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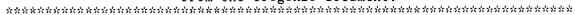
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#### **ABSTRACT**

A Televillage is a virtual community of people, businesses, government agencies, schools, libraries, health care providers, and others that have common goals or needs and are linked through telecommunications, information resources, and shared services. A Televillage can develop a strategic focus for community and regional development; organize, pool, and manage local resources and services; extend the capabilities of schools, government, and businesses; and facilitate access to information. Extensive research in 1991 and a 1992 feasibility study concluded that rural Kentucky areas could benefit by the Televillage concept. Two pilot Televillage sites were selected: Pikeville, to serve a mountainous and isolated area, and Elizabethtown, in a more densely populated region with an agriculturally based economy. Criteria for site selection included strength of local economy, nature of businesses or institutions, range of potential users, community leadership, technological infrastructure, proposed center facilities, concept understanding, and a sufficient market. The first two Televillages will be fully operational in early 1996. Appropriate facilities, technology infrastructure, and expected usage influence capital and operating costs. The technology platform is estimated to cost \$350,000, while first-year operating costs could be an additional \$300,000; however, variations in Televillage design could lower or raise this baseline estimate, and revenue could offset some costs. (RE)

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# THE RURAL TELEVILLAGE,

# Creating A New Strategy for Rural Development

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#### THE RURAL TELEVILLAGE™

There is an energy apparent in the conversations of the groups of people working at the Televillage Center. Local mathematics teachers are sharing ideas with colleagues in another country through an educational video conference. A local pediatrician is using another video conference are a to contact an expert at the state university's medical school about a newborn baby's puzzling symptom.

An entrepreneur who wants to start a company in a neighboring rural community is using a document-conferencing system to consult with potential investors, showing them up-to-theminute income and cost projections. A staff member of the new Government Information Office is helping a citizen access information on new environmental regulations.

History students at a local high school, linked through a Televillage network, have just finished retrieving information remotely from several computer databases for a research project.

One has the feeling that the opportunities "here" are endless.



#### The Context

This picture illustrates what could soon be taking place as the first Televillages begin to take shape. Freed from the constraints of time and distance, rural areas now have the opportunity to reshape themselves into Televillages.

The forces of the global information economy are transforming patterns of business and community life. Access to ideas and information is rapidly replacing traditional development tools as a primary means of creating and sustaining economic growth. Telecommunications and information are changing the ways people learn and conduct business - altering the characteristics of many existing jobs, creating entirely new jobs and broadening cultural horizons, especially for rural residents.

Many rural communities have responded to these new challenges, not by innovating, but by investing more time and resources in obsolete development strategies - strategies that fail to reshape the local economic base. The means are now available to enable rural areas, through the construction of information "gateways" such as a Televillage, to innovate, expand health-care and educational opportunities and strengthen economic development capacity.



#### Questions

#### 1. What is a Televillage?

A Televillage can be understood as a virtual community of people, firms, government agencies, schools, libraries, health-care providers and others connected through a common vision or need and linked through telecommunications, information resources and shared services. A Televillage is characterized by dynamic, new patterns of human interaction, cooperation, communications and development.

#### 2. Why would an area create a Televillage?

The creation of a Televillage is an effective tool for:

- Developing a Strategic Focus: The process of "building" a Televillage involves extensive community planning and the creation of a common regional vision.
- Organizing, Pooling and Managing Resources: Through a Televillage, an area can
  strategically organize and provide a variety of equipment, resources and services
  for people, workers and organizations that might not otherwise be practical or
  affordable.
- Extending Capability: The Televillage greatly extends and expands the capabilities of schools, government, businesses adding value and promoting economic growth.



• Facilitating Information Access: A Televillage can help a region take full advantage of the global information economy. It can be thought of as a kind of "off and on ramp" of the information highway.

## 3. Does the Televillage have "borders?"

The Televillage possesses a sense of place with roughly defined borders (e.g., a group of counties or cities). But by its nature it is flexible and adaptable and in many ways edgeless.

#### 4. What is the Televillage Center?

It is an actual physical facility that serves as the "town square" for the Televillage. It is the hub of an integrated information pathway involving information networks, equipment and services.

The Center is a public and private mixed-use facility providing a comprehensive package of services to the larger Televillage. The Center can support a variety of customers with services provided on-site or remotely. Office space may be available and organizations may be part of or consolidated with the Center. A Televillage may have more than one Center.

## 5. How will the Center be designed?

The facilities are viewed not simply as technology centers but also as living laboratories of innovative workplace environments. The work environment is designed

with careful attention to systems that enhance individual health, satisfaction and productivity. In addition, the Center serves as a place where people can meet, work together and share information and ideas.

6. What kinds of applications and resources will be available through the Televillage and the Centers?

The Center's service package could include computer usage, video and document conferencing, fax, optical scanning, voice and electronic mail, information access, training and consultation.

7. What types of customers will the Televillage and Center serve and what kinds of services will be provided?

Companies:

Small or start-up firms might locate or rent space, using the Center as an incubator. An area firm could have affordable, expanded access to equipment, technical assistance or information, perhaps time-haring the use of certain technology or services. Out-of-town companies might rent space, use the Center as a satellite office or have employees in the field use the facility to telecommute to the home office.

Schools:

Area colleges and schools might conduct professional training or distance learning classes for students gaining access to expertise and learning opportunities outside the region.



Libraries:

Local libraries could emerge in the Televillage (perhaps as an actual part of the Center) as Telelibraries integrating electronic or more traditional information formats and greatly expanding their capacity.

Workers:

Home-based workers might use the Center as a part-time office or access services remotely (including consulting assistance).

Health-Care Providers:

Health professionals or local medical centers could use the Televillage to support remote diagnosis, consultation, patient monitoring or continuing education.

Government:

Local, state or federal governments could provide simple, single point access to government information, services and perhaps documents. Regional or satellite government offices might be located in the Center.

Citizens or Civic Organizations:

Local civic g oups and residents could take advantage of training and technology education opportunities or use a Televillage's online service to communicate and access a variety of information and services.



#### 8. What physical facilities are needed to house a Televillage Center?

At the start, a community may use an existing facility, followed by a renovated or specially built new facility. Initially, renovating an existing facility will keep start-up costs down, reduce early financial pressure on the Center and help with community acceptance by associating the Center with a familiar structure. Permanent site selection should consider ease of access, convenient parking and proximity to other resources such as libraries and government offices. The Center should be designed with constant change in mind.

# 9. This strategy sounds fairly sophisticated. Can a small underdeveloped rural area create a Televillage?

Yes, the Televillage is a development strategy, not a "thing." Each Televillage is different, structured to meet the unique needs of an area. Frequently, a region may not require all of the services and applications mentioned here. A viable Televillage, either operating on its own or serving as a satellite to another larger Televillage, can be created in many rural regions. A sophisticated communications infrastructure is not required to begin the development of a Televillage.

## 10. Will Televillages create new jobs?

In and of themselves, the Televillages will only create their own staff positions, which will be good-paying jobs that will contribute to the local economy. They will also



provide the stimulus and resources for entrepreneurs to start new businesses and for existing firms to expand. The Televillages can also help local professionals such as engineers, doctors and lawyers to remain in the area and encourage professionals such as writers or consultants to work or locate in a rural area. The Televillage is structured to strengthen the economic development capacity of rural areas. The primary focus of the strategy is to stimulate growth and job creation from "within."

# 11. What help will be available for Center users who are not familiar or comfortable with technology?

An Information Broker will guide and help potential users. The Broker can help with training and education needs, locating sources of information and assist in using technology to access information and services. The Televillage is specifically structured to provide services and widespread access to rural residents, including those with very limited technical skills.

## 12. Will local or state government approval be needed to create a Televillage?

None of the activities planned and anticipated for the two pilot sites is expected to require special regulation or exception from existing regulations. Implementation may raise such issues, but the experience to this point suggests that existing regulations and policies pose no insurmountable barriers. This situation may be different in other areas of the world.



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#### 13. Who will operate the Televillage or the Center?

The initial pilot Televillages and Centers are structured to be nonprofit corporations governed by boards of directors. The corporations will own the Centers' assets. Other governing and operating structures may be appropriate.

#### 14. How will Televillage Centers be financed?

The Televillage and Centers are proposed to be viable market-driven operations supported by solid business plans. Up-front development costs could be privately financed or supported through a combination of public, foundation and private grants. Ongoing operations are to be supported in large part by fees and related revenue.

## 15. How long does it take to get a Televillage operating? What process is involved?

Phase One, which involves an extensive planning/community development process, securing a site for the Center, identifying a market to support the Center, creating management and operational plans and securing initial financing for start-up, could take ten to eighteen months. Phase Two involves full implementation, locating the site, designing and constructing or renovating a facility (or facilities), hiring full-time staff, marketing and seeking sources of financial support. It will require twelve to twenty-four months.

#### 16. How much will it cost?

The actual costs involved in developing and operating a Televillage can vary greatly depending upon many or several factors and the scope of the particular effort.



Planning activity could be kept at a modest dollar level but should not be underemphasized. A viable Televillage depends on solid planning and extensive community involvement.

The availability of appropriate facilities, technology infrastructure and expected usage influences costs. Generally, start-up costs can be clustered into two categories: capital and operating. Capital costs include equipment, technology and facilities. Operating costs involve personnel, supplies, communication line and rental costs, leases (including facility), insurance and similar ongoing expenses.

For one Televillage now under development, the initial technology platform is estimated to cost approximately \$350,000. Facility costs are subject to local markets and conditions and will be different for a renovated structure or a custom-designed Center.

Operating costs for the first full implementation year are budgeted at approximately \$300,000 - some of which will be offset by revenue.

These figures are based upon one fairly ambitious model. Many other variations on this model exist which can result in much lower or perhaps higher costs.

#### Work-to-Date

The Televiliage Initiative involves an aggressive approach to development which uses telecommunications and human resources to stimulate economic growth in rural areas. Two Televillages are now taking shape in rural Kentucky with others emerging in other areas including regions outside the United States.

Besides the project partners the Televillage Initiative has received financial support from the Economic Development Administration of the U.S. Department of Commerce, the Appalachian Regional Commission, The Aspen Institute, the James Graham Brown Foundation



and the German Marshall Fund of the U.S.

Extensive research and community development activity has guided the Televillage effort since it began in 1991. A feasibility study completed in late 1992 concluded that rural areas could potentially benefit by reshaping themselves into Televillages.

The broad concept of the Televillage was a result of the feasibility study. Two focus groups of professionals, educators and business people familiar with economic development and the needs of their regions offered valuable comments and insights. The project team conducting the feasibility study also met with national experts on rural development and telecommunications and held a conference on the topic that attracted more than 200 people.

The project team asked an architect to create schematic drawings of a hypothetical Televillage Center to help focus discussion of specific issues related to the strategy. In 1992, 47 rural Kentucky communities who had expressed interest in developing a Televillage were sent a Request for Proposals. Nineteen formal proposals were received and a site selection team visited the five finalists. The sites were judged on the:

- strength of the local economy,
- · nature of businesses or institutions,
- range of potential users,
- · community leadership,
- technological infrastructure,
- · proposed facilities to house the Center,
- · understanding of the concept, and
- evidence of a sufficient market to support the Televillage.

The two pilot sites selected for Televillages in Kentucky - Pikeville and Elizabethtown

— will provide valuable lessons and contrasts in local needs, economic conditions and



geographical factors. The Big Sandy Televillage centered in Pikeville will serve a region that is very mountainous, extremely isolated from major markets and has scarce building land. The Lincoln Trail Televillage centered in Elizabethtown will be in a more densely-populated region whose economy is agriculturally based with a small pool of manufacturing firms.

Project staff developed detailed implementation plans over a two-year period to implement the Televillages, including five-year financial projections. Funds are being raised to support start-up; commitments from customers and tenants are being pursued and services are being phased in. Plans call for these first Televillages to be fully operational by early 1996.

