

Glossary

Baseline: An established line from which to measure the next state. In change management, baseline is the marking of the significant points in a series of changes over time. Baseline is used in combination with benchmarking, where communities establish the current state in order to properly evaluate progress over time.

Benchmark: A standard used in measuring quality or value as a comparison against other communities. In organisational management, benchmark is a point of reference in evaluating best practise.

Broadband: The quantity and quality of information that can be exchanged over distance using one or more telecommunications channels. The International Telecommunications Union (ITU) sets the differentiation point between narrowband and digitally transmitted broadband data at speeds of 1.5 Mbps (mega bits per second) or greater.

Broadband Community: A community that uses computer processing and telecommunications connectivity to accelerate its economic and social development. Synonyms include intelligent, smart, wired, digital and networked communities.

Cable TV Network: The transport infrastructure of local community cable television systems. In broadband communities, cable TV networks will be upgraded from uni-directional to bi-directional delivery systems for voice and data communications, as well as video.

Change Management: A systematic effort to influence and shape the direction of change. In the context of networked communities, the change management framework consists of three inter-related components: the context (both local and global), the content (broadband applications, community objectives and programmes), and the process (acts of collaboration among individuals and organisations).

Chaos Theory: A construct from physics that portrays dynamic states in nature that are far from equilibrium. In organisational behaviour, the theory is sometimes used to describe complex systems that are observed to be unpredictable yet seem to follow an ordered pattern. Organised chaos (chaordic approach) is used in this book as a metaphor for depicting the rate of accelerating change and the response from networked communities.

Citizen Empowerment: Applications offered by the new digital networks that enable local citizens, including K-12 students, senior citizens, the disabled and the unemployed, to be more productively and creatively engaged in solutions to community problems.

Clusters: A number of similar things grouped together. In the business world, firms of similar intent group together to realise economies of scale or to gain a competitive or a comparative advantage over other firms or groups of firms. In networked community development, examples of clusters include sector-specific groups, but also multi-sectoral groups that include commercial firms, government agencies and academic institutions using telecommunications to support working together, sometimes on a global basis.

Collaboration: The pooling of resources (experience, expertise, money, labour) by two or more stakeholders or partners to solve a set of problems that neither can solve individually.

Collaborative Learning: The process by which information, knowledge and opinions are shared within a peer group. An example in community networks is the use of computer communications to promote collaborative learning among geographically dispersed individuals and organisations of common interest.

Communities of Practice: In networked communities, these are dispersed groups of people with a passion and proficiency for something who regularly interact to share experience and increase learning.

Core Competencies: Those talents and tasks for which individuals and groups are best suited. Within communities, core competencies can take the form of unique products and services of high quality, an enterprising culture or an attractive natural environment.

Culture of Innovation: A defining characteristic and mindset of communities that invest in education, research and development with the aim of framing their unique position within the Network Society.

Culture of Use: A defining characteristic and mindset in which citizens of all ages and status within communities have committed themselves to the mastery and application of information and communication technologies for their own and others' benefit.

Digital: A communications protocol in which information is transformed by computers into a near-universally adopted language. Communities, employing information and communication technologies (ICTs) for economic and social development, are often referred to as digitally networked communities.

Digital Culture: A society or group of societies embracing ICTs as the basis for information exchange.

Digital Economy: Those parts of the local and global economy that make use of information technology (IT) hardware, software, applications and digital telecommunications as the principal basis for transactions between business, government, non-profit organisations and individuals.

Economic Development: Steps taken by actors at all levels of a community or society to improve their economic well being and environmental health by investing capital, creating businesses and jobs, and working with others to grow the local tax base.

Economic Indicators: Business measures or statistics that provide a baseline from which communities can evaluate progress. Network community leaders use economic indicators as a basis for economic analysis and as a predictor of future performance.

Electronic Network: A system of interconnected electronic components or circuits over which digital information flows in the form of voice, video and data. An

electronic network is often called a data network, the most common form of which is the public Internet.

Entrepreneurial Spirit: The willingness to take risks and invest in new business development, growth or innovation. Entrepreneurial spirit is often associated with the creation of new firms, but can also refer to the willingness to innovate in non-profit organisations.

Equal Access: A social justice issue having to do with opportunities to share and participate in the benefits of society. In networked communities, the phrase is often used interchangeably with “open access” and “net neutrality”, meaning that all people should have equal access to the Internet.

Fiber Optic Network: A telecommunication transmission line consisting of highly transparent glass fibers capable of relaying vast quantities of information quickly in the form of encoded laser light pulses.

First and Last Mile: The last mile is a historic reference to the interconnections between the local telecom providers originating service and their target customers. The first mile is a symbolic reference to a change of circumstance in which consumers have become such active producers of content and information services that equal or greater network capacity is needed on the outbound path.

FLOSS: An acronym for Free/Libre/Open Source Software.

GIS/GPS: The acronyms for satellite-based geographic information systems and global positioning systems whose applications are widely used by communities for land use planning and management of transportation flows.

Governance: The process by which decisions are made and implemented, whether at corporate, national or local levels. In the context of community, “good governance” is characterised as participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive, and following the rule of law.

Hard and Soft Skills: Hard skills refer primarily to such technical proficiencies as network systems management, computer programming and design of Web sites. Soft skills tend to be observational, intuitive and interpersonal in nature, and include a high level of verbal and written communication, artistic expression and persuasiveness.

Human Condition: Those elements that make individuals and their societies uniquely human—or work against their humanity. In networked societies, “the human condition” refers to the inevitable tension that exists between the current state of the community and what it would like to become, expressing the ongoing struggle between satisfying basic human needs and satisfying higher level human expectations and aspirations.

ICT: An acronym for information and communication technologies, which includes computer and telecommunications components, products and services that make up the building blocks of “electronic” and “digital” community networks.

Information: The raw data or facts on which knowledge is based.

Information Society: Individual communities or an aggregation of communities in which information development, storage, management and distribution are deemed a priority.

Information Workers: People who have the training and skills to carry out the social and economic work of information societies.

Innofusion: A hybridization of the words innovation and diffusion, used in organizational change as the process by which goods, services and guiding principles come into being and are diffused within an organisation or community.

Intelligent Community: Those communities that demonstrate a commitment to using computer processing and telecommunications connectivity to accelerate their economic and social development, sometimes called smart, wired, digital, broadband and networked communities.

Internet: A globally interconnected computer network that uses a common language or protocol (TCP/IP), sometimes called the World Wide Web, the Web or the IP-Net.

Internet Protocol: The TCP/IP standard for adding address information to the packets of data that travel over the Internet.

Key Concept: A theory, general principle or strategy of significance, in this case related to the design, implementation or evaluation of networked communities.

Kbps/Mbps/Gbps: Units of measurement for telecommunications signal speed or capacity. One kilobit/kilobyte per second represents one thousand bits/bytes; one megabit/megabyte per second represents one million bits/bytes; one gigabit/gigabyte per second represents one billion bits/bytes.

Knowledge: The shaping of raw data (information) into forms that are more usable and sharable in the process of learning about and gaining mastery over the natural and social environment.

Knowledge Economy: The creation of wealth based on the intelligent exploitation of information to increase the productive capacity of capital goods, labor and natural resource inputs. The knowledge economy is present in advanced stages of the information society, namely the Network Society.

Knowledge Management: The process of systematically and actively gathering, analysing, organising, managing, sharing and otherwise leveraging the stores of knowledge that might be of use within a community or enterprise.

Knowledge Workers: Employees and self-employed individuals who create and manipulate knowledge to help themselves and their organisations achieve goals. Knowledge workers are often using ICTs to create, process, manipulate, store, retrieve and distribute information.

Labour Markets: Pools of individuals seeking employment. In the case of networked communities, the key labour markets include those individuals who have the relevant skills that organisations need to be productive.

Learning Community: A community culture in which groups of people are engaged in ongoing self-education and provide mutual support for learning that improves performance. In learning communities, innovation occurs naturally, almost as a by-product of how conscientiously people attend to their work and society.

Long Tail: The many niches of old and new products, described by author Chris Anderson, that are being turned into mass markets of near limitless choice by people connected to the Internet.

Measurement Systems: A process for the systematic determination of merit, worth and significance of something or someone. In the context of communities, these processes are of value to measure steps taken toward a goal and to assess opportunities.

MPLS: Multiprotocol Label Switching is a technological innovation allowing Internet Service Providers to treat different kinds of data streams differently so as to give priority to certain information, diverting and routing traffic around link failures, congestion and bottlenecks.

Networked Community: The virtual and physical arrangements in which people live and work using computer processing and telecommunications (ICT) connectivity to improve the quality of their lives. Similar concepts include the “wired community”, “broadband community”, “smart community”, “digital community” and “intelligent community”.

Network-Connected Devices: A reference to the thousands of content originating or content receiving terminals used to interface with the Internet and its applications.

Network Society: A theoretical construct describing individuals, groups and organisations relying on information and communication technologies (ICTs) for exchanging such products and services of the knowledge economy as know-how, expertise and intellectual property. The Network Society is an advanced state of the information society.

Net Neutrality: A principle relating to the concept of “open access” stating that the broadband Internet should be implemented everywhere as a public utility, and that users should be in control of what content they view and what applications they use.

Open Source: This concept refers most commonly to the source code of digital software that has been made publicly available with little or no intellectual property restrictions.

Partner: A community partner is any person or organisation that makes a financial or in-kind contribution to the success of the community.

Process Re-Engineering: A management approach that seeks to restructure to improve efficiency and effectiveness. For communities, such an approach will require looking at operations from a “clean slate” perspective to determine how they might be improved.

Project Communities: Groups of people sharing a common interest in a project and who decide to collaborate in creating and developing it.

Relationship Marketing: A marketing framework, based on the quality of interaction and exchanges in networks of relationships, that encourages long-term relationships for the pursuit of common goals. Relationship marketing is contrasted with transaction marketing, which is based primarily on a sales relationship.

Reliability: Measuring something consistently. Reliability is usually contrasted with validity, which is concerned with the value or importance of what is being measured.

ROI/SROI: Return on investment refers to the financial gains resulting from an investment. Social return on investment is an attempt to measure the social as well as the financial value created by an investment.

Satellite Network: Space-based communications systems that provide global coverage for the two-way delivery of voice, video and data communications on land, sea and sky.

Silos: A term frequently used to describe organisations or business units that are incapable or unwilling to engage in collaboration or sharing with others.

Skills Supply Strategy: A formal plan to ensure that organisations or clusters of organisations within a community have an adequate supply of the right kinds of knowledge workers for the near and medium term.

SMEs: An acronym for small to medium size enterprises and businesses. The description of what constitutes a small business in terms of size fluctuates depending on the agency or country using the term.

Social Capital: That which promotes individual or collective action. In networked communities, social capital normally will originate within networks of relationships based on reciprocity, trust and commitment to the values of stewardship.

Social Development: Steps taken to improve the social well being and environmental quality of citizens within a community or region.

SOHO: An acronym for small office/home office, referring to the small enterprises that often emerge in family residential environments based on the availability of broadband Internet connectivity.

Stakeholder: A community stakeholder is defined as an individual, group or organisation that has a stake in the success and failure of community programmes and services.

Stewardship: A term frequently used in the context of communities in which personal responsibility and commitment of time and resources go beyond the contractual requirements of a job.

Strategy: A plan of action designed to achieve a particular goal.

Strategic Planning: A process to determine appropriate strategy. It includes an analysis of the internal and external environment of the firm, organisation, community or region as well as a determination of the alternatives and the actions needed to properly implement a plan.

Sustainability: A process or state that can be maintained at a certain level indefinitely. In the context of community sustainability, it is the process of learning, innovation and renewal embedded in the local culture that successfully accommodates a changing environment.

Synergy: When two or more actions create an effect greater than what is possible by individual actors or than predicted by knowing only the separate effects of the individual agents.

Tacit Knowledge: The difficult-to-access kinds of knowledge that people carry in their minds and hearts. Although difficult to access, tacit knowledge is needed to advance community development when a collaborative environment is created.

Transformational Leader: One of the roles of leadership is to raise others to higher levels of motivation, performance and morality. Transformational leaders in communities tend to be those capable of motivating staff, volunteers and investors to reach beyond expectations and sometimes go in entirely new directions.

Universal Technical Standards: In reference to telecom networks and devices, the goal of engineers is to create information processing and distribution formats that will facilitate adoption and diffusion among all users.

User-Centric: In reference to community networks, the emphasis on the convenience, specific needs and desires of the end users rather than of providers.

Virtual Community: A community of people who share common interests, pursue common goals, and work and learn collaboratively in an electronically facilitated environment.

Virtual Private Network: Using the public-switched Internet to exchange secure data between government, corporate, community and other local area networks, while giving direct and priority access to selected others without expecting them to bear all of the leased line and dial-in costs of remote access connectivity.

Wireless Network: Home, office or community networks, such as 4G cellular, Wi-Fi and WiMax, that provide on-demand access to the Internet, often at broadband speeds.

Wi-Fi Network: A limited range but high capacity wireless technology that allows users to transmit and receive voice, video and data over distances of a few hundred feet.

WiMax Network: A high-capacity wireless communication system offering voice, video and data connectivity over distances up to 30 miles for fixed stations and up to 10 miles for mobile applications.