**9. Capacity to Decide**
**How can the capacity to decide be improved as the nature of work and institutions change?**

Because the world is increasingly interdependent and complex, improving abilities for collaborative decision making across institutional, political, and cultural bounders is essential. Many of the world’s decision-making processes are inefficient, slow, and ill informed. More-open systems, democratization, and interactive media are involving more people in decision making, which further increases complexity. A UN survey of 105 national legislatures found 10% using e-government systems to engage citizens in policymaking. Fortunately, the world is moving toward ubiquitous computing with collective intelligence for nearly just-in-time knowledge to inform decisions.

A variety of decision support software is increasingly being used. Some let groups select criteria and rate options, others show how issues have alternative positions and how each is supported or refuted by research. Such systems improve decisions by exposing or filtering out bias, facilitating robust debate, and providing more-objective assessment of facts and capabilities. Issues-based information software can make decision making clearer and more transparent (See the attached CD Chapter 6 for Global Energy Collective Intelligence Figure 23).

The number and intricacy of choices seem to be growing beyond our abilities to analyze and make decisions. The acceleration of change reduces the time from recognizing the need to make a decision to completing all the steps to make the right decision. Rapid collection and assessment of many judgments via on-line software can support timelier decision making. Expert advice was most often the view of single individuals or very small groups, but now decision making benefits from the increasing use of open systems that invite broad and transparent participation of groups of experts and individuals from around the world. (See the attached CD Appendix N for an explanation of the Real-Time Delphi. Unfortunately, we are still so flooded with information clutter and superficial news that serious attention to decision making gets little interest.

In the past, many political and business decisions included competitive intelligence and analysis to guild decision making. As the world continues to globalize, increasing complex interdependencies, synergetic intelligence and analysis should also be considered. What synergies are possible among competing businesses, groups, and nations? Synergetic analysis sees to help make “win-win” decisions that assist a larger number of enterprises while reducing some wasted efforts in only “win-lose” decisions.

Vast peer-reviewed data banks are being interconnected so that composites of data from many sources can present the best facts available for a given decision. Issue-tracking for decision making is improving with Web 2.0 tools. Internet searches for “decision making” will yield many just tools and software to help individual and institutional decision making. More user-friendly, powerful, and flexible simulation and modeling software will eventually find its way into decision making, as have spreadsheet software and search engines. Advances in cognitive neuroscience and brain-computer interface technologies should eventually improve decision-support systems. Meanwhile, too much time is wasted going through useless information.

Ubiquitous computing will increase the number of decisions per day, constantly changing schedules and priorities. As computers increase in processing power, much of our decision making can be automated, just as the autonomous nervous system manages basic bodily decisions. Decision making will be increasingly augmented by the integration of sensors imbedded in products, in buildings, and in living bodies with a more intelligent Web and institutional and personal collective intelligence software that helps us receive and respond to feedback for improving decisions.

Self-organization of volunteers around the world via Web sites is increasing transparency and creating new forms of decision making. Today’s challenges cannot be addressed by governments, corporations, NGOs, universities, and intergovernmental bodies acting alone; hence, trans-institutional decision making has to be developed and common platforms created for trans-institutional strategic decision making and implementation.

Training programs for decision makers should bring together research on why irrational decisions are made, lessons of history, futures research methods, forecasting, cognitive science, prediction markets, data reliability, utilization of statistics, conventional decision support methods (e.g., PERT, cost/benefit, etc.), collective intelligence, ethical considerations, goal seeking, risk, the role of leadership, transparency, accountability, participatory decision making with new decision support software, e-government, ways to identify and better an organization’s improvement system, prioritization processes, and collaborative decision making with different institutions.

Challenge 9 will be addressed seriously when the State of the Future Index or similar systems are used regularly in decision making, when national corporate law is modified to recognize trans-institutional organizations, and when at least 50 countries require elected officials to be trained in decision making.

**Regional Considerations**

**Africa:** Microsoft is collaborating to help e-government systems improve transparency and decision making and reduce corruption. A recent mining boom in Africa will not help the local population unless investments are accompanied by good governance. How can the cultural advantages of extended families be kept while making political and economic decisions more objective and less corrupt? The New Partnership for Africa’s Development has begun improving collaborative decision making. African civil society needs development to pressure for freedom of the press, accountability, and transparency of government. If the brain drain cannot be reversed, expatriates should be connected to the development processes back home through Internet systems. Informal decentralized networks of allied political groups within and across borders are becoming tremendously empowered by mobile communication devices and online social networking sites.

**Asia and Oceania:** Synergies of Asian spirituality and collectivist culture with more linear, continuous, and individualistic western decision making systems could produce new decision-making philosophies. South Korea is exploring collective intelligence capabilities. ASEAN could be the key institution to help improve decision-making systems in the region.

**Europe:** As of May 2008, there were 2,379 multilateral treaties and agreements affecting decision making around the world; Europe is a major contributor to these, which is leading to “reporting fatigue.” Bureaucratic complexity, lack of transparency, and proliferation of decision heads threatens clear decision making in the EU. Tensions between the EU and its member governments and among ethnic groups are making decision making difficult. A global observatory and advanced information technology may facilitate public participation in direct democracy.

**Latin America:** E-government’s transparency could reduce corruption. Data for decision making are weak in the region. In addition to improved efficiency and transparency, the modernization of state decision making requires the design of new agencies and functions to attend to new aims of the political policies, with increasing civil control. Latin America has to improve political educational awareness and the involvement of the people and to reduce corruption.

**North America:** Intelli-pedia provides open source intelligence to improve decision making. The region’s dependence on computer-augmented decision making—from e-government to tele-business—creates new vulnerabilities to manipulation by organized crime, corruption, and cyber-terrorism, as discussed in Challenges 6 and 12. Self-organizing groups on the Internet are becoming de facto decisionmakers in the region, with decisions made at the lowest level appropriate to the problem.

**Graph:** Artist’s conception of a Global Climate Change Situation Room

Source: Frank Catanzaro, chair, Cyber Node of The Millennium Project

