Culture, Technology, Time and Politics in a New Global Environment: New Thinking, New Models

by

Joseph O. Okpaku, Sr., PhD
President and CEO
Telecom Africa International Corporation

A Keynote Address to

4th Culturemondo Digital Culture and Heritage Roundtable

Culturemondo Roundtable / TechnoCulture Expo 2008
The Hua-shan Culture Park, Taipei, Taiwan, December 10, 2008

Culture, Technology, Time and Politics in a New Global Environment: New Thinking, New Models

by

Joseph O. Okpaku, Sr., PhD

Your Excellencies,
Honoured Guests,
Fellow participants,
Ladies and Gentlemen,

I would like first to thank the government of the Republic of China for hosting this 4th Culturemondo Roundtable holding simultaneously with the Technoculture Expo 2008, and for putting its authority and resources on line to enable this event to take place with maximum comfort and promise. I would also like to thank the Culturemondo network, especially its International Steering Committee and its local organizers and sponsors for the invitation to address this august body of most distinguished minds and persons. In particular, I would like to thank Mr. Ilya Eric Lee, Ms. Mengshan Lee, both of the organizing committee, and my friend, Miss Joy Tang, for organising and facilitating my presence here. I hope that my contributions this morning and for the duration of this Roundtable will justify their confidence in me. I also hope that you will find sufficient value in the ideas that I plan to share with you this morning to embrace or challenge, as you please, in our common effort to seek new and more efficacious intellectual and strategic constructs that better define the challenges and opportunities of our world culture, and enable us to craft new models for the 21st Century that better match our genius.

As a perpetual optimist, I am uncompromisingly committed to the exploration of all ideas that promise to enhance our common pursuit for understanding and a greater common good and enlightenment. .I am committed to all that can make us happy, creative, caring, decent and good. Given the glaring challenges we face today as a global community, we have a strategic and moral obligation to craft new paradigms that empower all of us, each from his or her own unique culture, heritage and perspective, so as to unleash our genius to build a new and more enlightened and fulfilling global human society and the rich culture that sustains it.

Culture, Technology, Time and Politics in a New Global
Environment: New Thinking, New Models

In choosing for this address, the topic: *Culture, Technology, Time and Politics in a New Global Environment: New Thinking, New Models*, I wish to invite you to join me to take

a deep dive into the centre of our thoughts and ideas about our contemporary society and environment, with a view to exploring the extent to which we have or do not have a sufficient working understanding of each other across our diverse societies and cultures, and of the world we all live in and share, the changes our world has gone through over the last many years or decades, how we have engaged or interacted with it, and, at the end, why somehow, from all appearances, we seem not to have mastered our human environment to the extent that we once assumed we had, even just a few years ago. The less than acceptable state of our world today, mired in so much anxiety, uncertainty, fear, insecurity and distrust amongst even large populations, would seem to suggest that there is something fundamentally flawed in our lives and in the world we live in, and how we prosecute the relationship between the two in our cultural space.

An African's Perspective

I have chosen to address this topic very much from the point of view of someone who is the child of the world's oldest society and culture but whose people's voices are muted or ignored by most of those who manage the portals of global expression and public opinion, to the detriment of all of us. I speak as an African who comes from what is, in fact, humanity's birthplace, and the ultimate home and origin of all human culture and civilisation. Despite the fact that Africa accounts for one-sixth of the world's population and a much larger share of its heritage and human and material resources, Africa's opinion is not often sought, even in matters which affect her directly or the implementation of which relies heavily on her resources. Instead, everyone has an opinion about African, most often uninformed, and few in turn ever seek Africa's opinion about their own societies.

But I have always said that one of the greatest global strategic flaws in the lopsided control of the voice of the world, (not to be confused with the world's opinion), is that people hold their opinions and feelings dearly, and they will act in accordance with what they think and how they feel. So if we dismiss their opinions or fail to take account of their feelings, it is we who are at risk, because, when they act, they surprise us because we never cared to listen. Women understand this notion very well. Men tend not to. This propensity to dismiss the voices and, implicitly, the knowledge and culture of those who do not wield global power or might is one of the most serious challenges to our building a fair, equitable, enlightened and exhilarating global culture and dispensation.

The World We Live In

It is my humble but considered opinion that despite unprecedented advances in science and technology, especially information and communications technology, (or perhaps because of them) our understanding of our contemporary world and the forces that shape our lives and culture in it is vague at best, perhaps seriously flawed, which makes our efforts to manage both, dysfunctional. Our notion of the world we think we live in today is obsolete, having expired quite some time ago. We do not know, and have not achieved a tangible and workable new concept of the true nature of our contemporary world. If this is true, as I do believe it is, then because the world we are working with is obsolete, the

bulk of our strategies for mastering and enhancing it is, of necessity, equally obsolete. If so, then it also follows that the solutions we have been crafting and deploying in our efforts to master our world and solve contemporary problems are, in all probability, themselves also obsolete and essentially irrelevant, which is why they seem to be unworkable, no matter how hard we try and how much resource we deploy. In fact, to a large extent, the very language and concepts that we employ in discussing and engaging our contemporary life and global environment, might themselves also be obsolete.

This state of affairs demands that we engage in *new thinking* in order to craft *new models* of our contemporary culture and society that have more efficacy and value, and hold better prospects of serving to enable us create a new global environment that more accurately represents the best of our human genius, with the promise of leading to a more peaceful, enlightened, inspired and cultured global society.

In order to achieve a better and more efficacious understanding of the true dynamics of our contemporary society and the forces at play in it, all with a view to formulating a fair consensus on just where we are and how we are as human beings, communities and societies, we need to disassemble the components of our perception of our world today. As part of our diagnosis on our way to crafting solutions, we will explore the role of culture, technology, time and politics in shaping our contemporary global environment, for better or for worse.

Thereafter, in advancing our solutions process, we can work to put the disassembled pieces of our worldview together in a new construct or set of new ideas and constructs, in an effort to suggest some new models for our contemporary society that have more relevance, greater value, more durability and more commonly-shared benefits--- intellectually, culturally, emotionally, politically, and, overall, strategically. In doing so, we will focus on the importance of the notion of time as a cultural entity in various societies, and, in particular, on the benefits and threats of science and technology, especially information and communications technology, and innovation, to the achievement of the new world the outlines of which we will attempt to define.

In such a new world, the traditional notions of dominance, power and pre-emptive strategic advantage, all of which have and continue to fuel stress, conflicts and wars, must yield to a more intelligent concept of cultural plurality and exchange that supports and sustains a common global human interest and destiny. In such a new world, the wisdom, knowledge and experience of ancient cultures such as of Africa, Asia, the Pacific and the ancient Americas will be brought on stream to inform younger techno-cultures such as those of the United States of America and provide them the much-needed cushion against the self-debilitating threats of youthful exuberance that induce political and socio-economic excesses. In such a new world also, science and technology, especially through the deployment of cultural digitisation, must serve human culture as a tool for the enhancement of quality life and existence, and not the other way round. Culture, human culture, as the sum total of the history and legacy of man and society, and the product of his genius, must remain quintessentially supreme.

In specific terms, such a new world will offer unique opportunities for innovations in information and communications technologies, including telecommunications, especially with regards to easy and affordable global access to connectivity, bandwidth, ubiquitous computing, robust yet low-cost fixed and mobile terminal equipment, and multi-directional and multi-cultural content access and exchange.

I will tell you what we at *Telecom Africa International Corporation* are doing to address these challenges by seeking to turn Africa's critical needs and challenges into unique opportunities, and the different kind of global partnership that we seek, a partnership of equals, to accomplish this. We seek a partnership of like-minded entities (individual, institutional, national, regional and global), who are committed to Africa's genuine transformation, and who understand that genius is universal and that the demography of knowledge and innovation is not identical to that of material wealth, technological advantage or political power.

In Africa, we seek to unleash our expertise and the vast knowledge and wisdom as humanity's oldest culture and civilisation, to address what are fundamentally the challenges of human existence. Like everybody else, we seek our legitimate position at the top of the pyramid, creating innovations to contribute as much to the total pool of human knowledge as we derive from it. In this regard, we at Telecom Africa have crafted an initiative that is designed to replace the poverty management model of development that has been foisted on Africa without our acquiescence, and to replace it with a bold knowledge, science and technology-based, research and development-driven self-development strategy for a quantum transformation of Africa to a globally-competitive modern society. This Africa of our dream will be one that is deeply embedded in, and faithful to, the richness of our culture and tradition. I will share a brief on this initiative, code-named *Project R&D*, and outline the opportunities for strategic partnership in this unprecedented undertaking.

Promoting Culture and Heritage through Digitisation

Culturemondo

In its *2008/09 Development Plan* Culturemondo describes itself as "an open international network of people who manage, build or develop online cultural content, resources and services" and who "work through a community of practice to facilitate strategic and relevant knowledge exchange." It describes its vision as being "to engage, empower and inform digital culture practitioners and specialists. To connect them internationally, no matter where they are from, in order to become better facilitators in their own neighbourhood." Then, somewhere, tucked away under the heading of "Background", it states, most importantly, that the motivation behind the participants in Culturemondo is "the drive to engage and excite people with the richness and diversity of culture and the way that it shapes our lives." [1]

The Taiwan e-Learning and Digital Archives Program (TELDAP)

---

[1] www.Culturemondo.org

For its part, in the preface to its website, the Taiwan e-Learning and Digital Archives Program or TELDAP, after quoting the philosopher Francis Bacon's famous statement that "Knowledge is power", begins by declaring that "in the twenty-first century when there is an explosion of information and the knowledge economy holds sway, how do individuals learn, appreciate and apply knowledge and how do countries help their citizens to achieve these objectives, to promote the development of culture, and to pass on the legacy of human knowledge and civilization? These are the issues that countries around the world should address."[2]

The Power of Culture

From a third angle, The Power of Culture group, on its website in a link from the UNESCO Culturelink website, states that there is "no development without culture. If culture is defined as the entire system of beliefs, practices and customs that exist in a society, it is the foundation that supports every development. Economic development without cultural roots will never be sustainable. But culture is not merely a vehicle for material progress: it is a goal in itself. It is part of the daily reality and is therefore essential to the development of all people" It goes on to say, "all our efforts to achieve the millennium goals will be in vain if we fail to notice the themes that occupy people every day and bypass their creativity."[3]

Each of these three culture portal organisations represents a different perspective on the role and deployment of artifacts, manifestations, and, in the case of the Power of Culture, national policies of cultures and heritage, for socio-economic, cultural and political change and transformation. Culturemondo seems rather meticulously descriptive, modest, and almost self-effacing, or perhaps minimalist, while TELDAP is bold, prescriptive and pro-active, perhaps interventionist. The Power of Culture is clearly political, even if slanted specifically towards socio-economic development politics. They all three make firm statements about certain key concepts such as information, knowledge and culture, that are central to our dialogue today and in the next few days, but the substantive meaning of which are less tangible than might be assumed. I, therefore, believe that it will enhance our exchange if we attempt to establish a common understanding of these and other related key concepts about culture, technology, information, change and transformation so as to ensure that we are on the same page, so to speak, in this discussion.

Definitions

Information, Learning, Knowledge, Culture and Civilisation

In January 2000 in an address entitled *Designing Knowledge Societies: Challenges & Opportunities,* given to the *ASEAN Regional Workshop on Building Knowledge Societies*, held in Kuala Lumpur, Malaysia preparatory to the Global Knowledge II Summit, I said essentially the following:

---

[2] http://teldap.tw/en/
[3] http://www.powerofculture.nl/en/theme/policy.html

"Next to the universe, *mankind*, and the *human spirit* which drives it, remain two of the most durable phenomena of history. The context within which mankind pursues its existence is *society*. The environment within which (and the context and memory with which) this pursuit takes place is *culture*. The substance of culture is *knowledge* and *history*. The process by which man interacts with knowledge and history, extracting from and enhancing it, is what we call *learning*. The process by which the human spirit prosecutes its survival and growth is *living*, and the extent to which man succeeds or fails in achieving self-enhancement and the advancement of society and enrichment of culture is what I call the *quality of life*.

"Culture, the accumulation of human experience and creativity, is, therefore, the pre-eminent context of human existence, the sustaining substance of which is knowledge. Contrary to the assertions some have made, knowledge does not derive from learning. Learning is a process by which we access knowledge. Learning is the tool with which we acquire education.

"Often, *information* and *knowledge* are used as if they were synonymous. This flaw, in my humble opinion, threatens our ability to address the true challenge of defining a *knowledge society*. Information is simply a body of facts and data. Knowledge, on the other hand, is the crystallisation of lessons learnt from the study or experience of the phenomena of history. Knowledge derives from culture; and the history of knowledge within a culture becomes *civilisation*. Knowledge, therefore, embodies not only the mastery of the phenomena of life and man's innovation, but the ethics, morality and traditions of a given society and its culture.

"Where knowledge spills over beyond a given society onto a global platform, its context becomes *global culture*. Building a knowledge society, therefore, compels the entrenchment of the essential qualities of a given culture or civilisation as the core of a new configuration of future society. Access to information, while an important component of acquiring knowledge, does not in itself constitute learning. This would suggest severe limitations in the power we implicitly grant to Internet access as the magic tool of transforming society. It must be remembered that the essential value of Internet access is the ability to access much larger chunks of information much faster and, hopefully, much more easily." [4] It does not by itself automatically translate into knowledge or enlightenment, especially since there is hardly any authentication of the information or data so accessed, or the analysis we derive from it.

In response to one of the speakers who had stated that learning was the foundation of building knowledge societies, I argued that learning was "a process, not a foundation. Knowledge is the tool for building societies and the foundation for that process is culture." [5]

---

[4]   Joseph O. Okpaku, Sr., PhD. *Designing Knowledge Societies: Challenges and Opportunities*, a Presentation to the *ASEAN Regional Workshop on Building Knowledge Societies*, preparatory to the Global Knowledge II Summit, Kuala Lumpur, Malaysia, January 26-27, 2000

[5] ibid

The Quintessential Significance of Culture

Culture is such a quintessential part of our lives and our societies, descriptive as well as determinant, that it infuses all we think, say and do with its insights and ramifications. Just as having a common culture and cultural heritage fairly predictably determines how we perceive things and how we are likely to respond to situations and issues, the diversity of culture more often than not results in significant differences in how we perceive and react to the same issues or situations. In terms of the acquisition, transmission and sharing of information and knowledge, this means that much can be conveyed by a simple "trigger piece of information" in a situation of a common culture.

On the other hand, it also means that in a situation of diverse cultures, much less is transmitted and understood than we tend to presume, even where the level of knowledge and education, and the mastery of a common language are at par. In this latter situation, the understandings, norms or perspectives of those who control or manage the content or portals of the quantification, packaging, presentation and exchange of information and knowledge colours or influences the message, in an asymmetrical way. This would suggest that simply collecting, organising and transmitting or exchanging information does not *per se* translate into great value unless such an effort is predicated on a sound knowledge, driven by a higher purpose, and informed by noble ethical intent, and a profound knowledge of (or at least sensitivity to, and respect for), the value and significance of the knowledge, culture and heritage of others with whom we share our common human space.

In the absence of such fair and equitable acknowledgement of, and sensitivity to, cultural diversity, manning the portals of cultural knowledge and expression can, in fact, prove to be counterproductive, if not outright dangerous. In an extreme case, such unenlightened management of the output and manifestation of culture, no matter how elaborate, given the power inherent in the tools it employs, can mean that little is shared, in real terms. Instead, what we have is simply that the party who does all the defining and shaping of the message serves as a sole source, while the other party with little or no significant input into the creation of the content or the design and management of the portal is reduced to being just a silent observer or bystander to the evolution of human dialogue and progress that presumably involves him.

In such a situation, what is intended as or seen as dialogue or cultural exchange becomes really a monologue, one in which one party does all the "talking" and the other party, all the "listening". In such a dispensation, little, if anything, is learned, and if the party on the receiving end is silent or vaguely enthusiastic, it is more a practiced acquiescence than genuine participation or acceptance. In the extreme case, as has been the norm in the global context for so long, global dialogue has been little more than a conversation between the voices of those who control the machinery and portals of communication, and the echoes of the very same voices, that is, in effect, a soliloquy.

The Cultural Immune Syndrome(CIS)

Every day, as we communicate across cultures, we routinely portray what we disseminate as universal truth or fact when, in truth, they are ethnocentric, being heavily embedded with cultural, religious, social, political and ideological bias. This is as true where the agenda is propaganda as it is where the intent is genuinely philanthropic or assistance-driven, such as the promotion of health, education and other socio-economic objectives through instruments of public enlightenment. For the latter in particular, messages so crafted are deliberately or inadvertently highly culturally biased, having derived from a totally different cultural, moral and ethical context. So when we disseminate such messages across cultural borders, we act as if we have established a common platform of understanding when, in fact, we have not. When such cultural bias-embedded messages are disseminated in their target alien environment, the receiving culture detects these biases, and in order to protect itself from being "invaded" by such "cultural offensives", automatically rejects the entire message, good messages (important information), embedded messages and all.

A good example of such a process is the early global campaign against HIV/AIDS. In old societies such as Africa where the protocol of conversation amongst persons of different age groups and genders is highly complex, sending young ladies from abroad to talk to African chiefs about sexual abstinence and condoms was little less than an abomination. The messages of morality that were embedded in such material made them even more suspect. Consequently, the Africans rejected the embedded cultural messages by rejecting the entire message.

This process by which a culture instinctively detects an alien cultural message or intent embedded in what purports to be a bias-free, "objective" or "scientific" message and which it regards as a threat to itself, and rejects the entire message, is what I have called the *"Cultural Immune Syndrome"* or CIS. The Cultural Immune Syndrome plays a significant role in the failure to communicate across cultures, resulting in miscommunications and misunderstandings that themselves sometimes lead to conflict, innocent or otherwise.[6]

The Digital Divide

The asymmetry between societies and cultures of means, technology, access and the authority they command, normally referred to inadequately merely as "the digital divide", has served to create a world in which voices are heard because they are loud, not because they are enlightened or profound. In reality, it can be argued that, contrary to all claims and expectations, the world has communicated far less meaningfully and coherently since the explosion of information technology than before. Shocking as this might sound, the facts are self-evident, and so are the consequences. This is where I would like us to engage each other in our dialogue.

---

[6] See Joseph O. Okpaku, Sr., "Culture, the Message and the Messenger" in *Turning a Crisis into an Opportunity: Strategies for Scaling Up the National Response to the HIV/AIDS Pandemic in Lesotho*, ed. by Scholastica Kimaryo, Joseph O. Okpaku, Sr., Anne-Githuku-Shongwe and Joseph Feeney, New Rochelle, N. Y. Third Press, 2004

Culture and Technology

For me, *technology* is essentially the application of knowledge, science and innovation to accelerate the process of problem-solving and production by reducing the tedium of repetitive manual actions by replacing them with high-speed processes. In the same address in Kuala Lumpur, I defined *technology* as "a tool and only a tool, for enhancing the quality of life, but with the inherent potential of also destroying it. Technology is *not* a culture and must not become a culture on its own. For, if we relinquish to technology the responsibility of shaping the future of society, if we confer morality and ethics to technology, we run the risk of inadvertently enabling technology to become a culture onto itself with the capacity to challenge and perhaps destroy human culture. This is the challenge to those of us who seek to use the enormous capacity of Information and Communications Technologies (ICT) to transform our societies into what we call knowledge societies. We must first *tame* technology through mastery and manipulation so that in deploying it as a tool it will remain obedient to our wishes and directions."[7]

Ethic, Morality and ICT

"The realm within which we establish the constructs for taming technology is that of ethics and morality. Ethics and morality are necessary aspects of culture. And since technology by itself lacks ethics or morality, it cannot, per se, be deemed to be a culture. We must also not confuse a fad with culture. Like good wine, culture is formed through many years of evolution and maturation. It is not a passing phase, no matter how far reaching its impact. To bridge the gap between culture and a fad, we often use the term "pop culture".

"Given the importance of ethics and morality in all cultures," I have argued, "in particular against the background of pluralistic beliefs in most cultures, the implications of knowledge as a scientific absolute becomes problematic. The notion of science as an absolute field of knowledge and ICT as the new trailblazer for the globalisation and mastery of science and technology, becomes unsatisfactory. We must also not confuse skills with knowledge.

The Limitations of Information Technology

"Again on information versus knowledge, what the Internet provides today is basically faster access to more information. This facilitates research and the dissemination of information, but in terms of learning, does not automatically create knowledge. Can we say that those who have this easier access to information automatically are or become more enlightened? The process of the acquisition of knowledge involves the process of

---

[7]   Joseph O. Okpaku, Sr., PhD. *Designing Knowledge Societies: Challenges and Opportunities*, a Presentation to the *ASEAN Regional Workshop on Building Knowledge Societies*, preparatory to the Global Knowledge II Summit, Kuala Lumpur, Malaysia, January 26-27, 2000

teaching and learning well beyond the mere access to data or information. In fact, to the extent that the present deployment of ICT is erroneously perceived as being the substitute for the complex process of formal or informal education, it threatens to produce a global population of a people whose reflective capacity, that most important aspect of social behaviour and responsibility, is reduced.

" We already have the nightmare of Internet-bred social misfits blowing up their schoolmates in a barrage of purposeless gunfire. The only kind of future knowledge society we could wish for is one in which our capacity for understanding, tolerance, social responsibility and for peace and equanimity, is enhanced. There is no evidence right now that the so-called information rich society has acquired the answer for the creation of a better and healthier society.

The Durability of Cultures

"By virtue of the global reach of Internet technology, the culture and civilisation of the vast populations of the developing world is in great danger of being run over by the power of materially or financially richer but in terms of civilisation, much younger cultures. It is my submission that despite its material wealth and immense military and economic might, the industrial world cannot truly dominate the cultures of older societies, and if it did, it would not be because of its own power but because of the latter's own recklessness and ineptitude."[8]

Knowledge Economies versus Database Economies

We routinely talk axiomatically about "knowledge economies" without taking the trouble to define what we really mean. What really is a knowledge economy? In particular, given the recent and ongoing virtual disintegration of the world's pre-eminent "knowledge economy", we must distinguish between what is truly a "knowledge economy" and what one might call a "database economy" which we tend to confuse with the former. Wall Street has served as the unquestioned alter or shrine of knowledge economies, that is, until most recently. But its unceremonious and rather clumsy and inelegant collapse in the full glare of the entire world despite its predication on the world's best information infrastructure, thrusting the entire world economy into disarray, would suggest an underpinning of anything but knowledge.

What happened to the unparalleled knowledge of Wall Street presumed to come with high-tech information and data acquisition, sharing and management infrastructure? Did the information infrastructure merely deliver data and information, but not knowledge, transparency and judgment? Was Wall Street merely a symbol of a database economy without the attributes that would have made it genuinely one of a knowledge economy? Did the mere acquisition of data and information without the compelling time-honoured underpinnings of ethics, morality and transparency, of perception, perspicacity, reflection, sound analysis and judgment, that is, of knowledge and its foundation of culture, undermine the flagship of the global economy, rendering it listless and adrift?

---

[8] ibid

We will need to provide sound answers to these questions as we seek to reconfigure the global economy or, better yet, craft a new model of a global economy, through our best new thinking.

Time

In 1996, at John F. Kennedy airport in New York, I asked my son, Joseph, Jr., who was at the university at the time, what he thought would be the most significant issue in the 21st Century. "Time," he said, without hesitation or prevarication. In the years that have since passed, I have had reason on numerous occasions to recall that answer. Like Culture, *time* is a complex concept the meaning and essence of which span the whole spectrum from the specific and scientific (such as as a measure of the pace of the sequence of events or the designation of a specific moment), to the elusive and intangible, such as with respect to cultural and philosophical concepts. Time can serve to locate and record moments in history. Time can also be used as a tool, same as the sculptor's carving knife, in the crafting and exposition of ideas, strategies and decisions. It is also deployed in war and peace.

Time is perceived and deployed differently in different societies. In this regard, it is also used as a major weapon in conflicts and wars. For example, the material value of time often expressed as "time is money" in most western societies, clashes with the "timelessness" of time in other cultures. When the two notions are pitched against each other, it causes anxiety and impatience on the former, a disposition which can lead to strategic errors, and enables the latter to hold out interminably, perceiving each confrontation as merely a skirmish. In warfare, for example, this results in heightened efforts on the part of the former to wipe out the opponent as quickly as possible, as a way to save or eliminate time, resulting inevitably in reckless assaults against human life in what is now called "collateral damage". Equally on its part, the latter engages in a seemingly endless streak of individually infinitesimal efforts that more often than not simply provoke or wear down the patience and endurance of the former, who most often is otherwise exponentially superior in manpower and firepower. This is why wars of attrition end up being bad deals for market-driven nations at war.

At the end, the results of excesses of both sides are equally devastating, abysmal and unacceptable. There are no winners, because, for the latter also, the belief in the timelessness of conflict means that decades and generation after generation are consumed by the extended anger, hatred and conflict, destroying great opportunities for healing and for the exhilaration of creative coexistence and expansive human partnership and collaboration. Everyone loses, including those who are not direct parties to the conflicts.

These differences in the meaning of time in different cultures and societies also have much significance in social and intellectual engagements, including even in simple traditional courtesies. The contrasts in the protocols of introduction of persons in which, for example, oriental culture requires that you study someone's calling card for a moment before putting it away, as a sign of attention, respect and recognition, is opposed to the western tradition of quickly putting away the calling card so as to "get down to business."

The disparity in the perception and meaning of time in so simple an act of cultural difference at play results in fascinating differences in negotiating strategies and practice. Americans, for example, are very eager to get down to negotiations, while oriental people take their time in preliminary courtesies that belie their high degree of preparedness.

Such cultural differences play a much greater role in global interaction than is often recognised in our analysis of global dynamics. In fact, culture and cultural diversity infuse practically all interaction between peoples and institutions of diverse backgrounds. Identifying and quantifying such diversities and disseminating the lessons derived from them as part of a popular education in cross-cultural exchange and enlightenment offers a unique area for exploration by Culturemondo and its partners going forward, and for others as well.

Politics

"Politics" is a term that has almost as many interpretations as the number of people who use the expression. It even most often takes on a different meaning each time the same person uses it. For our purposes here, let us define the concept of "politics" as the structure, process and dynamics by which different groups of people with similar or overlapping challenges, interests, affiliation or persuasion negotiate for advantage or redress in a common social or institutional space. That space can range from family or friends through small communities to local, provincial, state, national or global communities. At the highest or most strident levels, the substantive goal of politics is to obtain, retain and expand power or authority with which to gain and/or preserve such advantage and the benefits that come with it. Politics operates in numerous diverse spheres including culture, governance, diplomacy, warfare, education, science and technology, and trade and commerce. The prosecution of political objectives may be benign, gentle or strident, and the combination of the ethics, socio-economics, philosophy, and style, and the forcefulness of the goals go a long way to determine the nature of the political process, including how it comes to be designated as democratic, authoritarian, outright chaotic or otherwise. The ideological platform on which it is practiced further informs its sub-division into capitalism, socialism, social democracy, communism and more. My approach here is rather clinical, and I deliberately do not ascribe judgment or morality to this definition.

Besides having a culture of its own, politics plays a major role in culture, and culture plays or can play an even greater role in politics. For example, delving deeply into the cultural underpinnings of past or ongoing political conflicts and wars (including the Afghanistan and Iraq Wars) could yield very valuable insights the deployment of which could help reduce the occurrence, spread or duration of future conflicts. Our failure to deploy insights from culture and tradition in conflict prevention, mitigation or resolution has cost the world dearly. Where they have been deployed, we have seen remarkable results. A major success story is the deployment of traditional practice of conflict mediation mechanism for conflict resolution and reconciliation in Burundi and Rwanda in the aftermath of the genocide in 1993 and 1994 respectively in these two neighbouring countries. In both countries, the traditional practice of reconciliation under the auspices of

the Council of Wise People, was deployed following the deployment of standard United Nations or other international reconciliation methods. In Rwanda, this practice is called "*Gacaca*" and in Burundi, "*Basinganthe*". This deployment has been credited with bringing about the unprecedented levels of reconciliation in both countries.

Participation in politics is not always proactive or voluntary. It can be compelled by perceived challenges to ideas, arrangements, situations, commitments and interests that we hold dear and which we feel the need to fight for or defend. In this regard, for example, I was particularly struck by Culturemondo's genuinely honest statement in its 2008/09 Development Plan, under its vision statement, that the organisation is "not political". Yet its core commitment to the empowerment of people through the presentation and sharing of the objects and replicas of cultural output, and helping to promote cultural diversity through collaboration and presumably advocacy, will inevitably result in greater consciousness of possibilities. This, in turn, will raise people's personal aspirations and their expectations of a better and more enlightened social environment and disposition, and their demand for access to more resources (such as inexpensive bandwidth) in order to take advantage of the opportunities so offered. This commitment to the promotion of socio-cultural enlightenment through use of the Internet is, of course, a fundamental attribute of political commitment. Yet one understands the sensitivity Culturemondo seeks to address. In this regard, its position could perhaps be better expressed as "non-partisan non-activist."

THE SYNTHESIS

In defining the key terms and concepts that feature prominently in our discourse, we have quietly explored a number of issues in a process that I referred to earlier as disassembling the components. Let us now attempt to reassemble the pieces. Put differently, I feel like saying that now that we have prepared all the ingredients of our recipe, let the cooking begin!

Culturemondo Today and Tomorrow

One quality that I find intriguing in the self-profile of Culturemondo is its transparent modesty. Culturemondo describes its goals in the same modest terms as it does its origins in 2004. Its expectation is that if those who participate in these roundtables subsequently become members of Culturemondo, the organisation would have done well.

Three aspects of this modest expectation fascinate me. The first is that the potential inherent in the vision of Culturemondo is vast, and self-evident, and the possibility that the enthusiasm for its agenda as people come to know more about it would gather forces that could draw the organisation into a much larger agenda than it ever expected or is prepared for, is real. This poses some challenges.

The second is that besides the fact that the number of people who design and manage cultural portals is rapidly increasing, which will mean many more people who would want to be part of Culturemondo as it becomes a movement, there is also the possibility

that the millions of people who actively engage in social networks of all sorts might also be attracted to the appeal and agenda of Culturemondo and create a force that the network cannot resist. As with the first, this will, of course, create challenges of time and resource that could threaten the present equanimity of a carefully managed small agenda.

The third item is one that the founders of Culturemondo have themselves to blame for. With a name as grand and all-encompassing as "Culturemondo", people automatically expect it to be the giant organisation committed to building and managing the cultures of the entire world. If you did not plan for such a response, you might have considered a less awe-inspiring name, like "miniculturemondo", or "microculturemondo", or even something as simple as the Association of Managers of Culture Portals or AMCUP for short.

If you asked me to act as a soothsayer and consult the gods of my African ancestors to grant us a glimpse into the future of Culturemondo, I would see an inevitably much larger organisation down the road. I would see a group of Culturemondo people taking quiet respite at the foot of a dam, laughing and playing after hard work, and even fishing. But the high energy of the ideas and collaborations that you craft will gather such force behind the dam that it would one day burst out or overflow the top as more people seek to be part of your efforts. The challenge then would be whether you will be swept away down the river or sail happily downstream, empowered by the fullness of your accomplishments. The outcome will depend in part on how successfully you build new models to anticipate the rising tide of need and interest in culture-focused social networks. Your commitment to genuine cultural diversity, your recognition of, respect for, and support of the desire of others to engage their own genius in crafting a more enlightened world to create a new truly representative global digital culture environment will determine your success.

I state all of this because I sense the beginnings of forces around Culturemondo that will compel new thinking and the corresponding search for new models not only in the general arena of culture and heritage, but in Culturemondo itself. Your selection of *Culture and Heritage: New Thinking, New Models*, as the theme of this 4th Roundtable would seem to indicate either recognition of this incipient upswirl, or a subconscious sense of an impending change.

So, faithful to this prediction, I wish to anticipate this evolving situation by pushing back the boundaries of your more technical dialogue to address the much larger context of culture, technology and their interaction with the forces of time and politics and the pursuit of self-actualisation of peoples around the world. The eminent speakers who come after me will share their enormous expertise on new technological innovations at the cutting-edge, especially with respect to such emerging concepts as Web2.0, grid and cloud computing, and more. For my part, I will stay focused on the broader strategic issues.

Technology versus Human Understanding

It would seem a bit odd that the explosion in science and technology and the innovations they have brought about over the past several decades, especially the exponential growth in the amount of data and information that we are able to produce, plumb, manage and distribute or share would bring about a significant decline in our reflective capacity, collaborative intelligence or our overall understanding of each other and in our psychological, emotional and environmental wellbeing. It is as if the growth of our equanimity and quality of life has become inversely proportional to the growth of our advancement in science and technology. This anomaly poses a simple question: Why? Why is it that the more we appear to know about our world, how it lives and functions, and all that we can do with and in it, the less we are able to derive more understanding from it, the less we are able to build a better world, and the less happy and fulfilled we are?

One possible answer might be that our excessive and unconscionable association of human progress and the quality of life with science and technology alone, and the material benefits derived from it, almost in direct proportion, is flawed. While technology is important, especially in simplifying human and productive processes, technology does not equate to life. It is merely a component of the way we live, even though a very important one. Life is bigger than technology, vastly so, and at its core are those experiences, activities, expressions and processes that shape and affect our actions and sensibilities. Our self-expression, whether in conversation or in storytelling, literature, art and performance, our enjoyment of, and interaction with, nature and our fellow men and women, our emotions and the impulses that affect the palpitations of our hearts, our loves and conflicts, these define our quality of life. Our joys and pains, our laughter and tears, our passions, ambitions, our dreams and desires, as much for ourselves as for our family, friends, communities and societies, even for those we might not know but whose wellbeing we cannot be indifferent to, these are the core experiences that occupy the centre of our lives and living.

All of these impulses and experiences that are critical for our living a quality life are quintessentially matters of culture. And they are influenced , enhanced or embellished by our history, heritage, our environment, nature both around us and in our enduring memories (including institutional and genetic memories), and the highlights of our common traditions and legacies that we commonly hold dear, including our heroes and heroines, historic or mythological. In this context, even our folklore and fairytales play a very important role in our cultural life and experience, and the icons of such history can become critical figures whom we often use to craft new constructs and models of a better life and society for our people and the world-at-large.

It is my considered opinion that the flaws in our contemporary world, in the sense that we have not created the quality of life and the corresponding enabling world that we could or should have achieved by now, derive in great measure from the fact that in the rapid growth in our scientific and technological accomplishments since the industrial evolution, we have systematically excluded or reduced the importance of culture and its related attributes to our quality life. Instead, we have positioned science and technology in direct challenge to the more complex and more subtle dynamics of culture, systematically

replacing the wisdom and resilience of culture with the haughtiness and strong-headedness of technology without a sound understanding of technology's limitations. As a consequence, the human, philosophical, moral and ethical considerations embedded in our cultural life and critical for quality living, have continued to be challenged and undermined by the powerful and compelling persuasion of technology as the two fight for the limited space in our lives and world.

One of the reasons for this is intellectual laziness. Science and technology are to a great extent predicated on a process of simplification. The computer, the quintessential tool of technology on which most of our other latest scientific and technology tools are based or depend, is predicated simply on a binary system, on and off. As such, it can only manage "simple" problems, or complex problems broken down into components of simple problems, even though it does so at very high speed. I call all such problems that are susceptible or responsive to logic, and, therefore, to computer-based technology solutions, "tangible problems". Our challenge is that most human personal and social problems are inherently complex and "intangible", and thus being "extra-logical", are less susceptible or responsive to computer or other technological solutions. These fundamental human problems or challenges can only be managed through the tools of culture and the wisdom and experience that derive from it. And the longer a given society or culture has had to manage such complex challenges of life, humanity and social interaction, the greater its capacity to resolve or mitigate them, all other things being equal.

To understand this dichotomy in good relief, it might be useful to compare and contrast the behaviour and experience, as well as the strengths and weaknesses of "modern societies" and "traditional societies" especially with regard to such indicators as resilience, reflectiveness, circumspection, groundedness, equanimity and even individual longevity outside of the effects of war, disease and catastrophic phenomena, both natural or man-made.

To illustrate the point, let us take a quick look at the United States of America as the pre-eminent example of a modern society whose accomplishments in science and technology have been extraordinary, but whose youth of little more than two centuries makes her a relative newcomer. In the global community of nations and cultures, America is, at best, an adolescent nation. Few societies have accomplished so much in so little time, and had so much impact on the rest of the world. At the same time, the flaws inherent in such rapid development, especially as it led to the failure to understand and appreciate the cultures and dreams of others, and to make allowance for them, including the understanding that there is much to learn from others, has inevitably led to recurrent conflicts and even the current systemic dysfunction.

With little tradition to constrain her, or perhaps in a rush to make up for her young and youthful culture, America pursued scientific and technological excellence with fury not only as a strategic socio-economic effort, but significantly as a critical political strategy in her fierce competition for global power and dominance. This thrust was immensely fueled by the rivalry with the former Soviet Union in an ideological struggle that led to

wars of innocence in places and amongst people as removed from both the United States and the Soviet Union as Africa, Asia, and Latin America. The devastation this wrought on the lives of millions who did not even understand the rivalry and for whom both sides were simply aliens or "white people" remains the root cause of socio-economic and political problems to this day in the countries involved. This ideological rivalry that came to be known as the Cold War has itself left deep scares on the lives, ambitions and socio-economic, political and cultural psyches of many nations and peoples. For some, the cloud of Cold War politics continues to overshadow their deep-seated desire to craft their own individual and national goals and priorities outside the constraints of post-Cold War sensibilities. They wish to establish a new identity of freedom, fresh and innovative, and directly reflective of their indigenous knowledge, wisdom, genius, culture and traditions, and the pursuit of their highest dreams.

Paradigm Shifts

The dynamic nature of life is that there are always compelling reasons for change, in a perpetual cycle of renewal and reinvention. What varies is the intensity and urgency of the urge or need for change. When the going is good, there is a desire for things to stay as they are for as long as possible. On the other hand, when things are not going quite so well, the demand for change becomes louder and more urgent. Sometimes, in fact more often than not, there is even a call for change when all is well. This tends to be associated with boredom. Just as people can be bored with the good life, so also can people be so adjusted to bad times that they develop an inertia which militates against change.

From Private Dream to Shared Vision: Barack Obama and Change

Today, the word "change" which simply means the need for a paradigm shift, has taken a new and almost romantic meaning thanks to the phenomenal deployment of the concept by U.S. Senator Barack Obama of to pull off a presidential electoral victory that if anything, was a battle against all odds. Although there is no time to go into this in greater depth, it is relevant to point out that what made this extraordinary effort pay off was the combination of two things of relevance here. One was what he himself calls "the audacity of hope", that is, the enormity of his dream and his success in making a personal dream become the dream of millions of people not just in his own country, the United States, but across the world. The other is the simplicity of his vision, one that allowed others to embrace it, internalise it and regurgitate it in their own emotional and intellectual framework for yet others to embrace, internalise and regurgitate in a perpetual exponential process. This process of creating a personal dream and then presenting it to others in such a manner that they can take ownership of it, and then turn it around and pass it on to yet others in a perpetual iterative process, is the quintessence of leadership. In addition, Barack Obama's ability to capture and demonstrate a convincing understanding of the anxieties of the people, and to craft a credible set of solutions, his ability to then sell the people the idea that the solutions also rests on they themselves committing to help bring them about, exemplifies the way exemplary visions for change work. By urging the people to take ownership of their problems and committing to the pursuit of their self-actualisation and the common vision, he empowered them so that

they, in turn, could empower him to win the elections. This special bond between an articulate visionary and a public desirous of change, one created, is difficult to undo, as Obama's opponents found out in defeat.

What is significant for our purposes here is the recognition of the power of a dream, which is part of culture, and the value of placing a sound intellect behind it. This provides a model of problem solving in which we approach a problem frontally, engage it with passion and intellect, and commit to success by the very audacity of infinite possibilities. In his success, Barack Obama has not only placed America on a renewed path, but in so doing has inspired the hope of the world in the eminent possibilities of a better tomorrow. Whatever the ultimate outcome of his presidency, especially given not only the enormity of the challenges before him both in America and globally, Obama has demonstrated that there is little that we cannot accomplish if we try hard and are smart in the process. His challenge now is whether or not he will be able to persuade the American people, so used to seeing themselves as the "most powerful nation in the world", that that very notion may be obsolete and devoid of any intrinsic value or meaning. To do so, he will have to persuade his people that it is in fact both possible and desirable to have a world in which nations strive together to create a better world for all rather than seek differential advantage over others, a process that almost inevitably has led to conflict, violence and war.

But Barack Obama's successful campaign is significant to our deliberations here this morning. By his election, Barack Obama becomes literally the first *African* President of the United States. If we interpret the term "African" to cover both the continent of Africa as well as the entire African Diaspora in one people from a common cultural heritage, i.e. including African-Americans, Caribbean-Africans, European-Africans, Asian-Africans and more, then the statement takes on an even more significant import.

But equally significant is the fact that he accomplished this feat in part by deploying Information and Telecommunications technologies and applications with a mastery and dexterity never before seen in electoral politics, using mostly adaptations of social networks to a new level. As he heads to the White House, he and his ICT support team are already hard at work crafting and deploying even more innovative applications of social networking to create a new model of participatory governance that will redefine the concept. The proven genius and ICT savvy of this young African should be proof of what people from around the world can expect if they really try to genuinely partner with Africans as equals to create new innovations in ICT in general, and especially in social and cultural networking.

Also of relevance to this Roundtable and to the promise of Information Technology, telecommunications and networking in particular, is the convincing proof offered by Obama's campaign extraordinaire that simple network applications can be creatively adapted and deployed to empower the masses of the people, enabling them to circumvent even the most powerful political machinery and establishment. For us, the challenge is how to adapt this model creatively in several ways and arenas to empower the less materially and institutionally powerful or entrenched, especially the disenfranchised. This

has important political and strategic implications. It totally enables us to revisit current development policies and strategies so that we can jettison models of development as a concession to the underprivileged. We will be able to replace it with the strategy of self-development predicated on the ability of people, to act proactively to transform their condition and fortunes, through smart and energetic deployment of their own resources, no matter how limited.

The Perpetual Obsolescence of the Present

I deeply believe that every today is obsolete because we tend to focus our intellect on things as they are or have been. Our norm is that we think retrospectively. The problem in doing so is that by the time we focus on situations, those situations have already come and gone, and we are observing only their shadows or consequences. It is this sense of time lag between events and their consequences or what we commonly call "symptoms" that makes us invest in strategic thinking and planning. Significant events and processes undergo constant mutation. They also have a way of moving well ahead of our perception of their evolution in real time, which means that at the point at which we grasp them, they have already come and gone past that state. I would describe this approach to living as "the pursuit of the footprints of history".

The Dynamic Nature of Problems and their Solutions: Towards New Thinking On Problem-Solving

In problem-solving terms, this means most often that when we recognise or commence to address a problem, we traditionally "freeze it" in order to diagnose it. We then go away to craft a solution, based on what is actually our static assessment of a dynamic problem. When we then "return" with the solution to the problem, we often do not realise that the problem itself may have since changed in the time that we went away to craft the solution. In order to mitigate this dynamic of constant flux of problems, we need to device means of locking the solution process in tandem with the dynamic evolution of the problem so that we have a sort of "problem tracking solution process."

Our World Order

Our world order has been characterised by partisan, nationalistic approaches to information, knowledge, innovation, wealth and power, all with a view to gaining one-upsmanship vis-à-vis other nations and peoples. Some nations have often presumed to own a special right of place at the top of global excellence, knowledge and resource, pressing or insisting that others, whatever their own claims and ambitions, find a place to accommodate themselves somewhere down the ladder. This presumption of an exclusive right of ambition or aspiration to global excellence and the resistance to its challenge by others, have been a major cause of global friction and will continue to be until we change our models of engagement.

The fact is that all peoples and nations, whatever their challenges of temporary conditions, aspire to excellence. No one deliberately acquiesces to being inferior or even

second best. The fact also is that today, there is such a proliferation of knowledge, resource and expertise, creating new centres of excellence and opportunities around the world, that the notion of global dominance has also become obsolete. In fact when we revisit the famous statement by Francis Bacon that I quoted from the preface to TELDAP's website, namely that "knowledge is power", although he meant it as an encouragement of education, it came to be used as a justification for hoarding the world's knowledge and resources. But many nations disadvantaged by this adage seriously applied themselves and their limited resources to acquire education at the cutting-edge in practically all fields.

With the strategic empowerment so gained, a number of these nations have been able to build their own economies and global competitive capacity. In so doing, they have become less vulnerable to the whims and caprices of erstwhile super powers. This development has totally changed the global paradigm. Some of these countries, such as the People's Republic of China, India and Brazil, to name a few, and of Taiwan itself, have experienced such quantum leaps in scientific and technological capacity that they have also changed the equation of global knowledge management and trade.

Towards The Future: New Models

This new order poses as many challenges as it offer opportunities. Amongst the challenges is the fact that with economic empowerment comes major responsibilities. As nations and peoples migrate from once "developing" economies to major ones, there are responsibilities, institutional as well as human and moral, which must be addressed. A good example has been China's challenge with quality control in production especially of toys and food products. It has acted with deliberate speed and firmness to address this threat. Coming nearer home here to Taiwan, another threat as you grow an export economy, is interdependence and vulnerability to developments far from home. The American and European economic downturn is having severe impact on a Taiwan economy that has been built on being a silent manufacturer to the world.

All of these threats, however, also offer unique opportunities for crafting new models of economic resilience, a rare opening for creativity and innovation. Doing so offers a unique opportunity for young Taiwanese, along with others, to expand the reach of their genius. The world is essentially an open competitive environment, continued efforts to the contrary notwithstanding, and the smart, hard working and diligent can go a long way, with, of course, a little bit of luck. The young men and women of the Republic of China are in the same situation. In such circumstances, South-South cooperation, especially with Africa, offers special opportunities

Culture as an Instrument of Transformation, Understanding and Collaboration

In crafting these new models we have a unique opportunity to smartly turn to mutual cross-cultural education and exchange, in its larger and more fundamental sense, for mechanisms and insights to serve as special instrument for understanding and

collaboration. This, in turn, provides opportunities for creativity and innovation for culture portal managers as cultural as well as political and socio-economic compulsions merge or overlap.

In this regard, Africa, with her vast cultural heritage, offers a special repository of knowledge, wisdom and human experience from which to draw material for crafting innovative constructs that we can jointly explore over time, to create new models of social networking To derive the most out of this opportunity while building a solid and mutually enriching relationship, we will have to create a new and equitable relationship model with Africa and Africans that is based on mutual respect, acknowledgement, and fairness and equity, playing on the same level field for all.

In this regard also, I have said over many years that there are three prerequisites for meaningful globalisation or global collaboration:

1. Paraphrasing Benjamin Franklin, I have said trade and collaboration amongst nations must be fair and equitable.
2. It must be predicated on equal mutual access to each other's market at the same levels of value, complexity and sophistication.
3. It must be based on comparative, competitive capacity, in the absence of which there must be provision for affirmative action that enhances the capacity of whoever has a deficit, so that whatever deficit skills they pay for once, they will not have to pay for it a second time.

The Social Networks of Tomorrow

Social networks are, by nature, reflective of the social attributes and values of the culture from which they derive. As such, much of what we have as social networks today are essentially America- and Euro-centric. This is understandable, given their pedigree. But as social networks have become global, it is clear that we must begin to seek to embrace the plurality of the world's cultural diversity in genuine effort, so that these networks would have authenticity and value. Until we effect this critical paradigm shift, social networks will remain biased and mono-cultural and the efforts to make them global in reach will continue to look like little more than an effort to "convert" others to western culture, a modern-day sort of cultural missionary zeal. Ironically, ultimately, this blindsidedness will result in increasing western isolation because it does not provide for the flow of culture to Americans and Europeans, the only process by which they too can come to know about other cultures and, in the process, expand their own imagination, experience, knowledge and enlightenment. Ironically also, Africans and others from the non-European cultures know a lot more about western culture than westerners do theirs. It is partially one of the consequences of colonial imperialism. But if I know more about you than you know about me, who is strategically the stronger or better off of the two?

I also believe that a clear result of this America- Euro-centric nature of current social networks is that they are all primarily narcissistic. They are focused on me, me and me. How I look. What I do. Who my friends are. They hardly meet the definition of "social".

Telecom Africa: Towards A New Model of Social Networks

We at Telecom Africa have decided to create a new model of social networks and are in the preliminary stages of exploring how to accomplish this. What we envision will be more truly reflective of the diversity of cultures, and will afford all people, especially the young people of the world, from Lagos, Accra, Nairobi, Dakar, Cairo, Shanghai, Taipei, Tokyo, New York, Paris, London, Athens, Zagreb, Port-of-Spain, Trinidad, Kingston, Guadalajara, Havana, Maputo, young men and women from around the world, a unique opportunity to get to learn more about other people, than merely to focus on themselves. We will be seeking serious partnerships in this effort. We believe that in focusing on others, we actually build our intellectual, emotional and human strength because we draw insights and support from the knowledge of how others, especially people from much older cultures, see life and living, and manage human opportunities and challenges that they have had many more centuries to master.

Africa's Future: A Giant Awakens

In my brief for this address I was asked to share my dream for Africa and some of what we at Telecom Africa International Corporation are doing in Africa in pursuit of the African dream. As you can expect, I believe in Africa's dreams and am totally committed to its accomplishment, in the shortest time possible, but without compromising meaning, value and the subtle nuances of a cultured life and people. To do so successfully, we in Africa must also learn critical lessons of both what to do and what not to do, from those who have experienced science and technology-driven quantum development ahead of us. Africa is a giant that is awakening, and because of the wealth of her history, culture and civilization, in the right context and with the right strategies, and smart, fair, gracious, honourable and totally committed strategic partnerships from around the world, Africa holds the key to our creating the better future world that all of us desire and dream of, at different levels of passion and articulation.

In the specific area of Information and Communications Technology, especially Telecommunications, Telecom Africa has devoted a lot of energy towards crafting strategies for the best way to create affordable and ubiquitous access to telecommunications, including to the Internet, at costs that match the income levels of the people. As with most other services, Africans have had to pay more for less service than their counterparts from much wealthier economies. We believe that one way to cure this is to use research and development to craft innovative solutions to challenges of access, bandwidth and equipment so that we can have maximum quality services without bankrupting our young people. We must not compel them to divert income that they need for food, shelter and education simply to have communications access, which should be a basic utility. I have written a lot on this and many of these can be found on the web, including on google.

Specifically, the raison d'étre of Telecom Africa International Corporation was originally to establish industrial capacity in telecommunications in Africa, as the way to provide the affordability that we are so committed to. However, with the wave of privatisations of PTTs a decade and a half ago, in which many African networks were purchased by non-African telecommunications companies who had their own technology partners, we realised that such companies would never patronize our industrial outputs as part of the long-standing failure to encourage or at least respect Africa's dreams to also find her place at the cutting-edge of science and technology, alongside their global counterparts.

So we decided that as an interim step, we would ourselves begin to seek to build networks in Africa and replicate them fast enough so that we would one day have the critical mass of networks that would serve as a basic market for our industrial outputs. In pursuit of this strategy, we prefer to collaborate with industrial telecommunications companies that share our, and Africa's dream for self-development and who are committed to being our partners and technology mentors well into the future as we ourselves evolve on the industrial platform.

As a first step, we are engaged at present in working to build a nationwide broadband network in Mozambique, which will include our own international gateway. We plan to lay on top of this, a research and development unit that will focus on finding solutions to Africa-specific challenges. We plan to coordinate this effort with local universities at which our senior engineers will also offer, pro bono, courses in the science and technology of telecommunications as a way to build a solid corporate citizenship and social responsibility. Our Telecom Africa Mozambique network is based on an integrated, fully-convergent CDMA platform which will allow us to deploy several applications on a single platform. This is one way to address the challenge of affordability as in so doing, we will have four or five revenue streams that together, at low tariffs, will still bring us cumulative revenues that are as good as what others derive from charging less affordable tariffs for single stand-alone services. In so doing, also, we will give affordable access to the large populations at the lower half of the pyramid. This group tends to be very loyal, and as we empower them and helpthem grow their income through use of ICT, they will demand more value-added services, thus enabling us to increase our ARPU as well.

Project R&D: Science and Technology for Quantum Development

On a much larger scale, we are engaged in masterminding a massive initiative to eliminate the current externally-imposed and advocated poverty management approach to Africa's development, and replace it with a comprehensive knowledge, science and technology-based, research and development–driven continental initiative.

Project R&D as this initiative is code-named, is conceived of as a global partnership that will bring together African and non-African scientists worldwide, global science and technology corporations and research institutions, research units in leading African and international universities, business enterprises and international organisations, and the African public and private sectors, to build serious science and technology research and

development and the corresponding industrial capacity and opportunities in Africa. Project R&D will particularly involve leading universities worldwide because they constitute the bedrock of the critical research and development effort that drives and sustains science and technology.

Operational Strategy

Project R&D is conceived of as essentially three closely integrated operations: *Capacity Development, Research and Development* and *Industrialisation. The Capacity Development Programme* seeks to create and implement an extensive programme of education and training in research and development primarily at universities and research institutions in Africa.

The *Research and Development Programme* will be the foundation of Project R&D. For sustainability, maximum efficacy and impact, the R&D programme will be designed to create solutions that will lead to products and services with strategic and commercial value for both Africa and the global economy, through its comprehensive *Industrialisation Programme*, while promoting R&D in general, thus maximizing their future potential.

The Structure of Research and Development at Project R&D

As presently conceived of, Research and Development at Project R&D will consist of the following components:

1. *A Strategic Unit and Super Laboratory.* This will function as the high-level "brain and nerve-centre" of Project R&D and will be the first port of call for all projects and initiatives. It will provide the continuous continental and global scanning and processing of Africa's strategic development needs and opportunities, and manage the knowledge flow throughout the entire Project R&D environment and process. The Strategic Unit will be backed-up by a *Super* or *Master Laboratory*, a smart laboratory with super-computing capabilities.

2. *Telecom Africa Research Laboratories.* These will consist of a series of Sector-specific Physical Research Laboratories each of which will itself consist of a headquarters Laboratory and a network of sub-regional and national "satellite" laboratories.

3. *Partner Laboratories*, a network of select sector or subject-specific national, industrial and university research laboratories worldwide, partnering with and supporting Project R&D laboratories in their areas of expertise, as well as a network of national, industrial and university research laboratories in Africa, either already existing or assisted into existence for this purpose.

4. *A Global Virtual Research Laboratory,* which will itself include a network of sub-regional and national laboratories in Africa and "satellite" and partner virtual

laboratories in selected locations around the world. This will also serve as the R&D platform for participation in Project R&D by individual African and non-African scientists and groups of scientists from around the world.

5. *A Safe-Proofing Laboratory*, to serve as a "safe-proofing ground" for business incubation and testing of Project R&D innovations prior to actual deployment and commercialization.

6. *A Marketing and Deployment Unit*: As the ultimate purpose of Project R&D is to create and deploy concrete, smart and durable solutions to real, critical or differential development, socio-economic and quality of life challenges in Africa, the successful marketing and deployment of the products and services that constitute such solutions is a most important last mile of its initiatives. Because such solutions and the corresponding products and services crafted by Project R&D will almost invariably also have relevance in markets outside Africa, masterminding successful paths to global markets will be crucial for Project R&D

The Industrialisation Programme will consist primarily of establishing world-class globally-competitive industrial enterprises in the relevant sectors to implement the solutions resulting from the Research and Development Programme, and in so doing, serve as a catalyst for the establishment of such industries in Africa. These enterprises, which may be sector-specific or cross-sector on a case-by-case basis, will be either wholly-owned Project R&D establishments, or joint ventures with leading companies in the sector, with the participation of relevant third party institutions and enterprises.

Project R&D offers a unique opportunity for engagement by young scientists here and around the world, and scientific, research and development and industrial enterprises to engage in what will come to be one of the most revolutionary efforts at continental transformation in modern history.

Taiwan in Transition: Exploring Possibilities

When we talk about new thinking and new models, especially in social and cultural networking that is based on Telecommunications, Information Technology and electronics and nanotechnology, the accomplishments and challenges of the Republic of China, Taipei, stand out in bold relief. To a great extent, Taiwan has served the global market most diligently and innovatively as the silent R&D expert and manufacturer to the world, especially in areas of computing, networking and electronics. And just when strategies are being explored for Taiwan's options in the next phase in its global technology competitiveness, the effect of economic collapse across two or more oceans away is putting a temporary damper of the pursuit of new opportunities. Hearing your thoughts on this global challenge will be most enlightening to us. If you so desire, we might takes some minutes in this discussion to explore new strategies and new models going forward.

Given my total commitment to encouraging the dreams of young people, not just in Africa, but worldwide because they are our future, it would be inappropriate as a keynote speaker not to address the passions, hopes and dreams of our host community, especially the young men and women of Taiwan, who, as an integral part of our global community, share the same ambitions to help craft a better and more enlightened global society, and in so doing to derive much personal satisfaction from the engagement.

As the global environment changes and we all seek to redefine our place in it, closer to the top where it matters most, there is no doubt that one way to pursue your search for self-actualisation is to engage others in a common search to deploy knowledge for global development, all within the overriding vision of human culture. In this regard, listening is a rare and critical strategic attribute. If you wish to engage me and, any of my colleagues here, in exploring your thoughts, please feel free to do so. Ultimately the answer will be yours as it will come from you.

As one thought in this regard, collaborating with Africa offers a fertile ground for self-exploration and expression. It is my feeling, perhaps wrong, that young Taiwanese do not know much about Africa, and as a result, do not know the vast and exciting opportunities of engaging Africa in a new model of strategic pursuit of self-actualisation through science and technology as well as through travel, knowledge exchanges and innovative social networking.

Africa and Asia Pacific

Overall, the same applies to Africa and all of Asia Pacific. The two societies have a long history of comparison and shared experience. The same classes in which Chinese, Indian, Japanese and other Asian students studied in universities around the world, had a lot of us Africans as well. We *do* know each other quite well. But until now, our interaction has been through the framework of a Euro-American construct. As the world changes, I believe that the time has come to explore direct interaction between Africa and Asia-Pacific, not in the old model of who buys what and who sells what, but at a much deeper and more fundamental human, intellectual and strategic level. If Asians are to work closely with Africans, they will need to know and understand Africans in a fundamental way. This can only be done through understanding their culture. The same goes for Africans who would collaborate with Asians. And the same goes for everyone else who would wish to collaborate with others more meaningfully in our new global environment. As managers of corporate enterprises and cultural portals, there is a special role we can play in making the cultures of Africa, Asia Pacific, Latin America and the Caribbean, of America and Europe, and of others, a common knowledge amongst our own people.

Passing the Torch to a New Generation

Globally, a new generation is coming of age. The next few years to come will witness the passing of the torch from our generation to the next generation. Our challenge is to enable this as elder statesmen. In Africa, it is our age-old tradition that those who come

after us must be better than us and do better. If not, then we will not have done a good job as mentors. That is why in some African communities, parents do not bury their children, because this is not the right order of things. I believe that if we devote much care and attention to bringing up the young generation, they will not only do well, but they will not let us own. Then we can relax and enjoy the leisure that we will have earned from having done our part well.

Conclusion

Let me conclude by referring to a section of my 2002 address in Kuala Lumpur that I referred to at the beginning. I said at the time that:

"The struggle to build a better future for ourselves will involve a lot of sacrifices and frustrations; we must be prepared to pay the price. The more we stand together and the harder we work together across borders, and the more we remain committed to the higher principals of equity, fairness and decency, the less will be the price we have to pay individually, and the greater will be the joy of having contributed our bit to the creation of a better world. If, on the other hand, we seek new societies and economies to oppress in our struggle for self-actualisation, we will defeat our purpose and further frustrate the dream for a better tomorrow.

"Do we need others to be poor for us to feel rich or are we capable of seeking to build a truly universally rich society in which poverty and disadvantage of any one group or society is treated by us as evidence that our job is imperfect and incomplete?

"In deploying this powerful tool called ICT in developing our knowledge societies of tomorrow, we must examine the immense opportunities and serious potential threats which come with it. At the end of the day, the true challenge to all of us here is how the human mind and society exercises judgment and discretion in extracting from ICT what we need in order to make future society more fulfilling, more equitable, more peaceful, more accommodating and more responsible and responsive to the needs of most of our peoples.

"How to vastly improve the quality of life for all, expanding our opportunity and capacity for creative life and the unhampered pursuit of self-actualisation, that is our true challenge. Acquiring lessons learnt from careful study of the past infused by the essence of our cultural virtues, that is knowledge. Deploying that knowledge with fairness and honesty through time for sustainable development for all our people, that is wisdom. In this context our knowledge societies of the future would be nothing but the world of a new global renaissance in which we experience an explosion of brilliance, creativity, joy and equanimity. That, I believe is the way to create access, empowerment and appropriate governance in promoting the richness and diversity of global cultures. In that process we will eliminate poverty, not manage it, through the creation of wealth within the constraints of our social and cultural priorities."

In the next few days, as we share ideas and experiences in an effort to explore new thinking for crafting new models in the management and dissemination of our diverse cultures and heritage, let us be guided by the quintessential fact that we are fundamentally and deep inside, the same---simple human beings, dreamers who are often bold and optimistic, but inevitably are from time to time uncertain and vulnerable to the unpredictable challenges of life. We are simple, modest people who seek joy and happiness in the lives we live. Everyday, we feed off and seek meaning and security in our culture and heritage, and in turn, everyday we infuse both with the innovations of our own genius. When all is said and done, we all seek a world we can enjoy, protect, preserve and pass on, much enriched, to those who come after us. That is the right way of the world. That is my dream. And I am sure that that is your dream as well.

I want to thank you for your attention and your indulgence.

Thank You.

Dr. Joseph O. Okpaku, Sr.
President and CEO
Telecom Africa International Corporation
222 Forest Avenue
New Rochelle, N. Y. 10804 USA
Telephone: +1 914 636 6498 (temporary Taiwan mobile +886 955707014
Fax: +1 914 813 2503
Email: Okpaku@telecomafricaiinternational.com