From Conceptual Ambiguity to Transformation
Incorporating Gender Equality and
Women's Empowerment in the ICT arena

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Introduction

The international community has made progress in recognizing that the ICT revolution should not proceed as a technologically deterministic law onto itself, but must be shaped by human values. The need to align development in the ICTs arena with human development objectives is now widely accepted. However, to date, these reshaping efforts have been relatively silent on the need to include gender equality and promotion of women's empowerment as central tenets of the transformation effort. In this regard, the ICTs arena trails behind peace and security, education, health, human rights, enterprise promotion, macroeconomic reform and trade, where there is acceptance that there can be no meaningful progress, without consideration of gender equality and women's empowerment.

There is an urgent need to fill the "gender equality in the ICTs arena" conceptual gap and to develop effective strategies that can encourage concerted action. These steps are needed to ensure that women secure access to the potential benefits of the information and communication technologies (ICTs) and to minimize potential disbenefits associated with the ICT revolution. ICTs cannot fulfill their potential for use as a tool for gender equality, women's empowerment and human development unless decision-making and participation in the ICT sector undergo fundamental change.

This essay outlines a conceptual framework that can be used to open space for gender equality and women's perspectives to contribute to reshaping of the ICT revolution. The conceptual framework is applied to several critical areas of intervention that the international gender equality community has identified as being important –ICT policy making; ICT applications for promotion of women's economic empowerment, ICT enabled health and education services and ICT mediated public life participation. To complement the analysis presented a list of bibliographic print and electronic resource materials are also provided.

The first step in the transformation process is the redefinition of the raison d'etre for ICT sector expansion and application of ICT services. For ICTs to achieve their fullest potential, the prupose of ICT sector expansion must be redefined. Growth in the ICTs arena must become embedded in a set of efforts to promote human development rather than remaining an end in itself. Without a link to human development, ICTs will remain a technological side-show, the applications and services will continue to be the playthings of the global elite, and the digital divide statistics will continue to be alarming.

Positive human values and aspirations such as equity, equality, and justice must be integrated into the ICTs arena. Without these ethical considerations, the ICT revolution will remain shallow and unconnected to the central development problems of, poverty, insecurity, disease and growing inequality. Without concerted action, ICT infrastructure and applications will continue to enjoy unprecedented diffusion rates; but will only provide benefits to the rich and privileged. The poor will remain shut out and excluded.

The promotion of a human development based ICT revolution will require a much broader set of means to achieve ICT sector development, rather than the limited reliance on market mediated tools of liberalisation, privatisation and deregulation. Expansion of ICT services and applications to all citizens rather than only to consumers who can pay market determined prices will require creativity and inventiveness on the part of all actors. Non-market mechanisms will be a necessary element of any pro-development ICT strategy. In the people rather than profit centered ICT revolution envisaged here, democracy, transparency and participation become the basis for governance of the sector rather than empty rhetoric.

As will be shown transformation of the ICTs arena will require new ways of working and will challenge leadership and negotiation styles. The next section presents a conceptual framework that can provide some guidance in the process.

2. Thinking B.I.G -- a Conceptual Framework to Guide Transformation of the ICTs Arena

As noted earlier, transformation of the ICTs arena should include a range of focused and strategic actions that are directed at accelerating full and meaningful participation of women in the ICT sector in a manner that promotes gender equality, furthers the empowerment of women and advances overall human development. Although it is expected that the strategies used to transform the ICTs arena will vary according to context, environment and type of actors involved; it is argued that greater collaboration among actors and sharing of information, knowledge and expertise is likely to produce beneficial impact on the timeliness of achievement of objectives. Several key premises underlie the proposed transformation agenda.

First, the definition of the term "ICTs arena" is used here in an all encompassing sense to include ICT production units (companies that make equipment or produce services), ICT services and applications (telecommunications, information technology services such as software, multimedia, e-commerce etc), ICT equipment, ICT policy and regulatory bodies operating at national, regional and international level as well as technical bodies involved in setting technical and industry standards for the ICT infrastructure and services. Further, the ICTs arena is defined to include both intermediate and final goods and services. This comprehensive definition, is important because it recognized that ICT infrastructure, services and applications are often integrated into the value-chains of production and consumption of other sectors. For example, ICTs are used as intermediates or inputs in the production of other goods by the manufacturing sector and as the means for delivering services such as news, entertainment, education and training etc. As a result of this sprawling nature it is often difficult to measure the boundaries of the sector and to identify decision-makers. The strategic agenda outlined here for analytical convenience focuses on the core of the ICT arena, where final goods and services are produced and consumed.

Second, it is acknowledged that the majority of ICT infrastructure, services and applications are designed and produced by private sector companies, universities and research institutions. It is noted that the deployment of ICTs however involves a much larger set of actors. For example, public-sector decision makers set the rules and monitor operations of companies, and private citizens are employed by ICT companies, and also consume and use ICT equipment, services and applications in their daily lives. The interaction of profit motivated companies, citizens using ICT services, consumers buying ICT equipment, services and applications and public sector institutions carrying out oversight makes for a complex terrain. This complexity means that when designing a strategic approach, it is necessary to be mindful that variation in context is centrally important. It is not possible to develop a *one-size fits all* strategy for inclusion of human development objectives in the ICT arena.

Third, the ICTs arena is acknowledged to be technologically-intensive in which decision making about ICT infrastructure, services, policies and regulations requires a minimum level of familiarity with computer, telecommunications and information technologies. Meaningful participation as a producer or competent user is assumed to require additional competence, increased knowledge and deeper understanding of the underlying technologies.

Fourth, all technologies, including ICTs are considered to be socially constructed, in which the impact and outcomes resulting from production and application are influenced by social and economic factors, such as income level, social status, gender, race, class, religion etc.

Finally ICTs are not considered to be gender-neutral. There is an explicit focus on identifying and explaining the ways in which the ICTs arena is gendered and devising strategies to change gender relations that are disadvantageous for women. It is assumed that women's meaningful participation in the ICTs arena as producers, employees, consumers or users, is influenced by gender relations. The process of unearthing the gendered nature of the ICTs arena, influencing gender relations and reducing inequality is explicitly deemed to be a political process involving conflict, bargaining and negotiation over change and transformation of power relations as well as access to resources. It is expected that change agents (internal and external) will meet with resistance and will have to devise strategies to overcome resistance.

With the foregoing in mind, the conceptual framework proposes a three phased strategy for transformation of the ICTs arena. Figure 1 provides a graphical representation showing the distinct focus associated with each phase:- phase one, (Buy-in); phase two (Implementation) and phase three (Growth and reinforcement).

Figure 1:   Three Phases of the B.I.G approach to transformation
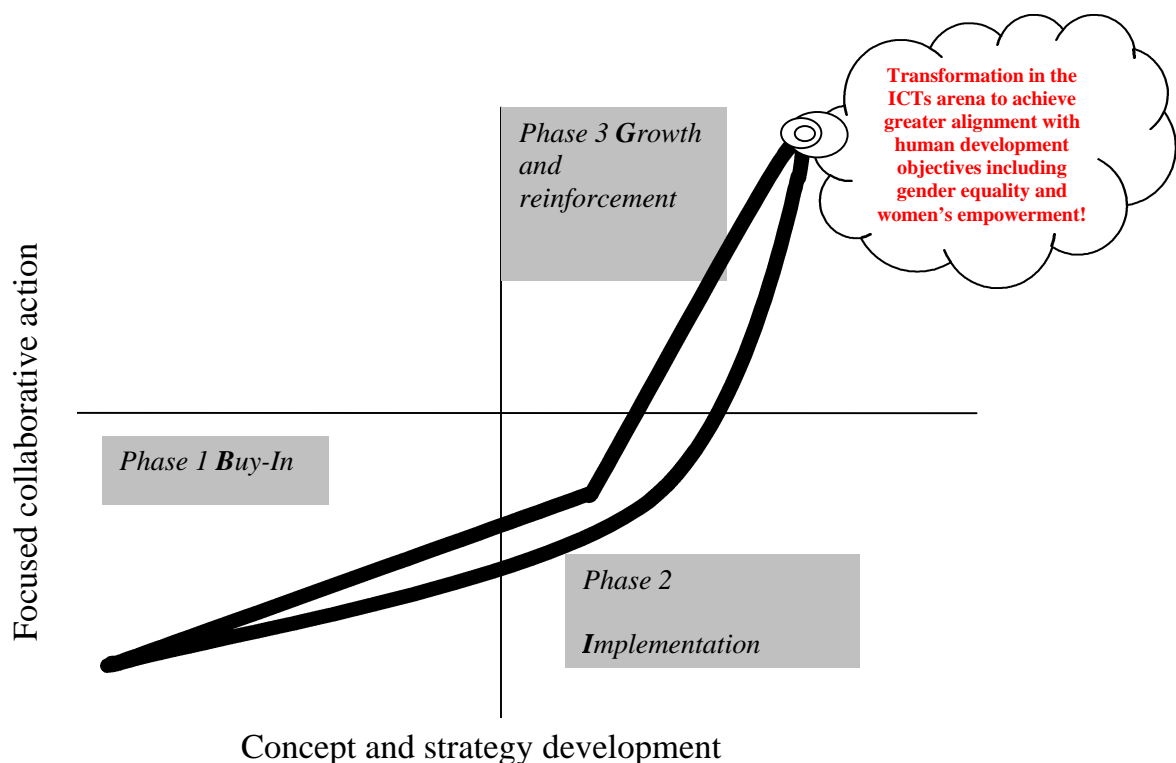
Source: author

In this approach, transformation is expected to be achieved through the combined effects of concept & strategy development and focused collaborative action. It is further argued that since the multiplier effects associated with these combinations accelerate movement towards the overall strategic objective, activity in one dimension only is insufficient. The framework does not envisage a linear, well delineated cut-off between phases, but rather anticipates a messy, non-linear, chaotic implementation pattern. However, there are some sequencing requirements since the learning and facilitation effects in the earlier phases provide foundation for intermediate and later phases.

The common characteristics and the strategic actions that should be associated with each phase are shown in Table 1. Applying this approach requires commitment to the goal, as well as the ability to invest resources (intellectual, financial and social capital) at every stage of the process. A first step in applying this approach would be to undertake an enquiry (formal or informal) to determine the initial conditions, and to identify barriers. It would also be helpful to define intermediate goals, so that progress can be regularly monitored. The second step involves designing specific strategies that are developed and clarified through the articulation of statements of objectives, indicators and outcomes. The approach is flexible and can be tailored to suit venues of varying scale and complexity. For example, the framework can incorporate the needs of small-scale, local, national, regional, and global initiatives as well as sites with varying levels of resistance. However, the framework does strongly argue that there is an imperative for success, that is that every action regardless of scale should be continuously assessed. This ensures that at every stage, alignment and understanding of the overall strategic objective is maintained rather than dissipated. Reinforcing actions that have the potential to make a positive contribution, and avoiding those that do not is non-negotiable. This requires that programmes of change move beyond instrumental indicators such as simple counts of the number of women in ICT projects, or women in decision-making positions in the ICT. These are not considered to be appropriate indicators. Instead, what is required are indicators that measure how through increased participation in the ICTs arena, the goals of empowerment, and gender equality are advanced. Development of appropriate indicators and assessment tools are therefore part of the capacity building foundation of the transformation agenda.

Table 1   Characteristics and strategies defined in the BIG approach to transformation

Phase	Characteristics of each phase	Specific Strategies
Buy-In *(Intellectual Capital intensive)*	• Confusion about strategic objectives • Fragmented activity with little collaboration • Widespread small-scale experimentation with little or no analysis, evaluation and information sharing • The cause of inclusion of gender equality encounters active and passive resistance • Gender equality & ICTs advocates have limited impact	1. Research and analyse the underlying and proximate causes of gender-blindness in the ICTs arena 2. Develop and articulate the case for human development and gender equality development. Develop tools for analysis and advocacy. 3. Develop models of organizational collaboration, based on knowledge and expertise networking and shared leadership. 4. Communicate with decision makers to raise awareness and counteract inertia and resistance 5. Build support base among human development and gender equality constituencies
Implementation *(Financial Capital intensive)*	• Clarification of strategic objectives • More widespread agreement on good practices • Increased collaboration in national, regional and global activities • Deployment of projects of appropriate scale with relevant evaluation and monitoring • Coherent strategies to respond to resistance • Integration of gender equality objectives in local, national, regional and global initiatives • Gender equality & ICTs advocates have moderate impact • Risks of co-option and dissipation of strategic intent emerge	6. Encourage regular and active communication among policy advocates, scholars, practitioners and activists to clarify concepts and share insights 7. Undertake focused interventions to assist producers in the ICTs arena with implementation of good practices through e.g. regulatory and policy tools, company investment plans 8. Develop specific campaigns to ensure allocation of adequate resources to women's participation in all facets of the ICTs arena 9. Develop critical mass in the numbers of women who can participate in technical and managerial decision-making within the ICTs arena. 10. Design and implement evaluation and monitoring mechanisms to assess impact of projects and programmes and to share results with human development constituencies.
Growth and reinforcement *(Social , intellectual and financial capital intensive)*	• Conceptual clarity • Widespread implementation of basic approaches to improve participation of women • Innovative approaches emerge • Gender equality & ICTs advocates have impact and share experience with other human development sectors through action-based coalitions	11. Reinvigorate and sustain conceptual and strategy development through research, analysis and information sharing 12. Undertake R&D to identify technology-based solutions to remaining barriers to participation 13. Share experiences and insights with development community 14. Identify champions and converts among the ICT decision makers 15. Expand and update awareness raising campaigns. Begin again using insights and experience!

The B.I.G approach suggests that a closer link needs to be made between conceptual foundations, strategy and action. It suggests that the Buy-In phase provides the time for clarifying underlying philosophy and objectives and for reviewing the experiences gained through multiple sites of experimentation. In the Implementation phase, expanded deployment is possible, because efforts proceed with greater shared understanding and common purpose. This is not to say, that there are no risks associated with this phase. On the contrary, it is particularly true that when mainstream institutions become involved, that risks of co-option and dissipation of fundamental objectives are greatest. In the Growth and reinforcement phase, there is renewed attention to refinement of conceptual tools and understanding based on careful evaluation and assessment of prior experimentation. This phase provides an opportunity to make further progress in increasing participation in areas that have been particularly difficult to penetrate. It is in this phase, that the advocates of gender equality and ICTs can draw on networks of support, shared expertise and political savvy to move towards the achievement of overall strategic goals.

Development of this framework draws on an analysis of the "conceptual silence and ambiguity" regarding gender equality in global efforts to align ICTs and human development; feminist research and analysis of transformation in other spheres as trade and human rights; recent studies of the integration (or lack thereof) of gender analysis in ICT projects; and conceptual work on gender analysis of ICT policy, including previous studies by the author. Analysis of the contributions of the participants in the UN-DAW on-line conference on the impact and use of ICTs as an instrument of women's empowerment and advancement provided an updated assessment of the extent to which women are able to participate fully in the ICTs arena. The framework is also informed by praxis. The author has been involved as an external change agent motivating for gender perspectives to be included in the work of the ITU, has worked with a policy, research and advocacy NGO active in lobbying for inclusion of gender equality issues in ICT policy and practice and has advised international organizations on gender and ICT programme development.

3. Applying the B.I.G Approach

The B.I.G. framework can be applied to articulating a strategy for moving towards transformation of the ICTs arena, in specific areas such as ICT policy making; ICT applications for promotion of women's economic empowerment, ICT enabled health and education services and ICT mediated public life participation.

As noted earlier, the pre-requirement for using this framework is an acknowledgement and understanding that all social, economic and political processes, including the production and/or application of technologies, are gendered. Having accepted this as a basis and motivation for corrective action, the first step in applying this framework would be to identify the characteristics of the initial conditions and the types of barriers faced. Secondly the framework recommends that specific action-orientated strategies be developed to tackle the barriers identified. These strategies will include definition of intermediate goals, and design of evaluation and progress monitoring systems. Finally, the framework implies that progress towards achievement of the overall strategic objective is attained by continuous learning, assessment, evaluation and careful interpretation of experiences.

The process of applying the framework would begin by providing an understanding of the gendered nature of social, economic, political structures and systems in the world, continent, country, village, or urban location. In this stage, opportunities would be created to explore the consequences of existing gender relations. Change agents using this approach should construct arguments and marshal evidence that varies according to the context and political environment in which the intervention is being made. However they ought also to take account of guidance from an insightful feminist scholar who has

persuasively argued that while it is possible to adapt to the context – shifting from justice based to expediency based arguments - true transformation will result only from wisdom based strategies[1]. The latter are likely to be more sustainable and far-reaching since they require the change agent and the institutions where interventions are being attempted to have shared acceptance of the inevitability and desirability of transformation.

Once there is agreement on the objective of an intervention, change agents can proceed with an enquiry into initial conditions in the ICT arena, by providing answers to questions such as:

1. Are gender equality perspectives understood by decision makers, at all levels?

2. Are gender equality perspectives used by decision-makers, at all levels?

3. What types of organizations advocate for gender equality?

4. Who are the champions of gender equality?

5. Is there agreement on why gender equality should be included?

6. Is there agreement on how gender equality perspectives should be included?

7. How much of the financial budget is allocated to gender equality or women's advancement?

8. How are decisions about budget allocations, innovation, project development made? e.g. by consultation, by committee, by fiat, by intergovernmental meetings etc

9. At what level are women in the decision-making systems?

10. What are the most common reasons given for not adopting pro-active strategies to enhance the participation of women?

The next stage involves identifying specific actions that respond to the initial conditions and barriers identified. Some care is needed to ensure that the actions attempted are appropriate to the spaces where strategic interventions are to be made. Table 2 illustrates some possible specific actions to secure Buy-in for gender equality across the four areas of concern. Taking these steps to persuade decision makers and those in power is a minimum starting point, since without "Buy-in" there is little likelihood of further progress to implementation, growth, reinforcement and transformation.

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[1] Peggy Antrobus, economist and member of DAWN feminist collective, personal communication with author, October 2002.

Table 2:   Specific actions to secure Buy-in for gender equality in the ICTs arena

	ICT Policy	ICT & economic empowerment	ICT & education ICT & health	ICT mediated public life participation
Buy-In	**Communicate the results of research, and conceptual development with the decision-makers that currently occupy positions of power and influence** **Develop organizations that can provide a foundation for continuous transformative work**			
	• **Develop conceptual arguments to disprove the assumption of gender neutrality in ICT production and use** • **Develop a case for the democratization of ICT policy making that includes full participation by women and gender equality advocates** • **Lobby for increased participation of gender equality advocates in ICT policy making** • **Provide opportunities for regular communication between gender equality advocates and ICT decision makers**	• **Investigate and examine whether there is a case for promoting subsidized access to ICTs for women. Assess the feasibility of implementation and make recommendations on the conditions under which such programmes can be expanded.** • **Investigate labour markets in ICT to identify causes of common problems e.g. occupational gender segregation and low levels of retention of women.** • **Investigate women's entrepreneurship in the ICT sector to identify barriers to success, explain differences in rates of business formation, business growth** • **Investigate human resource and development practices of leading ICT firms to identify the extent to which there are policies and programmes to support women's employment**	• **Develop the case for specific programmes and projects catering for women's health needs** • **Develop the case for gender-specific requirements for girls training & education** • **Identify any special features of ICT-mediated health and education programmes that make them more accessible or less accessible to girls and women**	• **Develop the case for public life participation with a special focus on women in various spheres e.g. parliamentarians, aspiring politicians** • **Identify specific requirements for women's enjoyment of right to association and public participation and explore how these are facilitated or hampered by ICT-mediated governance programmes.** • **Explore the extent to which ICT-mediated public life participation reduces any of the barriers commonly identified by women e.g. absence of family friendliness, male style of communication**

The characteristics of the "Buy-in" phase suggest that converts and believers in the cause of gender equality will self select and take on leadership. These individuals are likely to come from backgrounds of feminist scholarship, gender-analysis, and activists campaigning for gender justice. However, there are some challenges associated this style of leadership. Gender equality advocates who do not have a background or experience in the ICT sector, are unlikely to have regular or natural lines of

contact and communication with decision makers. Most men and women in the leadership positions in the ICT sector do not have familiarity with gender equality advocacy issues. Facilitating interaction between these groups therefore requires capacity building and active development of a cadre of dual skilled individuals who can make the case for gender equality in the ICT sector with both passion and competence. The communication process also requires brokers to facilitate regular contact and constructive engagement between ICT decision makers and gender equality advocates. In this regard, gender equality advocacy units in global institutions, within the United Nations system and its specialized agencies, can play a crucial role. However the positive effects that the UN system can have will be undermined if gender equality advocates operating outside these institutions perceive that there is a risk that the brokers will not facilitate access without censorship or self-interest. The "Buy-in" phase in other arenas is full of examples of institutionally based gender equality advocates being accused of watering down strategic objectives in order to win tactical or careerist advances. This smear should be avoided at all cost. Conversely, since enthusiasts and believers often lack the financial and organizational wherewithal to sustain negotiation efforts, they should engage with institutionally based gender equality advocates to devise strategies for joint actions. Building organizational competence for the "Buy-In" phase is a careful balancing act. These considerations should receive explicit attention rather than being swept under the carpet. These requirements of the "Buy-in" phase imply that gender equality advocates need to design processes for sharing responsibilities and leadership among organizations with different perspectives, competencies, preoccupations and political histories. It is a task that is time and resource intensive but one that cannot be avoided.

Once buy-in has been won, change agents should shift gears to securing financial resources to implement projects and programmes of expanded scale. The implementation stage should also be accompanied by intensive evaluation and assessment to ensure that technological folly does not overshadow the original intention of securing transformation. Table 3 provides illustrations of actions that can be taken in the Implementation phase.

Table 3:   Specific actions to secure Implementation of gender equality in the ICTs arena

	ICT Policy	ICT & economic empowerment	ICT & education ICT & health	ICT mediated public life participation
Implementation	**Translate the results of research, and conceptual development into concrete programmes and projects, at appropriate scale** **Continue to evaluate and assess the outcomes of programmes and projects in the light of strategic objectives**			
	• **Design tools and frameworks for incorporating gender equality perspectives in ICT policy** • **Undertake tests of implementation of tools and frameworks at national level, making provision to share results at regional and global level** • **Assess the impact of the democratization of participation in ICT policy for a and critically assess the role of gender equality participation**	• **Develop specifically tailored ICT applications and services to support women's productive activity in a range of industrial and service sectors (e.g. agriculture, textiles, craft)** • **Facilitate pro-active strategies to encourage and support women's employment in the ICT sector based on results of studies in phase 1.** • **Facilitate actions to remove the barriers to women's entrepreneurial activity based on the results of studies in phase 1**	• **Secure budgets to rollout ICT based education and health services targeted at girls and women, based on the design characteristics suggested by studies in phase 1.** • **Review experiences of ICT mediated service delivery for health and education and refine assumptions wrt modes of delivery** • **Increase women's participation in advanced ICT training and education programmes**	• **Allocate financial resources from within e-government budgets to projects which address the specific needs of women and which address the barriers to women's enjoyment of right to public participation identified in phase 1.** • **Analyse the impact of ICT-mediated public life participation on gender relations** • **Develop strategies to cope with "backlash" effects**

In the Implementation phase, the venue of activity shifts from sites associated with concept and organizational development to those that are operationally focused. Private sector companies, public sector ministries, regional institutions, development finance institutions and other donor agencies. In this phase, effort should focus on the translation of concept into reality without dissipation of strategic intent. Since by definition, implementation activity is decentralized, there is an important role for assessment and monitoring. Civil society organizations, scholars, gender equality advocacy units should be involved working in partnership with ICT decision makers in all stages of implementation, particularly in rigorous and sophisticated assessment of projects and programmes.

There will be variation in the rate at which regions, countries and sectors implement gender equality perspectives in the ICTs arena. Progress will be uneven and non-linear. There is no blueprint, but there are opportunities to experiment and to learn. The Growth and reinforcement phase combines implementation, learning, and reinvention. In this phase, there is a community that is genuinely interested in promoting gender equality in the ICTs arena. The effort to transform ICTs for human development

incorporates gender equality perspectives and involves a diverse set of actors. Table 4 illustrates actions that can be taken in this phase to continue progress.

Table 4:   Specific actions to secure Growth of gender equality in the ICTs arena

	ICT Policy	ICT & economic empowerment	ICT & education ICT & health	ICT mediated public life participation
Growth & reinforcement	**Ensure that efforts to promote ICTs for human development include gender equality perspectives. Use the experience of integration of gender equality in the ICTs arena as a basis for contributing to wider debates on the transformation of ICTs for human development and building a World Information Society** **Build coalitions among groups seeking social, economic and political justice.** **Analyse the long term impact of increased participation in the ICTs arena on gender equality and women's empowerment, using macro-indicators and other tools.**			
	• **Share knowledge and information on why and how gender equality perspectives can be incorporated in ICT policy** • **Promote alliances with social movements including pro-democracy and human development coalitions** • **Take active leadership in the alignment of ICTs with human development and building of Information Society** • **Contribute to debates on the intersection between ICTs and the achievement of the Millennium Development Goals**	• **Link the ICT initiatives to the campaigns and programmes aimed at transformation of global economic policy and end to feminised poverty**	• **Form alliances with women's health and education coalitions and campaigns that advocate for the right to education for all.**	• **Develop alliances with pro-democracy movements to strengthen response to any negative reactions to increased women's public life participation**

Concluding Reflections

This essay has provided an outline of a conceptual framework that can be used to transform the ICTs arena for the promotion of human development, gender equality and women's empowerment. The framework is informed by feminist analysis of organizational and institutional transformation. Within that theoretical perspective the limited results in transformation of the ICTs arena are not unexpected given the political and economic context in which change is being attempted. The B.I.G approach offers a perspective in which resistance is anticipated and responded to pro-actively. There is a focus within this approach on conceptual and strategy development and for focused collaborative action. Specific actions that promote transformation have been identified in four areas --ICT policy, ICT services for health and education, economic empowerment and public life participation.

The framework also implies that shifts are required in how gender equality advocates approach interventions in the ICT arena. The proposed focus is on development of conceptually sound and contextually flexible strategies that can be used to negotiate with powerful forces in the ICTs arena. The B.I.G. approach reflects on the limited effectiveness of efforts that are based on investing resources in developing recommendations, without first investing in the power and influence to persuade or implement. The approach also suggests internal changes within the gender equality advocacy communities. By stressing the need for focused collaborative action among various actors, it advocates a

move away from working for gender equality with processes that are characterized by fragmentation, divisiveness, non-inclusiveness and lack of strategic focus.

Many influential actors in the international community, including the United Nations ICT Task Force, have resolved to work to ensure that there is better alignment between expansion and growth in the ICTs arena and human development goals and aspirations. To give effect to its resolve, the UN ICT Task Force has committed to ensuring that Millennium Development Goals become the *heart* of the upcoming World Summit on the Information Society. In parallel, the international community has recognized the importance of gender equality and the empowerment of women, enshrining these goals in the Millennium Declaration and the Beijing Platform for Action. These two spheres of activity have not yet had a meeting of minds and as a result, collaboration among actors is scarce.

The framework has argued for a three-phase process for transformation of the ICTs arena. Within those phases, there are opportunities for collaborative action involving the academic community, civil society organizations, regional organizations, national governments, private sector companies, donors and the United Nations and its specialized agencies. Leadership in each phase is likely to be shared among different actors. In the Buy-In phases, strategic actions are likely to be led by academics and civil society actors working with institutionally based counterparts to persuade private and public sector decision-makers in the ICT sector to take gender equality concerns seriously in their planning and programme development.

Given the urgent need to begin the process of transformation, all actors should use their preparation for the World Summit on the Information Society, to undertake the specific actions that are necessary to build consensus around the importance and value of integrating gender equality issues in the ICTs arena. Developing concepts, tools, strategies and designing collaborative organizational processes can provide a sound foundation for tackling future challenges. Joint efforts are needed to leverage the strengths of different communities and achieve the overall objective –alignment ICT policy making and programming with human development objectives.

The B.I.G approach outlined here is a work-in-progress. It is ambitious in scope and hopefully thought provoking. Its intention is however very simple -- to begin a process of bridging the conceptual and operational gap that separates work by gender equality advocates and those working to transform the ICTs arena.

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Electronic Resources

Organisations promoting transformation of ICTs Arena	Website addresses
ABANTU for Development	www.abantu.org/html/netwomen.htm
ACWICT: African Centre for Women,Information & CommunicationsTechnology	www.acwict.org.ke
African Information Society Gender Working Group (AISGWG)	http://www.whrnet.org/icts/book/index.html
APC Womens Networking Support Programme	http://www.apcwomen.org/gem/printer/icts.htm
Asia Pacific Womens Information Network Centre (APWINC)	http://apwin.women.or.kr
Fundredes	http://funredes.org/mistica/
GAIN	http://womensnet.org.za/links/gainbroch.htm
GAINS: Gender Awareness Information and Networking System (UN-INSTRAW)	www.un-instraw.org/en/instraw_gains/
Gender,Science and Technology Gateway (GST Gateway)	http://gstgateway.wigsat.org
ITU Task Force on Gender Issues	http://www.itu.int/itu-d/gender

ModemMujer	http://www.laneta.apc.org/incita/
KOREA: Asia-Pacific Women's Network Centre	women.or.kr/ehome/index.html
OFAN	http://www.wigsat.org/ofan/ofan.html
SIYANDA: Resource to support the work of Practitioners in Mainstreaming Gender	www.siyanda.org/
UNU-INTECH Gender and Technology Programme	http://www.intech.unu.edu/program/proj9899/442.htm
	http://www.intech.unu.edu/download/telework/final7.pdf
	http://www.intech.unu.edu/program/projects/proj443/twtt.htm
UNIFEM-Digital Diaspora Project	www.unifem.undp.rg/pr_afr_digital.html
UNDP Ukraine telecentre for women farmers (UNDP)	http://www.undp.org/info21
World Bank: Gender and the Digital Divide Resource Center	www.worldbank.org/gender/digitaldivide/digitaldividelinks.htm
WSIS-Gender Caucus	www.wougnet.org/WSIS/wsis-gc.html
Women Watch	http://www.un.org/womenwatch
WomenAction 2000	http://womenaction.org/sectionj.html
WomensHuman Rights Net	http://whrnet.org/issues/ict
WomensNet (South Africa)	http://womensnet.org.za