DIMENSIONS OF THE DIGITAL DIVIDE
(Three series article): Third part

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Introduction
This is the third article in a series that considered the term ‘digital divide’. The three-part series looked at different aspects of the digital divide. We have structured this article series so that the broad themes (different dimensions) covered the following aspects:

- physical and material barriers;
- training and educational barriers; and
- participation divide issues and barriers.

We explored and discussed each of these different dimensions in the hope that readers may have their awareness and understanding of the digital divide topics strengthened. This article continues our series on the digital divide and the ways in which the divide is not a singular form of barrier but rather a multi-levelled problem. We assert that issues that prevent people from availing themselves of the advantages of digital technology need to be understood as occurring in different ways or ‘dimensions’.

In the first part of the article series, we discussed the background to the dimensions of the digital divide. In the second part, we discussed training and educational barriers to the digital divide. In this third (and concluding) part, we discuss participation divide issues and barriers.

Participation divide issues and barriers
The development of extensive forms of training provision and skilling practices is understood to have addressed the problems identified in the second dimension (training and educational barriers) of the digital divide. Computing and information skills became an accepted part of the educational curricula for students of all ages in many countries. Moreover, the growing acceptance that people regularly need to update their skills in the workplace and the emergence of the idea of lifelong learning resulted in numerous courses for adults outside of traditional educational spaces. Libraries and similar venues became recognised as places to equip people with the necessary skills to use digital media.

Alongside these changes in how education was understood, during the mid-2000’s there was also a range of technological developments (such as the development and proliferation of mobile devices and the emergence of web 2.0 and social media platforms). There were also other developments and systems which afforded users a greater opportunity to produce and disseminate their own content.

The ability to perform such actions was investigated by academic researchers with one branch of research considering the demographic characteristics of those who were producing and sharing
material. This area was expressly concerned with the issue of whether (if access and training were equal) an individual’s propensity to engage in the productive aspects of social media is adversely affected by ‘real world’ material, cultural and non-technical educational advantages – are extant inequalities reduced or exacerbated by an individual’s ability to participate? This approach was specifically concerned with whether social inequality can be addressed and reduced through digital media, whether social media simply reflects extant social inequalities or whether media further worsens existing problems.

Termed the ‘participation divide’ (Hargittai & Walejko, 2008), ‘participation gap’ (Jenkins, 2009), ‘production gap’ (Schradie, 2011) or ‘usage divide’ (van Dijk, 2012) this refers to how a propensity to engage in digital media production and social media engagement is commensurate with particular indicators of social inequality. Women, members of certain ethnic minorities and those from lower socio-economic groups tend not to engage in participatory culture as to the same degree as white men and boys from higher socio-economic groups (Hargittai & Jennrich, 2016). The situation is further exacerbated as such groups are underrepresented in those producing media. Media texts often represent or carry the values of those producing it. If certain groups are underrepresented by those producing the media, their views and interests are then not often portrayed.

However, establishing a direct link between markers of social inequality and a propensity to engage with social media and participatory culture is difficult. Micheli (2015) finds no correlation between the parental employment status of users and their proclivity to engage with social media. However, a link is noted between particular activities – such as information seeking - which contributes to the building of social capital and the parental social class. Moreover, engaging in social media is a varied activity ranging from a largely consumptive activity through a highly productive one in which users create content – social media can be and is put to many different uses in people’s lives (Lutz & Hoffmann, 2014). Furthermore, Blank (2013) and Blank & Reisdorf (2012) note that content production is not a single activity but incorporates many different practices from posts on social networks, creating written texts, static and video texts, acts of citizen journalism and editing, and repurposing other’s content.

The relationship of social inequality and the propensity to participate is complex. Once issues of access and training are addressed, a user’s direct ability to use social media and the amount of use of social media usage does not seem affected by the status or forms of social disadvantage their users endure. Indeed, in some instances those from disadvantaged backgrounds have a greater degree of participation than those from a non-disadvantaged social milieu.

Blank (2013) and Hoffman, Lutz & Meckel (2015) both noted that a larger proportion of time is spent on social media by those from low socio-economic backgrounds than those from more wealthier groups. However, what forms of social media are engaged in do seem differentiated by levels of educational attainment and parental social class (in the case of younger users). Brake (2014), in drawing upon a data set from Oxford University and using a broad range of literature, notes how activities of a more creative nature such as blogging, creating content on Wikipedia or forms of citizen journalism are activities engaged in more by those of higher economic status than those of a lower one. Similarly Hargittai & Jennrich (2016) and Hargittai & Walejko (2016) note how socio-economic status is linked to the production of creative content. Correa (2016) notes no difference in the amount of social media use between members with different educational levels when the use is for social purposes but does identify a difference between users when the task is searching for information. Thus it appears there are particular productive activities that are performed more by people of a higher socio-economic group than those from lower socio-economic groups.

While certain proponents of digital and participatory culture contend that use of any social media builds communication skills and confidence (Jenkins, 2006), it appears there are distinct activities that seem to be performed by particular groups. Some of these activities, such as searching for information, using social media for instrumentally career-focused networking and building
personal brands, are correlated with users of higher economic standing and other forms of privilege. However, it is difficult to determine the direction of travel – do socially advantaged groups use social media because they are advantaged or are they advantaged because they use social media in this way? A number of studies (see, for example, Radovanović, Hogan & Lalić, 2015) indicate that the social status impacts upon the way in which social media is used. The determination of which social media practices a user engages with appeal, is to a degree, determined by the level of social advantage a person has. Social media usage is a consequence of prior existing social factors rather than a mitigating factor to them.

The growth of social media also posed questions about how socially disadvantaged groups used different forms of social media and engaged in different practices. This aspect of the digital divide is significantly problematic as research seems to indicate that the expansion of a popularity of social media has resulted in it actually becoming a new space in which extant disadvantage can be enacted. Accordingly, the provision of access to and skilled use of digital media technology and social media may not be a means to alleviate social disadvantage but a new channel by which such disadvantage is continued.

The provision of services, delivery of training and even developing the adoption of specific practices may have side-effects to the intended alleviation of disadvantage and instead social media becomes a further arena through which social inequality is enacted. The provision of such technology should not be seen as a means to alleviate inequality but may indeed be a new means by which such inequality is enacted, facilitated and accelerated (Leaning, 2009).

Some concluding remarks
In this third part of our article series, we explored and discussed participation divide issues and barriers affecting the digital divide. When we reflect on the journey taken with our readers during this three-part series, we trust that our audience concurs that the digital divide may be understood not as one of multiple barriers to overcome but rather as one of a social problem of which there are multiple dimensions.

Further reading
Correa, T. (2016). Digital skills and social media use: how Internet skills are related to different types of Facebook use among ‘digital natives’. Information, Communication & Society, 19(8), 1095-1107.
Effectiveness of Change Management
By Preggie Munsamy

Introduction
Organizations are complex social systems interacting with the environment. The target of change is the organization as a system, not its individual members, even though individuals are the instruments of change. Shafritz and Ott describe the system perspective as follows: “The systems school views an organization as a complex set of dynamically intertwined and interconnected elements, including its inputs, processes, outputs, feedback loops and the environment in which it operates. A change in any element of the systems inevitably causes changes in its other elements.” (French & Bell, 1999, p4).

Organizations are examples of open systems, that is, systems interacting with their environments. Many problems of organizations today stem from rapid changes in environmental demands, threats, and opportunities. As the environment changes, the organization must adapt. (French & Bell, 1999, p5).

Before the 1970’s leaders as a whole paid relatively little attention to their external environment, including their customers, competitors, or the marketplace in general. If they had market share, that was all that mattered. Then, during the 1970’s technology, innovation, and deregulation (environmental forces) began to shake up many industries, including automobile, steel, manufacturing, communications, banking, and retail. These environmental forces began to alter the marketplace requirements for success in these industries. In the late 1970’s, the scope of change increased, further causing leaders’ focus to turn to the organization and how to improve it. Productivity improvement, restructuring, downsizing, work redesign, quality and process improvement swept the country. This focus on organizational improvement intensified in the mid-1980’s with the quality movement, then again in the early 1990’s with the reengineering craze and it continues today with the information technology movement, enterprise resource planning efforts and the search for how to master global connectivity via the World Wide Web. (Anderson & Anderson, 2001, p. 24).

In the modern era of global competition, organizations have to improve the quality of services and improve products in order to sustain profitability and achieve market share.
Organizations have to be innovative in developing new products and services. In so doing, they have to change to internal dynamics and external environments. Van Tonder, concludes the following to encompass organizational change:

- Is embedded in a specific context or contexts such as the organization itself, with its structural but also social and collective arrangements, the industry within which the organization operates, and the broader macro-economic, social-political, legislative, and indeed international contexts
- Is enacted through relationships (between employees, between constituencies within organizations, between organizations, and between other key players or stakeholders in a broader context)
- Inevitably will encounter resistance
- Requires, not only an appropriate and accurate knowledge and understanding base (cognitive intervention), but also adequate opportunity to release suppressed emotional tension or energy (affective intervention) that builds up within the organizational system because of developmental change. (Van Tonder, 2004, p117)

Principles for Organizational Change
Van Tonder proceeds to suggest important principles for effective organizational change:

- The first in this regard is the concept of resistance to change, which is embedded in a relationship that has become dysfunctional in one way or another (e.g. when the work-force resist an initiative to move forward because they perceive it to be an unfair practice).
- In order to progress beyond the constraining hurdles, more specifically the unresolved conflicts within the organization, some form of third-party intervention may be indicated (e.g. external consultants, change agents or catalysts, organizational psychologists, etc.).
- During the organization’s involvement with a consultant or third party (typically through diagnostic surveys, interviews, group discussions) a relationship is formed which, to be effective, has to allow the organization’s workforce to adequately express, project and often enact thoughts (at the cognitive level) and feelings (at the affective level). Not only does this principle from psychoanalysis find confirmation in existing consultation and mediation procedures, but it also highlights the desired policy of interaction between third parties and organizational constituencies and stakeholders. In this regard the understanding that the organization has of the change process and the emotional experience in respect of the change, need to be placed on the agenda for review and discussion.
- A further principle relates to the careful and thorough analysis of the transference reaction and specifically the thoughts and feelings expressed, projected and enacted. This has to occur in such a manner that a new understanding, at least in respect of organizational change and the change process, is established (in which event the resistance will be reduced and the organization can move forward). (Van Tonder, 2004, p 116).

Management
The primary task of management is to get people to work together in a systematic way. Like an orchestra conductor, managers direct the talents and actions of various players to produce a desired result. It’s a complicated job and it becomes much more so when managers are trying to get people to change, rather than continue with the status quo. (Christensen, Marx & Stevenson, 2006)
The principal object of management should be to secure the maximum prosperity for the employer, coupled with the maximum prosperity for each employee. The words "maximum prosperity" are used, in their broad sense, to mean not only large dividends for the company or owner, but the development of every branch of the business to its highest state of excellence, so that the prosperity may be permanent. In the same way maximum prosperity for each employee means not only higher wages that are usually received by men of his class, but, of more importance still, it also means the development of each man to his state of maximum efficiency, so that he may be able to do, generally speaking, the highest grade of work for which his natural abilities fit him and it further means giving him, when possible, this class of work to do. (Taylor, 1911).

Management is a set of processes that can keep a complicated system of people and technology running smoothly. The most important aspects of management include planning, budgeting, organizing, staffing, controlling and problem solving. Leadership is a set of processes that creates organizations in the first place or adapts them to significantly changing circumstances. Leadership defines what the future should look like, aligns people with that vision and inspires them to make it happen despite the obstacles. (Kotter, 1996).

Effectiveness
Organizational effectiveness theory began a dramatic evolution nearly 50 years ago with the merging of general systems theory concepts and then-prevailing management theory (Ackoff, 1970; Churchman, 1971; Emery & Trist, 1965; Herbst, 1974). This combination signalled the start of a paradigm shift, a new way of viewing the world and relating to each other, comparable to a shift from "machine age to organic thinking" (McCann, 1991). "Machine age" thinking was literally a product of the Industrial Revolution from the late 1800’s and a world view that held the organization as an independent and nearly free agent, able to act on its larger environment and insulated from regulation and control (Chandler, 1962; Morgan, 1986).

Effectiveness is a function of knowing where the organization is going, how it will get there and what part we all play in that movement. As the addiction to ongoing change increase, the potential for organization effectiveness will decrease. (Rieley & Clarkson, 2001)

Change Management
The “change management” bubble began to burst in the mid 1980’s and by the 1990’s it became glaringly obvious that truly managing change was becoming less and less possible. The technological revolution, primarily fuelled by information and communication technology, had increased the speed and scope of change so much that the process of change became significantly more complex. Furthermore, the tangible domain of changing organizational strategy, structure, systems, processes, skills, and technology suddenly required a significant focus on the less tangible domain of culture and people. By the early 1990’s, the scope and required focus of organizational change had fully evolved and entered the unpredictable and uncertain world of human beings. (Anderson & Anderson, 2001, p. 25).

Change management requires metamorphosis in the concept of leadership, management, employee involvement, organization of work and resource use. For most people involved in the change process, change management is not pain free. Most people prefer security and stability, many are happily accustomed to it or would like to
be. Pain comes when they are forced to confront the uncertainties of today’s business environment with its constant change and uncharted waters. Change leaders must struggle with pain even as they struggle with how to align their organization with today’s environment, how to ensure the stability needed to give employees a feeling of security, and how, at the same time, to promote change that will be aligned with tomorrow’s environment. (Morgan & Avergun, 1997).

Successful change management has become an increasingly important core competency for financial institutions. Despite more than two decades of change, there exists strong evidence of difficulties in achieving change management including an inability to gain sustainable strategic advantage through IT/IS (Fletcher and Wright, 1996; Bloomfield et al., 1997), failures of TQM implementation (Longbottom and Zairi, 1996; McCabe and Wilkinson, 1998; McCabe, 2000), uncertainties about business process re-engineering (McCabe and Knights, 1999), a ninefold increase in complaints to the Banking Ombudsman and a trebling of complaints to the Building Societies Ombudsman (McCabe et al., 1998). Changes that have already affected peoples' experience of employment are an important complicating factor. Performance, expectations, and attitudes towards current and future change will be influenced by levels of ‘self-efficacy’, which influence beliefs about competency to perform (Wood and Bandura, 1989), and by scepticism and cynicism resulting from experiences of earlier, unsuccessful change initiatives or ineffective leadership practices and lack of participation in decisions (Anderson, 1996; Wanous et al. 2000).

To make the change process work in an organization the following must happen:
• People must clearly understand what business the organization is in and who the customer is. A clear definition of purpose is required.
• New performance requirements must be clearly stated and understood by the employees who are expected to change their behaviours and the way they conduct business.
• As change takes place “new rules of the game” must be developed. Roles and responsibilities must be up-dated to reflect new performance demands and the performance management system must be strengthened to meet the needs for continuous personal and organizational performance. The behaviours, values and expectations of the new workplace must be clearly defined.
• The organization must have a constant supply of timely and useful information that enables customer-focused and cost-effective decision-making to take place at all levels on a daily basis.
• Core processes must be aligned with organizational goals and continually improved.
• Leaders and employees must have the requisite skills in leadership, creativity, problem solving, continuous improvement, team effectiveness and customer service.
• The organization’s culture must be reshaped in ways that motivate all employees to care for the business as if it were their own. (Morgan & Avergun, 1997).

It can be seen that a flow of actions are to be conducted in the process of change management.

Therefore, a particular sequence is not adopted or followed for change management. Change management is not a matter of simply following steps. Since no two changes are exactly alike, following a recipe for change management is not enough. The right approach will be specific to the situation. If you do not understand the why, changes can
fail even when standard processes are followed. Research with hundreds of project teams has shown that a one-size-fits-all approach is not sufficient. To be effective at leading change, you will need to customize and scale your change management efforts based on the unique characteristics of the change and the attributes of the impacted organization. (Hiatt & Creasey, 2003).

In managing the change process within organizations, change agents are best suited for this task. According to London, organizational change agents are leaders and managers who see a need for change, conceptualize and design the change, implement it, and/or adopt the change. (London, 1988).

London goes further to describe the types of change agents:
• Key change agents. Those who convert an issue into a felt need. This is usually the role of a charismatic leader. An example is Lee Iacocca, whose methods, style, and values dominated the change process at Chrysler. Iacocca eventually became a symbol of U.S. pride and rebirth.
• Demonstrators. These change agents demonstrate support for the change conceptualized by the key change agent. They are first in the line of confrontation to face those who prefer the status quo. The demonstrator’s role is to provide visible, vocal support for the change.
• Patrons. These individuals support the change process, financially or psychologically. For instance, a patron of change may provide the key change agent with a budget, a prestigious title, a promotion, or other symbols of support.
• Defenders. This role entails defending the change at the grass roots, the lower levels of the organization. The manager-defender is caught up by the charisma of the key change agent, by becoming an adherent and by spreading the word among the troops. Defenders may see how they can benefit from the change, or they may be pushed into defending the change resisters. (London, 1988, p58).

Communication
In 1993, Wyatt Company (now Watson Wyatt Worldwide) investigated 531 U.S. organizations undergoing major restructuring. Wyatt asked the CEO’s, “if you could go back and change one thing, what would it be?” The most frequent answer: “The way I communicated with my employees.” The next time you communicate major change to your frontline employees, do it differently. Communicate only facts, stop communicating values. Communicate, face-to-face; do not rely on videos, publications, or large meetings. Target frontline superiors; do not let executives introduce the change to frontline employees.

Before going any further, let’s clarify two points. First, our advice concerns the communication of the sort of change concerns that most companies face every five to ten years. We are talking about change that is necessary because the company’s survival may be at stake, not about everyday operational changes. Second, our advice is about reaching and changing frontline employees in large companies. Frontline employees such as bank tellers, truck drivers, processors of insurance forms, airline counter staff, welders, and telephone installers are the people making the product or delivering the service. If you want these people to change the way they do their jobs, then you must change the way you communicate with them. (Larkin and Larkin, 1996).

The first words employees hear about any change usually come from a corporate source: a senior manager, company newspaper, or video. Considering the front line’s
overwhelming mistrust of and hostility toward the corporate centre, that practice is strange. No matter what the change, be it a merger, restructuring, downsizing, reengineering, the introduction of new technology, or a customer service campaign, the first words frontline employees hear about a change should come from the person to whom they are closest: their supervisor. (Larkin and Larkin, 1996).