

## **E-HERITAGE IN THE GLOBALIZING SOCIETY: ENABLING CROSS-CULTURAL ENGAGEMENT THROUGH ICT**

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This article advocates that the traditional approach pursued by the tourist business is in need of fundamental revision. Experience has shown that economic development activities like tourism, when they are driven by outsiders (notably transnational corporations), are likely to deplete the cultural and social capital that is necessary for sustainable community economic development. It is assumed instead that to the extent that *insiders* are empowered and enabled to bridge cross-cultural differences, tourism development strategies may contribute towards global sustainability. Establishing cultural empathy between players in the travel industry is crucial in this process. However, this vision needs to be grounded in a sound business model for the heritage enterprise. To this aim, local narratives should be translated into compelling e-content to be diffused globally.

Key words: Sustainable tourism; Restructuring; Heritage enterprise; Incubator

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### **Introduction**

Tourism illustrates many of the opportunities and threats arising from the changes in modern society, epitomizing the dilemma of growth versus sustainability. Rather than an instrument of peace, as praised by international organizations like UNESCO (UNESCO, 2001), international tourism is today widely regarded as contributing to critical trends in world development. However, following Castells (1996, p. 428), heritage tourism might rep-

resent a link between the “space of flows” and the “space of places,” which become fundamentally separated from one another under the tensions of a globalizing society.

This article investigates the potential to fundamentally revise traditional ways of thinking and behaving in the tourism business to meet this challenge. This necessitates a consistent development framework. To this aim, a business model for regional incubators is proposed that achieves a genuine, sustained growth in heritage tourism destinations. The

primary tasks of this model are the stimulus to constituency building in order to overcome distrust amongst players and the transfer of knowledge, so that choices are both informed and responsive to all those with a stake in the process, across lines of income, geography, race, ethnic group, or political view, as well as jurisdictional and disciplinary lines.

The article is organized as follows. The second section presents some problem areas related with emerging world trends that are relevant to tourism and ICT experts. The third section sets the scene of our argument, pinpointing the shift toward commercialization and short-term decision making at the expense of conserving cultural heritage, and highlighting how the applications of ICT to tourism represent an unrivalled opportunity to enhance the performance of business and host communities. The fourth section proposes a coordinating mechanism based on ICT, which helps to achieve a more globally responsible paradigm for the tourism industry as a viable encounter of cultures. The last section offers some final reflections.

### Background Issues

The evolving world economic order is characterized by increased mobility of capital and growing diffusion of transnational corporations. Industrial, banking, and travel and tourism principles and practices extend from the developed countries towards developing and transitional regions. Globalization, that is, "the linking together throughout the world by distance-abolishing technologies of cultural, political and economic events" (Gray, 1998), has resulted in broadly two categories of citizens: those who are included, and therefore are able adapt their organization and behavior to the new socioeconomic environment, and those who are excluded, and hence are unable to defend themselves. Social inclusion represents one of the most crucial issues of our modern time, because it is fundamental to all human relationships and transactions. In a world increasingly made up of electronically mediated commercial and social networks, the right not to be excluded—the right of access—becomes more and more important (Rifkin, 2000, p. 239). Paraphrasing MacPherson (quoted in Rifkin, 2000, p. 238), postindustrial technology has changed the nature of the game. It has spawn the rapid rise of the global economy, the

privatization of property and the resulting right to exclude others from use or enjoyment.

Today, in many respects, the world is more disconnected than ever. Despite the irreversible improvements in technology—and the multiplication of opportunities that is associated to a greater generalized "access," the poor, the marginal, the unskilled have even fewer possibilities to cross the gap that separates them from the wealthy few. Failing to connect communities in the "disconnected" regions of transition and developing countries will lead to a further widening of the "digital divide." Indeed, whereas in the past exclusion was primarily associated with class or ideology, today it is mainly perceived as a geographical issue. The United Nations and national governments are increasingly confronted with the challenge of how to spread the benefits brought by technological progress and the mobility of capital and human resources among sectors of society and between regions. The recent outbreaks of violence at various meetings involving the World Trade Organization, the European Union, and the G8, the September 11th attacks, and the numerous regional conflicts of the last decade are all signs of a crisis in the world, arguably fueled by rising insecurity, which divides the public opinion and political leaders in new ways. The incapacity to govern and steer globalization towards the common good puts at stake the very conditions for balanced and effective economic growth. Hence, the necessity to set an "agenda for peace," building on the potential offered by a specific field of human activity: travel and tourism.

### Heritage Tourism and Sustainable Community Development

#### *Tourism in the "Death of Distance" Era*

More than almost any other sector (with the notable exception of education), tourism may have a strong effect on local culture. First, by using stories that locals can be proud of, in order to create a significant "pull" effect on travelers and residents alike within destinations. Second, by mobilizing complementary talents around such compelling narratives, so that economic empowerment may ensue from the resulting cross-cultural engagement, meeting the ultimate challenge of enhancing the destiny of a host community.

A new approach to tourism development seeks to capitalize on the opportunity that host communities have to consider tourists as their audience and, like a theatrical troupe, to engage their audience through a creative host–guest encounter. From the standpoint of cultural life, tourism that is both “need-led” and “demand-led” stands the best chance of benefiting the host culture. In fact, it builds on the local uniqueness and seeks solutions that are compatible to the “sense of place” and responsive to the needs of the host community. In the process, it generates the resources that are needed to keep cultures alive. What is more important in the context of this article, it allows “marginal” players in the globalization process to become relevant again, establishing a comparative advantage coming from “uniqueness,” “distinction,” and “knowledge.” For Richards and Hall (2000, “the rationale of sustainable tourism development . . . rests on the assurance of renewable economic, social and cultural benefits to the community and its environment” (p. 1). In this context, tourism represents a sustainable and powerful tool to bring together different cultures and system of values, recreating cross-cultural empathy between guest and host communities, with the result of an increased generalized understanding and tolerance. Thus, heritage tourism is an opportunity for world peace.

It is therefore recommended that tourism be placed at center stage as a key complement to various UN trade and technology initiatives. However, this is not the case. Tourism is today more than ever regarded as a “problem area,” something to constrain and regulate, rather than a strategy to pursue cross-cultural integration across the world. Despite the efforts of planners and business specialists, tourism remains the stereotype of an “irrational,” heterogeneous, rent-exploiting, partially industrialized sector that is very difficult to coordinate and govern (see Britton, 1991; Ioannides & Debbage, 1998; Leiper, 1990; Tremblay, 1998).

Technical progress in transportation has enhanced the physical accessibility of destinations, but this has not been matched by an equal increase in *cultural access* (i.e., the subjective capacity to recognize and attribute a value to the cultural features of the visited places). Consequently, in the generality of cases, tourism development has resulted in increased strain from tourist pressure on host communities. Caserta

and Russo (2002) show how the “place qualities” subject to global pressures are deemed to diminish, so that a critical level of profitability is maintained. Various other disadvantages regarding tourism-related employment are signaled by Choy (1995) and Williams and Shaw (1988). On these accounts, tourism fails to contribute to the elevation of economic status in host communities, and in practice it shows to be a short-lived option for development.

The so-called “deconstructionist” argument is upheld by those who think that as a consequence of technological change, systems of equivalence and cultural control move from the space of representation to the space of generation and (re)production. Global technology has already deconstructed both the nation-states and the old metaphysics of presence. The problem is that it has created an altogether new apparatus of (in)security (Featherstone, Lush, & Robertson, 1995). Critics of globalization embrace these arguments. They view the world through the eyes of the exploited population, the homeless, unemployed, refugees, and undocumented temporary workers (Souza & Stutz, 1994, p. 22). They would argue that tourism causes displacement and exclusion, just as heavy industry creates chemical pollution, and that globalization leads to cultural homogenization and to the prevalence of a “mainstream” cultural model, leveling local uniqueness. The movement against globalization therefore also shares the growth of interest in heritage conservation, which is considered at risk in this context.

Clearly, cultural tourism development presents some very definite unbalances. On one side, it depends on localized and hardly reproducible resources. On the other, it is governed by an industry that is increasingly both “global” in nature and disconnected from the sources of cultural capital. As long as the content of the tourist experience is determined by “outsiders,” responding to the needs and structures of disconnected institutions, there is no guarantee that the resource base—the most important of which is the social and cultural fabric of the host community—is preserved from erosion and displacement, leading to confrontation, refusal of tourism, and the eradication of host communities. The more so since organizations, facing the crisis posed by accelerating globalization, may be tempted to seek to design solutions in the what could be called “Olympiad model”: faster, cheaper, and better pro-

duction. Following Ciborra and Lanzara (1999), host communities that have heritage assets should be at the heart of the urban conservation and heritage tourism debate but are not, due to significant barriers to joint decision making.

Like any industry, tourism needs profit and investment incentives to grow. However, neither commercial interests nor government entities have the capacity to achieve a reconciliation of the inherent conflict between heritage and tourism. Indeed, authors such as Haywood (1998) and Ioannides (1992)—utilizing the conceptual toolkit of destination cycles—are inclined to link the performance pattern of destinations to the private strategies of multinational companies. In this context, it is felt that the very foundations of tourism have to change, and in particular the decision-making perspective of transnational tourism corporations, as far as their business practices in host communities are concerned. A solution ought to come from the negotiation between the key players representing both the public and private sector. As Orbasli (2001) indicates, the relations between the tourism players are both very complex and differ from country to country.

The decision-making process involves outsiders (boardroom) and insiders, local actors with an understanding of the host cultural values. A delicate balance has to be established between insiders and outsiders to maximize the benefits from development. Achieving such balance requires coming to terms with two main issues. First is the need to bridge potential legislative gaps and cultural differences to establish a participatory relationship between the initiators and the recipient of development or change. Second is the recognition that “if there is an Achilles heel to the new age, it probably lies in the misguided belief that commercially directed relationships and electronically mediated networks can substitute for traditional relationships and communities” (Rifkin, 2000, p. 241).

To sum up, the potential from tourist growth can only be fully exploited if both policy makers and businesses remove unnecessary structural barriers to growth, by capitalizing on the opportunities that are based on cultural heritage and identity. In other words, a new strategy is required for developing cultural heritage as a viable economic sector. Richards and Hall (2000) indicate that top-down, distributive empowerment models tend to be un-

successful, creating more tensions than they can resolve. Instead, they ask: “How is locally generated empowerment to take place? How are host communities to be linked with each other in order to create collaborative action at global level? (p. 7). In the next section, these questions are addressed.

### Bridging the Digital Divide Through e-Heritage

Globalization has profound implications for competitiveness, trade and tourism policy, and the quality of life. Two opposing trends are apparent. One is the increasing economic interdependence and multilateral global agreements. The other is a growing political fragmentation, the emergence of multiculturalism and regionalism.

Globalization tends to impose its own signs, symbols, and values that lead to both cultural convergence and technological and industrial divergence. This process is “most visible in three basic shifts in the sources of cultural identity: from local to global images, from public to private institutions, and from ethnically and racially homogeneous communities to those that are more diverse” (Zukin, 1995, p. 24). The global culture of today is epitomized by the urban symbolism of the McDonalds and Sheratons, which more often than not rise at the expense (if not, physically, at the place) of the traditional heritage that characterizes a host community. Youngsters all over the world are keen to keep up with global trends and fashions rather than reviving local traditions and languages. In such conditions, one of the pillars of societies, cultural identity, may be wasted. The residents of communities in developing regions largely lack the education and skills that are required to control their own economic destinies. When translated to the field of tourism, this implies that outsiders are likely to institutionalize the host function. Cities and regions find their indigenous culture withering, and its two most important “products”—social trust and empathy—declining. Typically, they become less attractive places to live, work, visit, and invest in. Therefore, economic development driven by tourism, especially in smaller host communities, may be short lived and contentious.

Globalization has also caused a power shift from public to private institutions. The capacity of cities to keep hold and govern the transformation process is crucial. “Traditional” decision makers are in in-

creasing hardships. The local–global nexus inherent to tourism is managed with blunt tools and a lack of focus (Chang, Milne, Fallon, & Pohlmann, 1996). New models of governance are required instead, which replicate the complexity and spatial articulation of the globalized society, but also interpret and provide solutions to societies that are undergoing a transformation. Strategic networks of stakeholders and a strong leadership of empowered actors (not necessarily formal, institutional policy makers) guarantee endurance to the development process, mediating through different and possibly diverging stances and ensuring to it the necessary political and social support (Van den Berg, Braun, & Van der Meer, 1997). The formation of such networks may be seen as a matter of building trust (Ganzaroli, 2002).

Finally, there is a noticeable shift from ethnically and racially homogeneous communities to those that are more diverse. Traditionally, heritage was conceived as a bridge between the past and the future of a community, a reflection of founding values, history, and identity (Graham, Ashworth, & Tunbridge, 1998). The cultural capital embodied in buildings, artifacts, sights, songs, and rites permits the transmission of the culture of a people through time and space. In origin, the objects that are now recognized as “heritage” were the expression of the socioeconomic circumstances of their age. Only in thriving and culturally active communities could such cultural stock be accumulated (Bendixen, 1997). The emerging heterogeneity of society causes a dramatic change. It implies a breaking of the rules of the tourism business, which traditionally (e.g., in Europe) depended on cultural heritage for its success. Waves of cultural diversity require new ways of thinking and greater flexibility both on the demand and supply sides of the market. The increased cultural diversity, coupled with the growing access to the heritage, is likely to result in strong pressure for a fundamental restructuring of the modern tourism business, with greater responsibility and empowerment of the host communities.

In synthesis, the transition to an information society provides places not only with threats but also with opportunities for development. The global processes described above create new opportunities, insecurities, and inequalities; however, fragmentation offers individuals a range of choices to be eclectic.

It behooves information technology experts and social scientists to show interest in these issues, because the long-term success of their field of inquiry depends largely on its ability to bring about integration at the host community level, enabling the public and private sectors to cooperate and use local resources for development efficiently. A basic prerequisite for sustainable tourism is allowing individuals and communities an opportunity to be included and “connected.” Computer network technology has revolutionized the management and control of distributed locations of labor over a greater geographic area for transnational corporations (Souza & Stutz, 1994, p. 255). The ILO “World Employment Report, 2001: Life at Work in the Information Economy” (Anonymous, 2001) indicates how the high mobility of capital and its inherently knowledge-based nature allows lower income cities and regions to “leapfrog” stages in traditional economic development, via investment in human resources. This implies the need to foster connections between individuals and organizations, what is often referred to as “social capital” or “social trust.” The aspects concerning the use and development of tools, technologies, and methodologies to facilitate the efficient networking of information and communication systems in tourism are gradually being recognized in the literature (cf. Buhalis, 1999). However, the issue is more general. The bridging of the digital divide requires above all abandoning traditional thinking and acting. It requires the development of a new humanism based on a right of access, which depends on availability of social trust and empathy. Both social trust and empathy, in turn, rely for their existence on culture (Rifkin, 2001, p. 247). Many businesses fail in places that lack trust and “the World Bank is just beginning to understand the relationship between culture and commerce” (Rifkin, 2001, p. 245).

In this light, the encounter between cultural tourism and information and communication technologies (ICT) represents an opportunity to enhance the performance of business and host communities. Its success depends on the ability to bridge the digital divide by corporations and governments of transitional countries. Host communities have to learn to use the potential offered by the new technologies, and this learning process can be slow, as the delays in endorsing e-government demonstrate (“Survey:

Government and the Internet, 2000). As long as they don't, they are passive actors in the globalization process. Anyway, with time, a change is foreseeable from the administered industrial economy to an entrepreneurial economy accompanying and *institutionalizing* the information society. In this new context, cities that wish to be competitive have to use their own resources in creative ways and exploit localized advantages for the better. Hence, uniqueness, local skills, knowledge, and distinction would become important again. For this to happen, the governments of transitional countries must be brave enough to overcome their concern of losing their local markets and control to larger global players. Experience demonstrates that host communities are better able to cope with existing problems and new challenges when all concerned parties jointly attempt to find a balanced solution through mutual consultation, business-to-business cooperation, and public-private partnerships (Innes & Booher, 1999; Lyons, Smuts, & Stephens, 2001; Van den Berg et al., 1997).

#### A Business Model for Sustainable Heritage Tourism

##### *The Heritage Entrepreneur*

ICT may indeed favor the reconciliation of heritage and tourism, supporting a process of creative encounter between host and guest communities. This is achieved through the empowerment of local stakeholders, which requires a shift in the center of gravity of decision making from outsiders to host communities, and the establishment of cross-cultural empathy between individuals and groups within the tourist industry. However, the cross-fertilization of IT and tourism is likely to maintain its promises only to the extent that it is recognized that "image" is much more important than physical attributes or the information processing paradigm, which has its roots in industry and ill fits the demands of our experience society.

So far, little systematic knowledge and methods—and hardly any tools—have been available to turn heritage entrepreneurship into an urban profession. The collapse of the centrally planned economies of Central and Eastern Europe at the end of the 1980s demonstrated the inability of central planning concepts to meet the expectations of stakeholders in

societies ever more complex and heterogeneous. The transition to a market orientation is filled with dangers, uncertainties, and crises. The process is expected to require considerable knowledge and skills; the inequalities amongst communities will grow substantially to the extent to which their economies become centered on market institutions. It implies that a revolution is under way. Metaphorically, the transformation that communities undergo may be likened to a journey. Like travelers, host communities may like the challenge to envision a desirable future and prepare themselves to move from a familiar habitat to a more dynamic but less known environment. Against this background, host communities that fail to control their destiny are likely to become "prisoners of their own past." Paraphrasing Jack Welch, the CEO of General Electric, the new credo for host communities should be: "Control your destiny or someone else will." In the example of communities like theatrical troupes, this equates to ideas, dialogue, and actions flowing amongst cast members. Civic leadership at the community level identifies a desirable future outcome and involves the host community to navigate jointly towards its goals.

To this aim, a model of business development supported by ICT applications is proposed. This model is bound to restructure traditional segments within the tourist chain, bringing culture, experience, and information at center stage. According to this approach, local cultures can "grow," responding to the stimuli coming from the global market—sophistication, participation, interaction, not disjointed by a creative reinterpretation of traditions and community values. Building on such growth, a virtuous cycle of development is ultimately triggered involving larger regions and interregional networks.

Timmers (2000, pp. 41–44) classifies 11 existing business models for e-commerce, along the two dimensions of functional integration and degree of innovation (Fig. 1). Ranking first along both dimensions is the "value-chain integrator," which critically depends on information technology for letting information flow across networks and creating added value from integrating these information flows. For the field of heritage tourism, this suggests a model that assimilates contributions from local institutions and private enterprises that are looking for ways to build on their existing potential, organizing them-

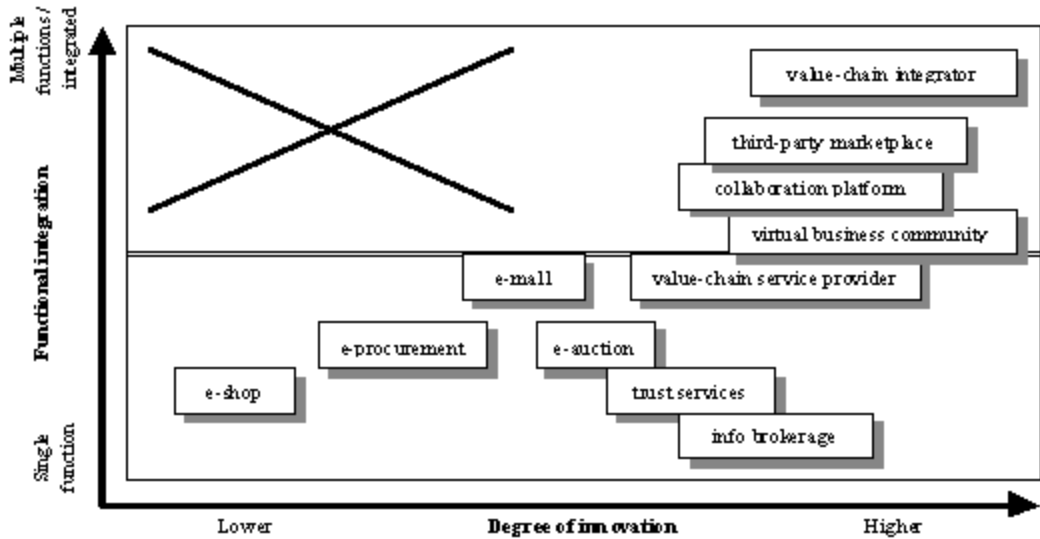


Figure 1. Classification of Internet business models (Timmers, 2000, p. 41).

selves as multiple steps of a cultural heritage value chain. This model has various requirements, which may proceed concurrently.

First is the general recognition and empowerment of the heritage enterprise industry, via IT-aided learning and skill development. This is clearly a task for international organizations, including the European Union and the United Nations, in cooperation with strategically thinking partners in the business such as the members of World Travel and Tourism Council (WTTC) and of the World Tourism Organization (WTO), which promote a host of initiatives for sustainable tourism and poverty reduction through tourism.

A second requirement for cultural heritage value-chain development is the elicitation and organization of cultural content. Here various information technology tools may aid the process, such as expert systems that can help with elicitation, and Web design tools that help to visualize the end result. A third requirement is of course venture capital, because the local entrepreneurs typically do not possess sufficient surplus for marketing developments of this sort. Thus, public-private partnerships at all levels have to be organized.

The restructuring of cultural tourism must address all the stages in which cultural contents are elicited,

processed, and brought to the public. To pass from principles to practices, the relations between the various actors at different stages have to be reconfigured. For the sake of analysis, the model is put in matrix format (Fig. 2), singling out three dimensions of development (input, process, output), each involving of a number of issues and strategic moves.

#### *Inputs for Cultural Heritage Development*

Communities that aim at capitalizing on tourism must be led to assess their own identity, lifestyles, and environments, enriching their insider perspective with the point of view of outsiders. This dialectic process of recognition of a place as a desirable place to live, work, and visit leads to developing and enhancing local cultural assets, emphasizing the unique character of the host community. A key challenge for the enhancement of cultural heritage is to bridge the divergent perspectives of how tourism organizations and service providers can present their cultural heritage in a way that appeals to the interests of the international tourism audience. What may seem commonplace to the local may be uniquely interesting to a foreigner—for instance, Egyptian mummies were once regarded as trash, and burned

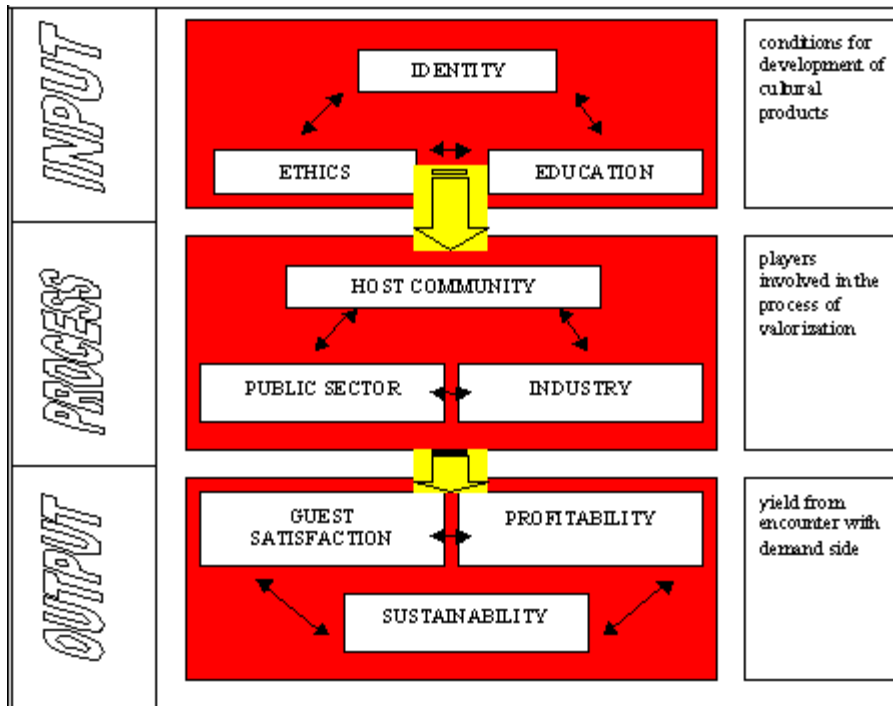


Figure 2. Reconstruction of the tourist business.

as fuel. Conversely, elements of modernity, such as a fast-food restaurant, may not seem so remarkable to the international tourist. For this, feedback and dialogue between hosts and visitors can be of great importance. Because, in most cases, the host population is relatively fixed, whereas the visitor population is continuously changing, it is important to capture visitor feedback at the point of experience. This can be simple comment forms at exit points of exhibits, or added to the check-out process at hotels or passport control points. Street interviews might also be conducted. Another device that sometimes works well is to give visitors a bunch of special monetary coupons that only function as tips to service personnel. A similar device can be employed as a complement to the institution or service itself, providing useful marketing feedback. In all these cases, it is important that the feedback be marshaled, assimilated, tallied, and directed to the appropriate community representatives.

If this vision is well formulated and implemented, the quality of life for residents should improve. However, and especially in regions in transition, con-

trolled growth is difficult, because residents and entrepreneurs may care less about preserving their heritage than "pilfering" for personal gain. In this process, they find allies among private multinational operators who derive their profits from the public good nature of cultural assets, without caring for the reconstitution of the cultural and natural stock that made places attractive in the first place. Locals may not even appreciate that heritage has an economic value beyond immediate survival considerations or symbolic importance. Hence, cultural identity as an asset for development depends crucially on the establishment of an "ethics of the heritage." The largely nonreproducible nature of cultural assets, both the tangible and intangible kind, should be respected in conservation and development initiatives. Education is a key factor that stimulates and empowers host communities in the wise use of their heritage.

Insiders must be made fully aware of the risks of an unbalanced use of their cultural assets, and the consequences for both the short term and the long term. Knowledge and pride of their own heritage, as well as the recognition of opportunities that the en-



counter with guests offer, result from greater awareness (a useful example regarding the city of Nazareth, Israel, is offered by Shoval, 2000). Information is an underlying factor both for education and ethics in developing the identity of a place for visitors.

The way in which the information is put together and presented to the visitor is crucial. Increasingly, visitors wish to be part of the process of elicitation and elaboration of contents, rather than being told what they have to see or like. Heritage tourism is often (mis)understood (Trotter, 2001) in mainstream opinion as a sterile identification of the present with the past. Rather, interactivity—the involvement of visitors and locals together in the codetermination and appreciation of culture—is what can make heritage tourism an active process of intercultural encounter. The encouragement of close host–guest interaction is a crucial requirement for holistic, sustainable tourist experience.

The host–guest encounter or “hospitality,” while complex in nature, represents an “institutional device to cut down the time needed to merge cultures, and to integrate alien mindsets and costumes” (Ciborra & Lanzara, 1999). The age of “dynamic efficiency” requires a new language to frame the relationship between information technology and cultural organizations.

Clearly, the various new e-technologies (for instance 4D animation and virtual reality) offer many opportunities to improve these complex processes, allowing high degrees of user-friendliness and sophistication. However, the need for technology infrastructure and other expertise need to be driven by locally determined goals for communicating the cultural heritage of the locality to its international visitors

The development of ICT applications is planned as ongoing and evolving, benefiting from feedback from field implementation experience in the tourism locations. Specific e-learning content may be developed to educate small and medium enterprises about the ways to provide culture-related products and services while maintaining their cultural identity. This would help to increase the number of start-ups, availability of quality service in the host regions, resulting in increased travelers’ interest and satisfaction.

Much information about cultural heritage can be gleaned from publicly available resources, which can

also be incorporated into more structured educational programs. The objective is to provide e-content for education to local stakeholders and tourists. E-learning and technical training for e-heritage will help to achieve broader awareness and knowledge to enable sustainable cultural growth.

Technical partners need to be brought together with local tourism organizations to design and implement Internet sites and portals that will aggregate information and services related to the cultures of each host city in terms of historical perspective, architecture, landscape, fashion, cuisine, and public culture. This joint-venturing process needs to be actively stimulated and supported by the local and regional governments and other nongovernmental organizations, in particular in regions that are now “disconnected.” A further feature would be to elicit comments from tourism clients that navigate these online materials as to how they could be improved. In this way, guidelines for evolutionary improvement can be obtained.

### *The Process of Heritage Value Enhancement*

Through education and ethics, cultural identity as embodied in heritage and local skills becomes an asset for development. The process of enhancement of the value of the heritage involves several actors that can be categorized according to different degrees of “insidership.” The natural “insider” is the host community, which is directly interested by the effects of the process of tourism development—both in positive and negative ways. However, they can be severely limited from enjoying the direct benefits of revenue and job generation to the extent to which the tourism industry is disconnected or poorly articulated in the “local.” It is the typical case of remote, fast growing destination regions in relatively unexploited areas such as the Pacific and Africa. Outsiders are found both within the private sector and the regulators; governments and public bodies may be less concerned with the local than with the regional/national relevance of tourism activity.

Insiders and outsiders express a variety of interests that are often hard to reconcile, with the consequence that more adaptive, connected, and culturally cohesive organizations impose their own strategies. However, cross-cultural empathy resulting from an ethical, informed use of the assets shifts

the interest of private organizations. The process of putting together and supplying cultural services is one in which considerable skills and “localized” knowledge are required. The local operator has an advantage on the anonymous, ubiquitous tour packager, because he is *part* of the culture that is being reproduced (Shaw & Williams, 1998). He is responsible for keeping cultural tourism linked to the economic production of cultural contents. In this way, local culture becomes a generator of economic value and is kept alive. However, as Dahles (2000) points out, to identify the conditions under which the small and medium sector operators become real engines of local development requires a deeper understanding of the social meanings embodied in the production, exchange, and consumption of the tourism product.

According to the literature (e.g., Klein, 2000), it is felt that the lack of entrepreneurial capacity represents a barrier to wealth generation through the conservation and the responsible use of the cultural heritage. Thus, enterprise creation for the cultivation of cultural heritage assets is a precondition for a sustainable development strategy based on cultural tourism.

From a network perspective, a critical success factor for the model sketched above is the existence of at least one partner who *takes the lead* in formulating and communicating the opportunities, identifying compatible partners, setting the agenda, and facilitating the process of formulating the strategy and operational plans. This role is referred to as the *Heritage Entrepreneur*, the engine and engineer behind the partnership dynamics. The heritage industry, small in size, information-intensive, and creative, is deeply embedded in the very social environment in which the cultural capital was accumulated through the ages. Its goal is to generate value from local knowledge and information, and make it available to consumers worldwide (virtually, via the Internet, and direct physical access: the two should be seen as complementary in nature rather than substitutes). Economic growth and the quality of local life are enhanced by balancing the interests of three major stakeholders: *residents* who want to raise their standard of living through economic growth and safeguard their quality of life through environmental and heritage preservation; *visitors* who seek an amenable experience, mainly for recreational purposes; the

*travel and hospitality industry* seeking to maximize profits.

ICT is central to this achievement, as it involves various stages of the operation of the heritage industry (for instance, content creation and communication, value enhancement, and market strategy).

The travel industry, in turn, has to be connected to such heritage entrepreneurs; and ICT, again, is germane to this connection. Enlarging the range and “depth” of experiences available to visitors, and empowering local economic operators, does not mean reducing the profitability of the industry, but rather, redesigning the system of value enhancement and commercialization of the tourist assets, in order to grant durability to the economic enterprise of tourism. In this process, the big players of international tourism should recognize the convenience of taking a step back from frontline operations, and should connect with local entrepreneurs in designing local strategies and delivering the cultural contents. Such restructuring within the tourism value chain achieves greater efficiency and equity both at a local and at a global scale. In fact, it provides wider opportunities of development to locals, contributing to a greater cultural understanding that is a necessary condition for cohesion and sustainability.

The scientific coordination of knowledge transfer to tourism service providers to apply new tourism technologies in each city has to be carefully managed for the project to be “culturally” successful in the long term. Utilizing the ICT infrastructure, communities are helped to become more strategic and entrepreneurial in managing their heritage. This implies a partnership structure that has the potential to empower once-disconnected actors and coordinate consensus in decision-making practices. Such new type of organizational structure demands both integrative thinking and acting, and higher levels of thinking by teams that rely more on technology. Therefore, such creative learning organizations need to be supported by “incubators.”

The incubator will serve a crucial threefold role in the process by: (1) shaping of alternative visions or designs for the desired future of selected cities; (2) transferring knowledge to tourism providers to apply new tourism technologies in each city; and (3) eliciting cultural content to strengthen heritage identity and the distribution of a coherent city image to face the global competition. The incubator

model functions like a “back office” in that it provides the support for the “front office” diffusion of e-heritage worldwide. Furthermore, the incubator structure can be cloned across the world by interested groups, saving cost and enhancing efficiency. This sharing of the context-independent aspects allows mutual improvement and coevolutionary learning of techniques.

The incubator for e-heritage may support business and governments in the construction of public–private partnerships. A number of stakeholders of the communities participating in local development can be trained in utilizing and sharing cultural resources in the most effective way. Training begins as soon as local actors experience learning by doing through the set-up process. The public element involves providing training spaces such as cybercafés or similar workspaces.

As a last stage of the incubator development, a federation of specialized tourism and culture-related Internet hosts could be organized to develop an integrated and comprehensive information infrastructure that describes the cultural activities and heritage of the regions concerned. National and regional resources are to be consolidated and integrated in regional Web portals. These portals perform two functions. Firstly, they can be seen as a marketing tool that projects the region in perspective to the rest of the world. Secondly, by educating tourists about the prevailing culture of the region, a more satisfactory travel experience can be offered.

#### *Output: Communication of e-Heritage*

The value enhancement process is expected to produce a number of outcomes, which can be categorized as “guest satisfaction,” “profitability,” and “sustainability.” These three categories result from the encounter of tourism demand with the supply of local culture. The center of attention there is still the tourist; yet he or she is no longer a passive participant in preconceived itineraries, but rather an aware, active player in the process of codetermination and reward of cross-cultural experiences.

Guest satisfaction results from the intensity and quality of the cultural experience. Satisfaction is also clearly connected with profitability, through the mediation of perception and commercial strategies—hence the importance of cooperation at different lev-

els in destination marketing. A development that generates profits guaranteeing high levels of tourist satisfaction is sustainable. The generation of employment resulting from sustainable tourism development represents the dynamic feature of cultural empathy between host and guest community: the more connected the two groups, the better chances for locals to develop and cultivate the value of their cultural assets and skills triggering a virtuous cycle of growth.

Various existing technological lines can boost the yield of heritage enterprises. Two of the most promising and widely available are described.

*Web Presentation of Cultural Heritage Information.* At this stage, it is necessary to identify the appropriate Internet technologies to communicate the cultural content that has been previously elicited. Existing Web-delivery technologies, already available in common browsers, should be utilized. However, it is often the case that potential tourist demand is generated in industrialized countries that have more advanced Internet services than the host communities, especially if the latter are in developing countries. This is especially true of bandwidth capacity, and hence the ability to view multimedia such as graphics and audio and video clips. Nonetheless, this apparent disparity can be turned to good advantage.

One approach would be to confine Web site development to textual descriptions. This is the easiest kind of Web site to develop, and also the fastest to view with low bandwidth services. Textual descriptions, however literary they may be, are necessarily committed to a certain language. Despite the progress in automated translation software, this technology is still not sufficient for the task of translating cultural heritage descriptions. Yet many aspects of cultural heritage can be effectively conveyed using graphics, images and sound. This includes online digital reproductions of art exhibits and architecture, audio clips of music, video clips of dance and theatre, etc. This can go far to overcome the obstacles of multiple languages.

The recent developments in the field of virtual reality have the potential to bring virtual cities and museums to Internet users. The experience of the “virtual theater,” realized by CINECA in Bologna and documented by Bonfigli, Calon, and Guidazzoli (2000), is a good example of how 4D technology

can be used to incorporate the visual chronology of the city, allowing users to observe the city's growth and development over time from a multitude of angles. Virtual reality applications can be used to combine historical evolution and cultural identity with the information society, which would enhance the dissemination of cultural heritage.

While local infrastructure may not be sufficient to support the higher bandwidth requirements of these multimedia forms, the Web site itself can be hosted and viewed from a remote mirror site in a country with higher bandwidth. The rental of such mirror site space is usually quite modest. In addition, the Web site can offer user options of text only, or low-resolution graphics, for users with lower bandwidth.

*Mobile Technologies for Cultural Heritage Information.* The objective is to utilize the fast growing mobile media for providing information that is useful to tourists, providing a reliable and ever-present reference point during their travel adventures. Tourists traveling by car, train, or bus and those already in the host city can have constant access to tourist information, including: hotel locations and reservations, maps of the city or region, telephone directories, and bulletin boards listing the city's attractions and events. Mobile phone technology is also being employed as a hand-held tour guide in many cities in Europe. This can be done simply by posting a telephone number on various tourist attractions, with a recorded message in multiple languages (there is usually a special charge for the call). More sophisticated systems can also offer limited multimedia presentations via mobile phone (WAP).

Mobile services such as these offer tourists a real-time and real-place information source that gives immediacy to their experience of the city and also enables them greater flexibility to select alternative routes through the city.

Similar strategies can be employed to provide information with buildings and historical sites as well. A museum in Venice, for instance, transmits information to mobile phones that are in the museum's proximity. Through the mobile device, a tourist gets information about the artifacts and gets guidance for visiting different parts of the museum.

Future applications may exploit the combination of mobile multimedia telephones (WAP), with geo-

graphical positioning systems (GPS), so that information can be delivered based on the person's present location. This can be especially useful when touring large historical sites, such as a battlefield or the ruins of an ancient city.

## Conclusions

In this article, a process of urban and regional development is anticipated in which e-heritage becomes a prime source for value creation, through the spontaneous reconfiguration of self-organized networks of independent business units, which co-operate to exploit opportunities from tourism. The formation of partnerships and multipurpose inter-industrial linkages are at the heart of this strategy. As opposed to globally uniform integration strategies that may increase the economic rationality of the enterprise but undermine its sociocultural embeddedness, localized value-enhancement processes enable the cultural heritage sector to shape—rather than adapt to—the changing nature of their particular niche in the tourist market.

The proposed process model for localized value enhancement of cultural heritage is aided by the networking potential of ICT and offers an organizational template from which the host communities in the host cities can develop their own specific uses. It seeks to capitalize on the existing cultural networks, promote their growth and creative potential, and connects them to whole regions and geopolitical contexts, working as an incubator that enlarges their own virtual communities. In this way, a technological link is established between heritage and a sustainable tourism economy based on the cultural richness of places. Its major innovation lies in the capacity to bridge the gaps that divide three fields of knowledge and planning—governance, organizational culture, and language—by electronic means. Thus far, these fields have developed largely independently of each other.

In an increasingly global and competitive market, characterized by standardization, cultural crisis, and pollution, tourism development as a social/economic development strategy can become not only counterproductive, but also self-defeating. However, cultural tourism provides a means to interact with human geography and to learn about host communities. In this regard, the conservation of cultural

heritage is just as important as the development of roads and power lines. Notably, heritage conservation and economic development need not conflict. While the economic development objectives of the tourism industry often impinge on heritage resources, their conservation is in the best interests of all. Today, the essential technologies for the broader application of system dynamics are becoming available. In the city of tomorrow, heritage enterprises will be inextricably integrated in the urban context and interfaced with numerous "glocal" stakeholders. This model is expected to create value for sustainable exploitation and integration of cultural heritage, including protection against the most open dangers of physical erosion, such as vandalism, civil disturbance, and warfare.

The authors hope that this vision of host community development may be shared by transnational corporations and international governmental and nongovernmental organizations. The sound application of ICT in tourism is an opportunity for many cities and regions that have so far suffered the worst consequences of an unbridled, imposed globalization. The progress made depends primarily on the commitment to empower its diverse constituent parts into the e-heritage enterprise, designed to cultivate their cultural assets for the value enhancement and subsequently for the benefit of host and guest communities alike.

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#### References

- Anonymous. (2001, June). *World employment report, 2001: Life at work in the information economy*. ILO report.
- Bendixen, P. (1997). Cultural tourism: Economic success at the expense of culture?. *The International Journal of Cultural Policy*, 4(1), 21–46.
- Bonfigli, M. E., Calon, L., & Guidazzoli, A. (2000). Nu.M.E., a WWW virtual historic museum of the City of Bologna. In J. Carroll et al. (Eds.), *Proceedings of SAC, 2000—ACM Symposium on Applied Computing* (Vol. 2, pp. 956–961). Como: Villa Olmo.
- Britton, S. G. (1991). Tourism, capital and place, towards a critical geography of tourism. *Environment and Planning D. Society and Space*, 9(4), 451–478.
- Buhalis, D. (1999). Information technology for small and medium-sized tourism enterprises: Adaptation and benefits. *Information Technology & Tourism*, 2, 79–95.
- Caserta, S., & Russo, A. P. (2002). More means worse. Asymmetric information, spatial displacement and sustainable heritage tourism. *Journal of Cultural Economics*, 26(4), 245–260.
- Castells, M. (1996). *The information age: Economy, society and culture. Volume I: The rise of the network society*. Oxford, UK: Blackwell.
- Chang, T. C., Milne, S., Fallon, D., & Pohlmann, C. (1996). Urban heritage tourism: The global–local nexus. *Annals of Tourism Research*, 23(2), 286–305.
- Choy, D. J. L. (1995). The quality of tourism employment. *Tourism Management*, 16(2), 129–139.
- Ciborra, C. U., & Lanzara, G. F. (1999). Hospitality and IT. In F. Ljunberg (Ed.), *Informatics in the next millennium*. Lund: Studentlitteratur.
- Dahles, H. (2000). Tourism, small enterprises and community development. In G. Richards & D. Hall (Eds.), *Tourism and sustainable community development*. London/New York: Routledge.
- Featherstone, M., Lush, S., & Robertson, R. (Eds.) (1995). *Global modernities*. London: Sage.
- Ganzaroli, A. (2002). *Creating trust between local and global systems: Information and communication technologies and new forms of intermediation between local and global systems*. EURIDIS and Faculty of Business,

- Erasmus University, Rotterdam.
- Graham, B., Ashworth, G. J., & Tunbridge, J. E. (1998). *A geography of heritage: Power, culture and economy*. London: Arnold.
- Gray, J. (1998). *False dawn: The delusions of global capitalism*. New York: The New Press.
- Haywood, K. M. (1998). Economic business cycles and the tourism life-cycle concept. In D. Ioannides & K. G. Debbage (Eds.), *The economic geography of the tourism industry*. London/New York: Routledge.
- Innes, J. E., & Booher, D. E. (1999). Metropolitan development as a complex system: A new approach to sustainability. *Economic Development Quarterly*, 13(2), 141–156.
- Ioannides, D., & Debbage, K. G. (1998). Neo-Fordism and flexible specialisation in the travel industry: Dissecting the polyglot. In D. Ioannides & K. G. Debbage (Eds.), *The economic geography of the tourism industry*. London/New York: Routledge.
- Ioannides, D. (1992). Tourism development agents: The Cypriot resort cycle. *Annals of Tourism Research*, 19(4), 711–731.
- Klein, N. (2000). *No logo: No space, no choice, no jobs. Taking aim at the brand bullies*. London: Flamingo.
- Leiper, N. (1990). Partial industrialization of tourism systems. *Annals of Tourism Research*, 17, 600–605.
- Lyons, C., Smuts, C., & Stephens, A. (2001). Participation, empowerment and sustainability: (How) do the links work? *Urban Studies*, 38(8), 1233–1251.
- Orbasli, A. (2001). *Tourists in historic towns: Urban conservation and heritage management*. London/New York: E&FN Spon.
- Richards, G., & Hall, D. (2000). The community: A sustainable concept in tourism development? In G. Richards & D. Hall (Eds.), *Tourism and sustainable community development*. London/New York: Routledge.
- Rifkin, J. (2000). *The new culture of hypercapitalism. Where all of life is a paid for experience*. New York: Putnam.
- Shaw, G., & Williams, A.M. (1998). Entrepreneurship, small business culture and tourism development. In D. Ioannides & K. G. Debbage (Eds.), *The economic geography of the tourism industry*. London/New York: Routledge.
- Shoval, N. (2000). The case study of Nazareth. In A. P. Russo (Ed.), *Tourism management in heritage cities. Proceedings of the 2nd International Seminar*, Nazareth, Israel, February 3–5 February. UNESCO Venice Office Technical Reports Series, No. 30.
- Souza, A. R., & Stutz, F. P. (1994). *The world economy resources, location, trade and development*. New York: Macmillan.
- Survey: Government and the Internet. The next revolution. (2000, June 24). *Economist*.
- Timmers, P. (2000). *Electronic commerce. Strategies and models for business-to-business trading*. Chichester: John Wiley & Sons.
- Tremblay, P. (1998). The economic organization of tourism. *Annals of Tourism Research*, 25(4), 837–859.
- Trotter, R. (2001). Heritage tourism. In N. Douglas, N. Douglas, & R. Derrett (Eds.), *Special interest tourism*. Brisbane/New York: John Wiley & Sons.
- UNESCO. (2001). Message from the Director-General of UNESCO, Mr. K. Matsuura, at the Official Celebrations of World Tourism Day, September 27, 2001, on the theme: "Tourism, a tool for peace and dialogue among civilizations" [On-line document]. <http://www.unesco.org/dialogue2001/en/dgtourism.htm>
- Van den Berg, L., Braun, E., & Van der Meer, J. (1997). *Metropolitan organizing capacity: Experiences with organizing major projects in European cities*. Aldershot: Ashgate.
- Williams, A. M., & Shaw, G. (1988). Tourism: Candyfloss industry or job generator? *Town Planning Review*, 59(1), 81–103.
- Zukin, S. (1995). *The cultures of cities*. Cambridge, MA: Blackwell.