The North Carolina Information Network — A Vital Cog in Economic Development

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In 1978 Winston-Salem based Piedmont airlines faced a crucial decision. The Federal government had just begun the deregulation of the airline industry and Piedmont, then primarily a local carrier in the Carolinas and the Southeast, had to choose between competing with the larger, established carriers like Delta and Eastern, or maintaining its local routes and hoping for the best. Piedmont did both. It rapidly redesigned its entire route structure, expanded its fleet of planes and established "hubs" at Charlotte, Dayton, Ohio and Baltimore, Maryland. The net effect was that Piedmont was propelled to major carrier status (it is now planning flights from Charlotte to London); **and** the airline has enhanced service to the many small to medium sized cities that it had traditionally served in North Carolina. Piedmont, United, American, Eastern, Delta and other airlines bring prompt, regular service to a variety of North Carolina towns in addition to the "first tier" cities of Greensboro, Charlotte, and Raleigh. More importantly, Piedmont has provided improved service to Fayetteville, Asheville, Wilmington, Greenville, New Bern and to smaller North Carolina cities.

Piedmont Airlines recognized that it was able to carve out a market niche for itself in the highly competitive airline industry. Piedmont also recognized that a symbiotic relationship existed between the company and the North Carolina cities it served.

The local economy improved and the citizens had more money to spend on the services provided by Piedmont Airlines. There was, however, an important third party involved in this process — the North Carolina Department of Transportation's Division of Aviation. In a recent interview in the magazine, **We The People of North Carolina**, Willard G. Plentl, Jr., Director of the Division of Aviation, stated that "in order to successfully recruit business and industry, rural

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communities have to have reasonable access to a general aviation airport."[1]

For many years the banking industry in North Carolina operated within tight geographic and other regulatory constrictions. In the late 1970's, these regulations began to ease and a slow metamorphosis began to take place in the structure and services offered by the major banks in the state. Growth of financial services in North Carolina became closely entwined with financial services being offered in other Southeastern states. Major state banks like NCNB, Wachovia, First Union and Southern National began to acquire subsidiaries in Florida, South Carolina and other states. Charlotte has, as a result, continued its rapid development into one of the major financial centers in the country. This growth in financial services has benefited all of North Carolina. The financial infrastructure so necessary to local industrial, agricultural and small business development and operations has been strengthened.

Information Infrastructure

Information dissemination, like finance and transportation, is one of the underpinnings of economic development. But while state, federal and local governments have taken direct, often creative, steps to assure that transportation and financial services are available to private and corporate citizens, almost no planning or resultant action has been taken to create an information infrastructure in our communities. Common sense and the gurus of the future tell us that our economy is now well into an information age, yet we treat information in a helter-skelter manner that is designed to assure that valuable data is obtained and used in the most inefficient manner possible. Why?

Part of the reason for the lack of information policy is the American fear justified by the numerous movements toward censorship. Although we don't want somebody controlling our

access to information, we must not let this fear cloud our perception of the need for a rational, coherent policy of *information distribution*. It is just as vital to assure the efficient, free flow of information as it is to assure that free access to that information is made available.

Information distribution systems abound in the United States. Major television and radio networks regularly pipe information about all sorts of goods and services into our homes and automobiles. Specialized information networks exist to transmit news, financial, police, weather and credit data. Much of this information is general in nature — we all need and use it. Much of this data is institution-specific. It is owned by the institution and really wouldn't help us much in our daily lives. Much of this data we don't want. All of this data gathering and transmission is out of our control. Here is where an information distribution policy is needed. Information gathering and transmission is now limited to those able to pay. The reception of much of this information is limited to the more affluent individuals. How do we assure that all citizens have access to the information needed to conduct daily lives and develop communities? We look to our library systems and services.

Libraries, especially public libraries, are the necessary building blocks of the information infrastructure and have been here for many years distributing information and entertainment, helping solve the illiteracy problem, and educating users. But how active have librarians become in working with other professionals in their communities in industrial recruiting, in promoting economic development? The answer is not clearcut. The answer also needs to be formed in the context of the information needs of the local business community.

Writing in the *Iowa Library Quarterly* Daniel H. Carter notes that "of great interest to local manpower and economic interests are the data relating to the community trade balance and the gross community product."[2] Herbert S. White, Dean of the School of Library and Information Science at the University of Indiana, discussing a related topic in his "White Papers" column in *Library Journal*, puts this need in a library context. "It takes no genius to recognize that the emphasis of municipal and state government concern these days is on economic growth, sometimes seen as economic survival. Librarians and their public libraries are superbly qualified to contribute to this effort."[3] Library services are vital to economic growth. The acceptance of this fact by library and business communities is a problem.

Information and Economic Development

A close correlation exists between information availability and economic growth. There has not been much direct discussion of this point in the library literature, yet glimpses of the interrelationship appear in the general business literature. A *Wall Street Journal* story discussing British economic policy reported that "Britain's Mr. Baker said the program was of vital importance to Europe. Our future prosperity ... depends on the success of building up an information technology industry."[4] Discussing the impact of information technology on "developing countries", Vladimir Slamecka of the School of Information and Computer Science, Georgia Institute of Technology, writes "through automation, the industrialized countries which developed and first applied information technology, have registered substantial increases in manufacturing productivity."[5] Slamecka further notes that "in industrial societies the applications of information technology are driven by the market, not by its designers or vendors; it is the customer who evaluates the cost and utility of a product and either accepts it or rejects it."[6] In another article the *Wall Street Journal* states: "the explosion in data processing technology now has vastly enhanced the speed and volume of the flow of information and made it more accessible. And this in turn has drawn attention to its value. In many countries governments now regard information as something like wheat. It is something to export or import at a price; you can tax it, restrict its flow for reasons of national policy, subsidize it or paralyze it, erect barriers against it."[7]

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Libraries and Information Distribution

How, then, can libraries take the lead in the establishment of an information distribution policy? How can we respond to the information needs of the business community as outlined by Carter and White? How do we allow the consumer to determine the development of information technology, yet make sure that the market place, in its rush to relevancy, doesn't ignore the potential future value of a particular source of information? How do we realize the full value of the investment we have been making in the development of information resources (libraries) for

decades? A starting place is a library network.

A quick return to the history of transportation in North Carolina is necessary. In 1921, North Carolina's Governor Cameron Morrison worked with the State Legislature in the passage of a $50 million bond issue to build roads in the state. Governor Morrison believed that his largely rural state's farmers and local businessmen needed the roads to gain access to regional and national markets. The roads were built, the markets became accessible and North Carolina's long climb toward its growing technological economy began. Through this process Governor Morrison became known as the "Good Roads Governor" and North Carolina came to be called the "Good Roads State".

The North Carolina Information Network is the "Good Roads" of the 1980's and 1990's. State government and private enterprise have been investing in the transportation and financial infrastructures needed to support economic development in the communities. Strangely enough, federal, state and local governments have also been investing in the creation of an information infrastructure in North Carolina for a long period of time, particularly over the past twenty years. This disjointed investment in information has been created to meet the needs of a specific library clientele. The advent of relatively inexpensive telecommunications and the present availability of powerful, inexpensive microcomputers has suddenly made it possible to link all of the "investment sites" so that information resources can be shared effectively and rapidly.

The North Carolina Information Network

The North Carolina Information Network, however, is taking this sharing one step farther. It is working with librarians and libraries of all types to develop programs that aggressively deliver, market if you will, information services and products to the various segments of the community. What are these programs, these products? Why is aggressive marketing necessary? What is the North Carolina Information Network and who will it aid in local economic development?

The North Carolina Information Network, an umbrella organization directed by the Division of State Library, works with all of the cooperative library-based information services in the state to coordinate services and fill in the gaps where services are needed or missing and, through LSCA and other funds, to enhance existing programs. Specifically the work includes these projects:

1. North Carolina Online Union Catalog. On May 21, 1986, the North Carolina Online Union Catalog came into operation. Housed at OCLC, the catalog consists of the records of all current OCLC full users in North Carolina and represents all types of libraries. The catalog also includes the holdings of the seven federal libraries in the state. The State Library has worked with OCLC in profiling all libraries in North Carolina not currently using OCLC and is encouraging these libraries to become dial-access "Selective Users" of the North Carolina Online Union Catalog and the OCLC Interlibrary Loan Subsystem. By the end of 1987 it is anticipated that over 500 libraries will be using the North Carolina Online Union Catalog. An extensive tapeloading program is also underway. The State Library is coordinating the loading of non-OCLC MARC records into OCLC. These records have been created by public, community college and academic libraries as part of local automation and retrospective conversion projects but have not yet been added to the OCLC data base.

2. North Carolina Union List of Serials. This data base will also be maintained at OCLC. Accessible online through the North Carolina Online Union Catalog, the Union List of Serials is scheduled to begin operation in early November, 1986. The initial program will be built on the Health Science Union List of Serials that is being created by twenty health science libraries in the state. A second union list of serials data base, the Western North Carolina Union List of Serials, will be added to this file. Procedures have been worked out for the long term addition of serials records and for the daily maintenance of the data base.

3. Business, Technical, and Educational Data Bases. The North Carolina Information Network will be working with commercial data base vendors to arrange favorable group contracts for the provision of services to all libraries in the state.

4. Electronic Mail/Bulletin Board Service. This program operates on two levels. The State Library will maintain a statewide electronic mail system, accessible to all librarians, that will create and maintain electronic bulletin boards which carry information for librarians and non-librarians. The Bulletin Boards will be open to the general public and will include job openings, calendars, financial information, state and federal legislative updates and the like. The electronic mail will serve a reference and a general communication function.

Since 1984 the State Library has been working with local library consortia in the creation of local electronic mail/bulletin board programs, and the local systems operating in Wilson County

and Cleveland County are described in this issue of *North Carolina Libraries*. Additional local systems will be installed over the next few years.

5. Document Delivery Services. This program operates on two levels. Pennsylvania, Oregon, New York and Massachusetts have been working in conjunction with national commercial package delivery firms to supply interlibrary loan delivery services to their states. The same arrangements are being discussed in North Carolina, and the State Library is working with manufacturers of telefacsimile equipment to arrange favorable rates for the purchase of this equipment by all types of libraries in the state. These units would be used for the rapid transmission of journal articles and other documents.

In general, the North Carolina Information Network will act as a cooperative agency and provide personnel, equipment, purchasing and overall professional services to libraries in North Carolina. Many of these services are, of course, geared to meeting the needs of librarians. The combination of services, the excellent collections in the state's libraries and the skilled librarians administering these libraries form the backbone of the system. The people, services and materials form the information infrastructure, the "good roads" needed by North Carolina to pursue economic development.

Library - Business Community Relationship.

The pursuit of economic development will require an all-out educational and marketing effort to the business community and state and local governments. Two crucial changes in perception are needed. Librarians will need to change attitudes toward the "marketing concept"; the business and government communities, in turn, will need to change attitudes toward the nature of library services. Herbert White has a good account of this situation. Speaking about librarians he says, "If we can't convince ourselves that marketing libraries is marketing for the public good, that individuals really need what we don't now provide for them, we certainly aren't going to be able to convince anyone else."[8] Speaking about the business-government community he states "librarians and their public libraries are superbly qualified to contribute to this (information providing) effort. That they don't make this contribution is due in large part to the fact that bankers, corporate leaders, chamber of commerce officers, and municipal officials don't know what information is lacking but attainable for their deliberations. They don't even know that they don't know, yet they are natural enough

clients, because they are information users who place a value on information. They just don't get it from libraries."[9]

Libraries and the business community, therefore, need to form a partnership if the information structure is to be formed, and the libraries will have to take the initiative in the formation of the partnership. As White notes, the business community historically has existed without a close relationship with the libraries. As a result, librarians need to become aggressive in the formation of these partnerships. W. Randall Wilson, Director of the Parlin-Ingersoll Library in Canton, Illinois, in a recent *Library Journal* article describes the initiative taken by his library in forming a partnership with the business community to promote industrial recruiting and economic development in that city.[10] Efforts like Mr. Wilson's will be needed over along period of time if the business community is to view the library as an important economic institution in the community. This perception does not exist now.

Personal Networking

In North Carolina the Information Network will be providing the necessary information services to serve the business community. Since personal as well as technological linkage is necessary for effective networking, steps need to be taken to merge the Information Network with the "Business Network". The merger should take place on a local and statewide basis, and some recommended actions to create a strong partnership with the business community on a local basis follow.

1. Present a United Front. In a county or community with libraries of several types (e.g. public, school, community college, special, etc.), develop business information services jointly among the libraries. To the business community, a library is a library. The labels applied to different types of libraries by the profession are irrelevant to nonlibrarians. If all segments of the community are to be served, libraries developed to serve these specific segments need to coordinate services to assure that patrons or businesses don't fall through the "information safety net." This coordination is networking on a local level and will require the formation of local consortia and resource sharing. Responsibility cannot be passed by one library to another in the community because of a claim of lack of funding, staff, interest, or a "lack of time — we're too busy now" attitude. Resource sharing that shows results will bring more dollars, resources and community recognition but will also bring more work.

2. Participate in Business Oriented Civic Organizations. The contacts formed through participation in civic organizations like Rotary, Kiwanis, Lions, and the Junior Chamber of Commerce and other organizations is essential if local networking is to succeed. Unfortunately these organizations do not welcome women. Until these practices change it will be difficult for female library directors to "crash" the "old boy" business groups. In the meantime, however, there are ways to become involved in the business life of the community. Local Chambers of Commerce provide the best avenue. The good ones do not discriminate; they welcome women on an equal basis. Main Street and downtown revitalization development efforts provide an excellent opportunity to participate in local business development efforts. Other organizations like small business centers, regional development organizations, and SCORE (if you are retired) provide opportunities to inject ideas and efforts into the community's business life. It is important, too, to participate aggressively in these organizations. In most cases these groups are searching for leaders and will support aggressive participation directed toward community development efforts.

3. Work with the Community College. In North Carolina the community colleges have developed an excellent reputation for participation in local industrial recruiting and economic development. The system was created, of course, with this purpose in mind, and the colleges have been very careful to nurture this role. Public libraries, in particular, should begin to foster this type of image. It is just as important for the director of the public library to be on the local industrial recruiting team as it is for the local community college president to participate in such activities. Develop a close relationship with the community college's library staff and the members of the college's small business center if one exists in the local institution.

4. Learn the Language of Business. Take basic business courses. Librarians constantly take continuing education courses. Most of the courses we take, though, are in the field of librarianship or in topics geared toward library administration. It is just as important to become familiar with the vocabulary and practices of the business community. Since there is no perceived benefit to the business community to become familiar with the vocabulary and practices of the library profession, the burden to cross cultures is on the librarian. This process of familiarization will carry a secondary benefit — it will help us in the management of our own institutions.

5. Become Consumer-Oriented. We do this to a great extent now. Our efforts, though, may be too constrained by the traditional areas of library service such as adult, young adult, and children. The University of North Carolina's Small Business and Technology Centers, the community college's small business centers and business departments in the private and public colleges will help in developing and implementing full scale marketing plans. Marketing of information and library services means more than the library's creation of bumper tickers and t-shirts with snappy sayings, more than the printing of posters showing celebrities holding a book, more than the hiring of mimes and clowns with balloons to promote a specific program. These advertising tools are fine when used in conjunction with an in-depth marketing plan devised to meet consumer information needs. When not geared to this purpose, they become frivolous gimmicks and demean the serious business of librarianship.

6. Befriend a Special Librarian. Special librarians, especially those who work for corporations, understand the needs of the business community. They know how to make information work so that it contributes to the bottom line of the corporation. Special librarians can help librarians working in other types of libraries contribute to the bottom line of the local business community. They are a good source of information about business-oriented data bases, reference materials, practices and culture.

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There are steps that can be taken by the statewide Information Network to support local efforts in addition to the provision of access to basic data base services. Some of these steps are:

1. Work with Other State Agencies. The Network's provision of business information services needs to be made in conjunction with services offered by other state agencies like the Department of Commerce or the Department of Agriculture. These agencies, in turn, have departments that specialize in tourism, regional development or service to distinct groups in the small business community. In North Carolina the Department of Commerce has an industrial recruiting program that enjoys an excellent worldwide reputation. The Information Network should become an inte-

gral part of the economic development and overall service offered by these agencies.

2. Work with Statewide Business Organizations. Data base services, marketing efforts and overall business information programs should be developed in conjunction with the efforts of statewide business organizations like the Chamber of Commerce and the North Carolina Citizens for Business and Industry. These important associations are crucial to our becoming an accepted member of the business community. They are politically powerful and can be of enormous help in assuring that the Information Network receives public and private financial support. They are also a prime source of program development. Because they represent major corporations as well as small businesses, their input in the development of a program of business information services is essential.

3. Conduct Regional Marketing Surveys. Because of the diverse geographic and economic nature of North Carolina, comprehensive regional market surveys need to be made to pinpoint, develop and provide information sources to meet the specific information needs of a particular region of the state. Several good regional library associations like the Metrolina Library Association or the Western North Carolina Library Association have already formed "natural" regional organizations to serve library needs in a specific area, and surveys can be conducted with the help of these associations.

4. Develop Business Expert & Consultation Services. Implementing business "expert" programs and consultation services will assist local communities and state administrators in establishing effective business information services. Assistance of this type has traditionally been provided successfully in other areas such as children's services. Business-librarian consultants can achieve the same results in the promotion of local business information services.

5. Coordinate Planning. Ensure that all statewide business information development efforts are made in conjunction with the development plans and policy of the Governor's Office and the state agencies dealing with business affairs. This step will assure that business information services will be gradually integrated with the work of the other agencies and aid in the ongoing acquisition of funding for the Information Network.

Conclusion

In summary, in order for a state, region or local community effectively to pursue economic and industrial development on a long term basis,

three important "infrastructures" are necessary: transportation, financial and information. North Carolina has well developed transportation and financial infrastructures. The state needs to develop an information infrastructure. The state and local communities have been investing in the development of library resources for a long period of time and, due to recent rapid developments in telecommunications and computer technology, the necessary building blocks of the infrastructure are already in place. The North Carolina Division of State Library, moreover, after many years of planning and study, has begun the implementation of the North Carolina Information Network. The Network will function as a co-op and provide access to basic services to libraries across the state. It will also help in the creation and development of local networks. The Information Network, though, has to become an integral part of the Business Network. Personal and technological networking on a local and statewide basis are vital for the permanent creation and deployment of business information services. Librarians must take the initiative to reach out in new ways to the business community to assure the merger of the Information and Business Networks on a local and statewide basis. The final success of the construction of the Information Network, while crucial to state development goals, can be of great value to the library community. Herbert White, invoking the name of Peter Drucker, sums it well: "Peter Drucker, with his Churchillian gift for short and memorable phrases, said it all a long time ago. Managers (and of course librarians who control resources are managers) only get credit for two things, innovation and marketing, because successful continuation of the status quo is assumed and earns no credit. Even more to the point, it is boring. In politics, 'boring' is a synonym for 'fatal.'"[11]

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