files off the computer they are using. With the printer setup through the server, Centre Stars members can print from any computer, rather than the one that the printer was originally hooked up to. Furthermore, it demonstrates to members of the program how a file server can be used (both for moving files as well as backing them up) and may give them ideas on how a similar system can be implemented in their business once they graduate from the program.

There are several parts to the sustainability of the server. An easy to use, free SSH client with a user-friendly GUI is installed on all of the computers. This makes it very simple for each business to access his or her file space, and thus makes it very easy for each person to learn how to use the server. Bruce and Jim know how to use the client and will show new people how to use it as part of their basic orientation. Jim, who is very technically skilled and has experience with servers, will handle any major problems that arise. Both Jim and Bruce are capable of adding accounts and adjusting quotas.

The main risk to the sustainability is that no one will use the server. The server has yet to be used to store any files. They may be averse to using the system because of technology fears or a lack of understanding. They may not see an advantage to using it either because they disagree with the advantages that are explained to them, or that Centre Stars does not effectively impress upon them the advantages of using the server.

Recommendations:

Periodically Evaluate Server Efficiency

The storage needs of companies will change as they become successful, or do not become successful. Some companies will want to make heavy use of the file server while others may not need to use it as heavily. Thus to maintain efficient use of the file server, especially as more and more companies are added to it, Bruce must re-evaluate the needs of each company. He should look at how much space they are currently using, and what they are using it for. Bruce should then make a judgment – with the input of each company – as whether a quota should be changed.

By doing this process periodically every four months, CNDC can avoid having to upgrade the file server because of it's misuse, or lack there of. An upgrade, while not costly, represents an unnecessary expense. This does not mean do not upgrade. Eventually CNDC will need to upgrade as the program grows.

Additional Recommendations:

Web Hosting

At some point during the consulting partnership, the need for web hosting services for the companies in the Centre Stars program became apparent. All the companies operating in the Centre Stars program that wanted websites were going to need hosting space as well as an email server. We investigated creating this kind of system on site, but came to the conclusion that this was not a cost effective solution. There are many low cost web hosts out there that are far more reliable than a small web server at CNDC could ever be and provide excellent support and a wide array of resources.

landl can host each business' website as well as providing email accounts for them at very low cost. Jim Gibbs who is a web developer by profession, and who, in trying to get hosting for his own webpage, has worked with many different services recommended this hosting service above all others. Jim cited *landl*'s very low costs, excellent customer service and high reliability. *HostReview.com* ranked *landl* as the best web hosting company in 2005. Furthermore *landl* is one of the cheapest hosting services available.

The package that they offer for small business and private use is ideal for the small businesses coming out of Centre Stars. It is very low cost and provides ample bandwidth and storage capacity for startup businesses. In the event that the business outstrips it's original contract with *landl*, it is very easy to upgrade the service to get more space or more bandwidth, according to Jim.

Furthermore, having all participants in Centre Stars host their web pages through *landl* will make Jim's contributions easier. Since Jim will be doing some if not all of the initial web design for these companies, being familiar with the host from having dealt with them in the past, will facilitate his job, potentially allowing Jim to more efficiently use his time.

About the Consultant

Conrad Woodring is a senior in mechanical engineering with a minor in international engineering studies. He will be working this summer on the island of Ebeye, in the Republic of the Marshal Islands, as part of the Technology Consulting in the Global Community Program. He was born in Virginia but has spent the majority of his life in New York. He plans to eventually go to graduate school, preferably in a French speaking country.

Appendix A

Centre Stars Plan

Introduction:

Centre Stars is a small business incubator program run by the Central New Development Corporation (CNDC) located in the Center Hill District of Pittsburgh. Centre Stars provides a wide array of support services, training and counseling for entrepreneurs wanting to operate in the Hill District at no cost to the entrepreneur.

In exchange for a small amount of equity in the startup, Centre Stars provides space for the company to start working out of, legal and financial advice, business training, any necessary tech support and training, as well as the necessary infrastructure (computers, phone line, mail service, file server space, etc).

This document describes the requirements for joining and graduating from Centre Stars, what the program offers, what each staff member's contributions are.

Program Staff:

Centre Stars is run by CNDC's executive director, Bruce Powers, with the help of a small group of volunteers from the community.

Bruce Powers – Bruce is CNDC's executive director and the key figure in managing Centre Stars. He organizes the sessions, coordinates the volunteers, helps entrepreneurs where his technical skills are sufficient, runs some of the training sessions, and more.

CNDC evaluation board – This is a small group of volunteers that review each entrepreneur in the program. Each entrepreneur will be required to develop a business plan and follow it. They will be periodically evaluated by this body to make sure their business plan is acceptable, and that they are making progress. The board will not consist of volunteers who involved in other areas of the program.

Jim Gibbs – Is the founder of Onelife Media – a company that does everything from web sites to java servlet development. He volunteers his time to act as the technical advisor to the course. He helps with any technical questions that may come up surrounding Centre Stars' computer hardware, as well as helping with web design.

Senior Core Of Retired Executives (SCORE) – SCORE is a national non-profit organization that provides business counseling and training. They will be providing financial counseling.

Reed Smith – The Pittsburgh based law firm will be providing legal counseling to program participants.

Business Mentoring – See the recommendations part of the consulting report.

Program Structure:

Staff availability:

Bruce will be at Centre Stars for both official meetings. The financial and legal consulting will be available onsite on a need basis. When an entrepreneur is ready to move forward with an idea, the volunteer consultants will be available to come in and go over all the legal and financial issues with the entrepreneur and try to educate the entrepreneur as best they can. The consultants will also be available to answer questions via email.

Mentors will organize with the mentored as to when and how often they will be available. Jim will be available one day a week during official meeting time. Jim will also be putting in time whenever else CNDC or the Centre Stars Program needs his services.

Official Meetings:

Centre Stars officially meets twice a week. During these official meetings, counseling services and workshops will take place. These official meetings will be open to anyone interested in joining Centre Stars and will serve as the meeting time for entrepreneurs developing their business plan.

Non-Official Meetings:

Once an entrepreneur has successfully developed his business plan and received the green light from the evaluation board, he or she may need more regular access to the Centre Stars program. At this point they may gain access to Centre Stars during regular business hours. They will have to check in with the receptionist at the church to get the key, and are liable for theft and destruction of Centre Stars property while they are using the facilities.

Although this is a liability to Centre Stars and CNDC, it is not possible to have someone always there. When the businesses really start to get going, they are going to need a significant amount of time at Centre Stars to get their work done.

Periodic Evaluations:

Program participants will be evaluated periodically every 4 months, as to whether or not they are adhering to their business model. These evaluations require that the entrepreneur go before the evaluation board and present the status of his venture. He will have to give financial data and demonstrate how he or she has adhered to the original business model. In the event that they have not adhered to their original business model, they will have to explain why not and make a

defense for why they are still going to be successful. They will also have to create new projections.

After this, the evaluations board, with the recommendations of Bruce, will decide whether or not the entrepreneur will be allowed to continue in the program.

Entrance Criteria:

In order to enter the program, potential entrepreneurs must meet a few basic criteria:

1. The potential entrepreneur must have some kind of idea. It need not immediately be all figured out. They need only have a vision.
2. The entrepreneur must be willing to operate their business out of the Hill district.
3. All entrepreneurs in the program must go through 12-week course that Centre Stars offers. This course covers business basics, management, finances, teamwork and many other entrepreneurship essentials.
4. While it doesn't cost anything to be in the program, all participants must agree to give a 10% equity share of their business to CNDC. This is so that CNDC can cover its costs for running the Centre Stars program without discouraging entrepreneurs from trying their ideas. By having no fees for participants, there is no risk involved. If their business fails, it doesn't cost them anything.
5. Within two months of entering the program, the entrepreneur must have a written business plan that he must then present to the *Evaluation Board*.
6. Should the *Evaluation Board* decide the plan is not adequate, the entrepreneur will be given one month extra to rewrite his plan after receiving a critique from the *Evaluation Board*. If the plan is not adequate after a second evaluation, the entrepreneur will not be permitted to pursue his idea with the resources of the program.

Throughout the entrance period, the Centre Stars Bruce and the volunteer staff members will help the entrepreneur shape his vision into a business plan that can be presented to the evaluation board.

Entrepreneurship Course:

Centre Stars offers a 12-week entrepreneurship course that all Centre Stars Participants must complete. The course covers business basics, managing your own business, handling finances, developing a business plan and model, teamwork, and more. It includes small workshops and exercises to reinforce the material.

Contractual Agreement:

Once through the entrance period, the entrepreneur will have to sign a contract stating that he or she is liable for destruction or loss of property while they are using Centre Stars without supervision. Entrepreneurs in the program will also have to sign a confidentiality agreement if

they wish to participate. This agreement is designed to prevent entrepreneurs that may work together or help each other out from taking one another's ideas.

Exit Criteria:

An entrepreneur can leave the program through two methods. First, he can be asked to leave the program if the evaluation board feels they are not adequately adhering to the business plan that they approved before letting the entrepreneur pass the entrance period of the program. For more details on how an entrepreneur exits the program in this manner read Program Structure under periodic evaluations.

The entrepreneur can also graduate from the program if they meet one of two criteria:

Two year maximum stay: Entrepreneurs may only stay in the program for two years (including the entrance period). After two years the entrepreneur is considered to have gained all the skills necessary and should have developed the business enough such that it can stand on its own two feet without the resources of Centre Stars.

Venture becomes profitable: Once the venture is able to turn a profit for one quarter it is expected to move out of the Centre Stars program and operate on its own before the end of the following quarter. Bruce can use his discretion to grant a longer stay as he sees fit.

Services (free of charge):

- All utilities
- Mail boxes located on the first floor of the building.
- Phone service
- Computer access
- High-speed internet (125 kb/s)
- High speed color laser printer
- Computer software and hardware
- Financial consulting
- Legal consulting
- Technical training
- Assistance with capturing funds
- Business training and consulting through a mentoring program

Software and Hardware:

One computer will be provided to each entrepreneur in the program once they have graduated past the entrance period. Computer hardware and software will be obtained by Bruce, free of

charge, only after the entrepreneur has moved past the entrance period. The entrepreneur will be expected to demonstrate a need for the product.

Financial Consulting:

The Senior Core of Retired Executive (SCORE) will provide financial consulting services. SCORE is a national non-profit organization that provides business counseling and training services.

Legal Consulting:

The Pittsburgh based law firm, Reed Smith, will provide legal consulting services.

Technical Training:

Jim Gibbs and Bruce will provide any technical training that is necessary. Bruce will teach office, media editing and most other software. Jim will be available to teach entrepreneurs about websites (how they work and their design), networking, file sharing and any other more advanced topics than simple software use, that Bruce cannot handle.

Assistance with capturing funds:

Bruce, and many of the volunteers in Centre Stars have experience working with non-profits. As the executive director of a non-profit organization and over 15 years experience working the business side things at Cisco Systems, Bruce has lots of experience trying to get funds. Bruce, and the other volunteers will help entrepreneurs find funds and apply for them.

Business Mentoring Program:

This still has to be set up. Reference the recommendations section of the consulting report.

Past Community Partners

4 Kids Early Learning Centers
Addison Behavioral Care, Inc.
Alafia Cultural Services
Alcoa Collaborative
Allegheny Co. Housing Authority
Allegheny General Hospital Pastoral Staff
American Association of University Women
Animal Friends, Inc.
ASSET, Inc.
ASTEP-Grace Memorial Presbyterian Church
Auberle
Auberle In-Home Services
Bedford Hope Center – Resident Council
Bedford Initiatives
Bethany House Ministry
Bishop Boyle Center
Bloomfield-Garfield Corporation
Borough of Crafton
Boys & Girls of Wilkinsburg
Braddock Carnegie Library & Community Center
Brashear Association, Inc.
Breachmenders
BTC Center
CADA-Citizens to Abolish Domestic Apartheid
Career and Workforce Development Center East
Carnegie Library of Homestead
Carnegie Library of Pittsburgh
Carnegie Science Center – Hill House
Association
CART-Consumer Action Response Team
Center Avenue YMCA
Center Avenue YMCA, Allequippa Terrace
Center for Creative Play
Center for Hearing and Deaf Services, Inc.
Center of Life
Central Academy
Central New Development Corporation
Children Youth Ministry
Children's Museum
Christian Life Skills
Community Day
Community Day School
Community Human Services Corporation
Community Technical Assistance Center
Competitive Employment Opportunities
Conflict Resolution Center International
CONTACT Pittsburgh
CTAC-Community Technical Assistance Center
East End Cooperative Ministries
East End Neighborhood Employment Center
East End Neighborhood Forum
East Liberty Development
East Liberty Presbyterian Church
East Side Community Collaborative
Eastminster Child Care Center
Eastside Neighborhood Employment Center
Education Center
Every Child, Inc.
Fair Housing Partnership
Faison Development & Opportunities Center
FAME
Family Services of Western PA
First Charities/First United Methodist Church
Friendship Development Association
Garfield Jubilee Association, Inc.
Gateway to the Arts
Glen Hazel Family Reading Center
Greater Pittsburgh Community Food Bank
Greater Pittsburgh Literacy Council
Greenfield Senior Center
Gwen's Girls
Hazelwood Senior Center
Hazelwood YMCA
Hill House Association
Hill House Association – After School Program
Hill/Oakland Workforce Collaborative
Hope Academy of Music and the Arts
Hosanna House
Housing Alliance of Pennsylvania
Hunger Services Network
Jane Holmes Residence
Jewish Family & Children's Service
Jewish Residential Services
Joy-Full-Gospel Fellowship After School Program
Just Harvest
Kingsley Association
Lawrenceville Development Corporation
League of Young Voters
Light of Life Family Assistance Program
Madison Elementary School
Manchester Academic Charter School
McKees Rocks Terrace
McKeesport Collaborative
McKelvy Elementary School
Methodist Union of Social Agencies
Miller Elementary School, Principal's Office
Mon Valley Initiative
Mon Valley Providers Council
Mon Valley Resources Unlimited
Mon Valley Unemployment Committee
Mon Yough Community Services
Mount Ararat Community Activities Center
NAACP National Voter Fund
NAMI Southwestern Pennsylvania
National Association of Minority Contractors /
Black Contractors Association
Negro Educational Emergency Drive
New Beginnings Learning Center
New Penley Place
Northside Coalition for Fair Housing
Northside Institutional Children Youth Ministry
Northside Leadership Conference
Northview Heights Family Support Center
OASIS Senior Center
Opera Theater of Pittsburgh
Operation Better Block
Orr Compassionate Care Center
Outreach Teen & Family Services
Parental Stress Center
Pennsylvania Biodiversity Partnership
(This list is continued on the next page...)

Past Community Partners (continued)

Pennsylvania Low Income Housing Coalition	St. James School
People's Oakland	St. Stephen Elementary School
Pittsburgh Action Against Rape	Sustainable Pittsburgh
Pittsburgh Citizens' Police Review Board	The Community House
Pittsburgh Health Corps	The HUB Downtown Street Outreach Center
Pittsburgh Mediation Center	Thomas Merton Center
Pittsburgh Social Venture Partners	Three Rivers Center for Independent Living
Pittsburgh Vision Services	Three Rivers Youth
Pittsburgh Voyager	TLC-USA
POISE Foundation	Turtle Creek Valley Council of Governments
Program for Health Care to Underserved Populations	Tzu Chi Wen Chinese School
Providence Family Support Center	Union Project
Radio Information Service	United Cerebral Palsy
Reading Is Fundamental Pittsburgh	Urban League of Pittsburgh
Regional Coalition of Community Builders	Urban Youth Action
River Valley School	Ursuline Services
Rodef Shalom	Vintage Senior Center
Rodman Street Missionary Baptist Church	Weed & Seed Program, Mayor's Office
Ronald McDonald House Charities of Pittsburgh	Wesley Center
Rosedale Block Cluster	West Pittsburgh Partnership
Rx Council of Western PA	Wireless Neighborhoods
Sacred Heart Elementary School	Women's Enterprise Center
Salvation Army Family Crisis Center	Working Order
Schenley Heights Community Development Center	YMCA McKeesport
Second East Hills Social Services Center	YMCA Senior AIDE Center
Sharry Everett Scholarship Fund	Youth Fair Chance
Southwest Pennsylvania Area Health	YouthBuild
	YWCA Bridge Housing
	YWCA of McKeesport

Community Partner Information FAQ

(continued from back cover)

7. What does it cost to be a Community Partner?

The cost for participating in this experience is your time and your commitment to follow through as agreed. As leaders of community organizations, we know your time is of premium value. Those who have made this investment of time have reaped returns many times over.

8. What does the Community Partner have to offer Carnegie Mellon students?

- Students learn to structure unstructured problems. Community organizations are complex environments with complex problems. Your organization provides excellent environments in which to practice the art of structuring problems.
- Students come from different cultural backgrounds and most have never been in a nonprofit organization. They are practicing how to communicate across cultural differences and across technical knowledge differences. They need to be able to make mistakes and learn from them. Community partners provide a supportive relationship in which students can take risks and learn about how to communicate, how to relate, and how to maintain professionalism.
- Students get the opportunity to practice process consulting. They are learning that expertise is only as valuable as the ability to help others solve authentic problems. You provide a context in which students can practice these skills.
- We've found that Community Partners are very appreciative for the students' assistance. There is nothing more rewarding than to experience your efforts as valuable and rewarding for others. You provide that experience for students.
- Finally, you offer a glimpse into career opportunities in the nonprofit arena. Students learn to appreciate those who work in the nonprofit sector, and they grow to appreciate the role and function of community organizations. We hope this appreciation not only informs the choices they make in life, but also encourages them to care and give back to the community throughout their professional careers.

9. How do I become a Community Partner

Contact an instructor, Joe Mertz or Scott McElfresh. Send your contact information: name, title, name of organization, address, phone, fax, location of organization and your interest in being a Community Partner. You will have a telephone conversation and possibly an on-site visit. All organizations are considered, though preference is given to organizations providing services to a low-income community or a community at risk for falling into the "digital divide."

**Send email to
instructors@tcinc.org
(email preferred)**

**Or call
Joe Mertz: 412.268.2540
Scott McElfresh: 412.268.4859**

10. Caveats

- We do our best to ensure that students who sign-up for the class are committed to completing the class, however, occasionally, a student ends up withdrawing from the class during the semester. Typically, this happens when a student has underestimated the time they need for this class. We do our best to advise students so this does not happen. When it does happen, there is nothing we can do except to invite the Community Partner to participate in the following semester.
- The semester is short and the student has to do a lot of work in a short amount of time. For this reason, it is critical that you keep your scheduled appointments, do the work you agree to do, and maintain communication with the student. The student will need your feedback on reports quickly, often the next day. When we get to the final consulting reports, we will need fast turnaround time from Community Partners because we also need to get the reports published in time for the Community Technology Forum.
- If there is any chance that you think you will not be able to follow through with the requirements of this partnership, please wait until such time as when you are able to do it. Since the Community Partner is the focus for the student's learning, it is essential that the partnership be sustained for the semester.

Community Partner Information FAQ

1. What is the goal of the partnership in this course?

The goal of this class is to expand the capacity of the Community Partner to use, plan for, and manage technology, administratively and programmatically. The student is learning process consulting, project management, communication, relationship management, problem identification, and analysis.

2. As a Community Partner, what can I expect to happen?

Once you match with a student consultant, you will set a meeting schedule that you and the student will keep for the remainder of the semester. The student comes to your location for 3 hours a week. During this time you and the student work together. This is not an internship in which the student merely works on site. Rather, it is a consulting partnership in which you must work together to achieve your technology goals. The student facilitates a process that moves from assessment, to analysis of problems and opportunities, to defining a scope of work, to developing a work plan, to analyzing outcomes and finally presenting that analysis. As the Community Partner, you are the consulting client. You provide information and discuss that information with the student. But you are more than a client; you are also a learner. In process consulting the client "owns the problem" as well as its solution. The consultant facilitates the client in achieving that solution. The consultant doesn't "do for" the client. Rather, the consultant works with the client.

3. What types of activities are typically included in a scope of work?

Each scope of work is unique and depends solely upon the specific needs and opportunities of the individual Community Partner. Partnerships have focused on a wide range of activities, including: personal information management (how to use Windows, organize files, backup files, use various software packages, use time managers, use Palm Pilots and other personal information management tools, e-mail, etc.), developing a plan for how to train staff and how to incorporate knowledge and skill into job description, designing a local area network, implementing Internet connectivity, designing and developing a web site, determining effective data storage methods, analyzing the needs for an information database, designing and implementing a database, solving technical problems, designing a public community technology access center, determining the specifications for computers, developing disaster recovery plans, and more.

4. Who can be a Community Partner?

This course target individuals playing an administrative or programmatic leadership role within a community organization. Typically Community Partners are Executive Directors, Directors, Assistant/Associate Directors, Coordinators, and Managers. But, we make the selection based on the organization and the role that the individual plays within that organization, regardless of title.

5. Why do you focus on organizational leaders?

For an organization to use information technology effectively, its leaders must have a vision for how it can support the organization's mission, they must be comfortable enough to integrate technology into their personal work practices, and they must know enough to budget, staff, and subcontract appropriately. By partnering one-on-one with a student consultant, the leader has a unique opportunity to build that vision, comfort, and knowledge, no matter where they are starting from.

6. What are the requirements for being a Community Partner?

- Hold a leadership role within your organization.
- Have a computer in your office or one you could or do use in your job.
- Reliably meet with the student consultant 3 hours per week, every week, for about the 13 weeks.
- Come to an on-campus gathering 2 times during the semester. Once at the beginning and once at the end.
- Share information about your organization with the student consultant.
- Read project reports prepared by the student and give the student immediate feedback.
- Complete a brief response form after reading each report and return to the instructor.
- Keep a log of consulting sessions and send to instructors twice during the semester.
- Read the final consulting report. Give feedback to the student immediately.
- Make a brief presentation at the end of the semester (with the student) at the Community Technology Forum. (This is the 2nd on-campus gathering you are required to attend.)

(continued inside back cover)