The complete version of this article appeared in the 
*OD Practitioner*, 49(1), 7–19.
and other technological innovation have fundamentally shifted the social fabric at every level—the way people, teams, organizations, and society connect and share knowledge. The rules of the game and the way work is done have been significantly reshaped. As Raymond Kurzweil (called by the Wall Street Journal the “restless genius”) said, “the technological change is happening so rapid and profound—it represents a rupture in the fabric of human history” (2001).

But what is yet to come is quite unimaginable to many of us. The recent World Economic Forum published a report (September 2015), Deep Shift: Technology Tipping Points and Societal Impact. The panel interviewed over 800 executives and experts from the ICT sector, outlined the details of this condition, and described the six mega ICT trends and the time line of 21 tipping points of innovation by 2025.

John Newton, founder and chief technology officer of the document management firm Alfresco highlighted the “tipping points” by saying “according to Moore’s law, in 10 years’ time computing will be about 64 times more powerful, storage capacity will be about double that and network capacity probably about 50 times greater than today” (2014). That means that any problem will not be constrained by computing or space, but by imagination.

4. Consumer/customer rights and requirement of transparency. With a greater awareness of their rights, and better access to information through technology, customers/consumers demand more transparency and accountability from those who provide services and sell goods. This coupled with rising expectations of higher service levels and increasing product quality within the context of faster delivery time and greater individualization of “hi-touch” services, organizations find that the only sustainable way to maintain these relationships is not to be just “nice to have” but to become a “must have” organization.

5. Population movement and rapid urbanization. The massive scale of population movement has now become endemic. In less than 5% of countries, statehood equals peoplehood, which means very few political states have the same ethnic and racial group inside their state line. This population movement has been compounded by the ongoing political turmoil around the globe. This phenomenon of both forced and voluntary migration of populations towards more politically stable countries has serious social, economic, and political implications for both the exiting and receiving countries. The World Economic Forum notes that by the year 2050 there will be a near doubling of the urban population worldwide to 6.2 billion, i.e. 70% of the projected world population of 8.9 billion.

This rate of urbanization has vast implications for every sector within the receiving countries. The provision of housing, education, medical assistance, social services, employment, welfare, etc to a diverse population has piled an increased burden on mainly public sector institutions, especially in the face of continuous reduction of financial resources. For most organizations, this population movement has also brought with it a host of complex issues in working with diversity and inclusion.

6. Demographic shift. The population movement together with the changing demographic profile has created a compounded level of complexity for society worldwide. Countries with the least developed economies face a challenge with a growing and restless young population, especially when their pursuit of better lives are frustrated by poor access to education and limited opportunities in skill development and employment. Hence the surge to seek greater opportunities to improve their life chances leads to increasing migration. Conversely, the countries with the most developed economies are suffering with a relatively lower birth rate and have major gaps in human resources at every level from medical professions to the manual and service industries. On top of that, an extended life span means there are growing demands for services and health care for the aged population, as the demographic profile has placed a major burden on the financial and healthcare systems.

How Do The Trends Impact The Future of Work?

Many academics, major consultancy firms, industry leaders and entrepreneurs have been conscious of the impact these mega trends have on the way work is done, and many of them have begun to shift and adapt the way their work is done. The following reports summarize some of these “future ways of working.”

1. PWC published a report, The Future of Work—A Journey to 2022, in which over 10,000 people from China, India, Germany, the UK, and the US gave their views on the future of work and what it means for them. Key data include:

   • 66% see the future of work as a world full of possibility and believe they will be successful;
   • 53% think technological breakthroughs will transform the way people work over the next 5-10 years; and
   • 2 out of 5 people around the world believe that traditional employment won’t be around in the future. Instead, people will have their own “brands” and sell their skills to those who need them.

2. Work Foundation (A well-known UK think tank) published a report in January 2016 in which they predicted that by 2020, 70% of the workforce will adopt mobile working.

3. KPMG published a report, Adapting to a New World of Work, in October 2014 focusing on what key changes are predicted by graduates (Gen X and Y). They found:

   • 75% believe the nine-to-five office culture will end;
   • 76% expect greater flexibility to prescribe their own working hours; and
   • 68% think that virtual networks would result in greater
employee engagement and higher productivity.

4. Financial Times published an article, “The Human Cloud: A New World of Work” (October 8, 2015). The term describes a way that employers begin to chop white collar jobs into hundreds of discrete projects or tasks, then scatter them into a virtual “cloud” of willing workers who could be from any part of the world, bidding and winning the job based on a price as long as they have an internet connection. The complexity and type of the tasks varies—they can range from typing data into a spreadsheet, desk research on a specific topic, or writing a piece of code.

The crucial features of a human cloud are:

- These are not jobs but tasks or projects;
- Performed anywhere in the world by people, on demand, who are not employees but independent workers;
- Much of it is white-collar piece work;
- There are online platforms that act as intermediaries, e.g., Upwork, SuperTasker, Sticky Crowd, Freelancer, PeoplePerHour, and Amazon’s Mechanical Turk. Amazon’s Mechanical Turk has three parties—those who pose a request—called “requesters,” those who do the work “turkers” in Amazon’s terms, and the intermediaries who take care of the financial transaction plus the rating tracking of all the turkers’ performance.

According to the research, in 2014 employers spent between $2.8 billion—$3.7 billion globally on payments to workers. Online platforms like Upwork processed about $1 billion worth of payments in 2014 from which they took a 10% cut. Its chief executive predicts they will reach $10 billion billing in another six years. Other organizations have introduced the human cloud internally to test it—attempting to erase the rigidity of bounded roles.

5. World Economic Forum’s report, Deep Shift: Technology Tipping Points and Societal Impact (September 2015), listed some of the top 21 tipping points that are expected to occur by 2025, which will have wide impact on the way we work:

- The first government to replace its census with big data sources;
- Tax collected for the first time by a government via a blockchain;
- The first robotic pharmacist in the US;
- 1 trillion sensors connected to the internet;
- 90% of people having unlimited and free (advertising-supported) storage;
- 10% of people wearing clothes connected to the internet;
- 10% reading glasses connected to the internet;
- The first 3D-printed car in production;
- 30% of corporate audits performed by AI;
- 90% of the population using smartphones; and
- 90% of the population with regular access to the internet, etc.

6. The other key trends are:

- Big data—since there will be data about everything and everyone because of the scale of digitization, AI and robotics are having an impact on decision making and jobs.
- Blockchain—Also the internet is driving a shift towards networks and platform-based social and economic models, which means assets can be shared, creating not just new efficiencies but also with an emerging technology like Blockchain they replace the need for third party institutions to provide trust for financial, contract activities.

The future of work patterns span a wide spectrum depending on what type of industry the organization belongs to, the size, the scale of globalization, the nature of the work, the type of customer interface they will need to maintain, etc.

At the extreme, more work is carried out by robots, services are provided by driverless cars, and the world of smart drugs enhances intelligence, memory, and work (even though they are still very much on the experimental side).

On the other end of the spectrum are the less radical but gradual systemic adjustments organizations have to make. Some of the areas where organizations have taken steps are:

- Attracting and retaining talent;
- Running cost cutting and growth strategies in parallel;
- Increasing the flexibility of human resources deployment;
- Building conditions that help boost a sense of wellbeing amongst those who work in the organization;
- Fertilising the ground for more cross-boundary ways of working with sufficient diversity and collective intelligence to create solutions for big audacious problems;
- Having smaller offices to contain staff (every desk in London costs £ 8,000-
  £12,000 per year);
- Encouraging an increase scale of mobile (virtual) working;
- Creating a “bleisure” culture—a portmanteau of “blur” and “leisure”—the way that technology and culture have made our work and free time less distinct from one another;
- Providing smartphones and cloud-based collaboration tools, which offer constant connectivity to erase the neatly compartmentalized 9–5 work day;
- Engaging in office design to promote personal reflection, collaborative labs, e.g., with a big white wall, rooms with ping-pong tables, and bean bags to relax and reflect;
- Continuing to experiment with the bubble organization—role defined by deployment and accountabilities; and
- Building an integrative service delivery model with commissioning organizations, suppliers, and other third parties working together.

As it stands, organizations like Netflix, Airbnb, Uber, and of course Google have continued to experiment further into
alternative structures and processes to encourage innovative ways in delivering work. Their aim is to ensure their people will take advantage of collaboration, build a fluid understanding of work, act intentionally about the lack of rigid hierarchy, experiment quicker decision-making structures and processes, and promote the intelligent use of data, all with a view to engaging successfully with customers on a massive scale.

The robust evaluation of why the above ways are fitter for a future-oriented organization has been well put by Edwin Smith (2014) writing for The Times. He said the multi-billion-dollar-valuation of these businesses and the short space of time in which they have been achieved are testament to how this way of working is paying off.

So, if that is how the future way of working is going to be—what sort of “organizing principles” or “structure” do organizations need to be “future ready”?

The Implications of Macro Trends on the Evolution of Organizations

Back in 2000, in his book, The Art of Focused Conversation, Brian Stanfield created a map of organizations using eight variables to differentiate four types of organizations. The four types are: Hierarchical, Institutional, Collaborative, and Learning Organization. The eight variables are: Leadership, Structure, Preoccupation, Mission Context, The Worker, Communication, Values, and Skills. Like any typology, it is not perfect as organizations seldom fit into one type along all eight variables, but conceptually this map has given us something to adapt and play with—both as a diagnostic aid and as an intervention steer. Having worked with many organizations, most organizations are still hovering between the “Hierarchical” organization and the “Collaborative” organization.

The reality is that the evolution of organizations by now has moved on significantly. Organizations can and should take steps towards picking up characteristics that are deemed to help them to be better “fit” to be even more future ready.

Just for illustration, let us take a quick look of the characteristics of both Holacracy and Wirearchy organizations. Both are more “organizing principles” than rigid structures. In Holacracy, people work within circles that represent different aspects of an organization’s work. Staff do not have job description, but roles. An individual can have more than one role within different circles, contributing in any areas that they can. The person who is empowered a given role has autonomy over that domain. So the circle can undergo evolutionary changes but there will not be major organization restructuring. The early adopters are Yammer, Blogger, Twitter, Zappos, Medium, etc. However, this way of working, especially when introduced from top down vs enabling the staff to choose to opt into this way of work put great strain on people as the change required is too fast and too deep. But nonetheless, the organizing principles offer real alternatives to a long tradition of hierarchical way of organizing.

Wirearchy comes from hierarchies plus communities of practice and networks. It is an organizing principle around a networked world, with sub units acting autonomously to solve problems by having high connectivity and acting in a webby nonlinear way. The culture and behavior patterns of this type of organization reflect exactly those characteristics: collaborative learning, high connectivity, lots of cross unit work, leveraging collective intelligence, building entrepreneurial behaviour, clear boundaries but high experimentation and bounded autonomy, setting up conditions and processes to breed agility and high adaptability with rapid prototyping and feedback, etc., but without sacrificing the back room structure and support with the target quality standard. Above all else, what makes this type of organization work is a high relational orientation among the system players. Elements of these characteristics have been pioneered and adapted by many of the ICT (Information and Communication Technology) organizations over for a decade, and different aspects of them have proven to work.

An example case in point is a children’s social service team in one of the UK Local Authorities who were facing dramatic funding cuts that seriously compromised their ability to execute their care for vulnerable children. One social worker thought.

Many of us are slowly but genuinely undertaking the necessary inner work to let go of the need for control, and learning how to work with emergence. We are also letting go of our need to be an expert, to be the one capable to solve their wicked problems. When we are brave, we openly admit that we do not KNOW the HOW TO in those novel situations the clients are facing.

“there has to be a way to find the savings so we can keep the service standard integral.” Through conversations with her team colleagues, they identified one way to retain their service standard was to cut the court hearing time on child protection cases, which was 58 weeks.

Next, they went beyond the team to the “social work professional communities” in their area, floating and testing the ideas with other children’s service teams in three other local councils. They received enthusiastic responses. With the beginning of the cross-location communities of practice, they worked out a proposal to cut the delay in court hearing cases in order to achieve savings. But they soon realized there were gaps of knowledge that required them to network with other professional communities to seek help, e.g., legal and finance. So through their collective networks, they created a task team to increase the scale of innovative ideas via diversity thinking. Eventually they devised a plan, wrote a proposal, worked through the necessary governance processes, and finally submitted a proposal to a regional body. As a result, they managed to cut the court hearing
The challenge facing us is that in order for organizations to survive, they need to explore various new possibilities for organization configuration, processes in getting work done, and the re-designing of an organization’s variables. In parallel, new types of OD thinking and intervention needs to be explored. Organizations need OD to travel alongside them as so much of the success will require the human race to unlearn something primal and basic in our education and upbringing, such as—being organized, well structured, having control over our own turf, working on individual or solo perspectives and achievements, aiming for specific targeted achievements, etc. The characteristics of future ready organization—so far—shows us we will need to do the reverse, or at least we will need to add different ingredients to what we know well (e.g., in the case of Holacracy). The question is—has the OD professional community started its own transformation?

**How Do We Become a “Future Ready” Professional Community?**

This section will not be a list of what to do and what not to do, especially from a deficit perspective. I believe that many of the global community of practitioners have been moving with the times. As a whole, many colleagues have been adapting practices to the shift already, even though there is always much more we will need to work on, especially in our effort to convince other colleagues to come alongside to help organizations to stay even sharper and be more future oriented. While we shall remain self-critical, but for now, we need to affirm the steps some of us have been making to be “future ready.”

The followings are the headlines of what work we have begun:

» We have begun our work in the dynamics of tensions and polarity management—often holding the polarity of keeping what is core to OD values and practices while acquiring something new and different to build on what we have while discarding the obsolete practices—noting that we cannot take clients to places we ourselves have refused to go.

» We have been adapting our change approaches and experimenting the way we deliver “help.” Our colleagues in the complexity and chaos area have taught us many things, especially in how we can work more effectively with complexity and emergence. Though we can go further and be more masterful in this area.

» We have learnt about the importance of using a lot of the “C” methodology to surface clients’ own wisdom and community ownership—e.g., supporting them to increase Cross functional interaction, become a much more Connected workforce, design processes to enable them to engage in regular Co-construction and Co-creation, help the system to surface Collective intelligence and make Cross boundary work a norm. We are also supporting L & D colleagues to reshape the learning process to make Collaborative learning a requirement rather than an exception, making growth strategy to become an occasion for Co-venting, and teaching clients how to use Co-Creativity as a tool for innovation.

» Many of us are slowly but genuinely undertaking the necessary inner work to let go of the need for control, and learning how to work with emergence. We are also letting go of our need to be an expert, to be the one capable to solve their wicked problems. When we are brave, we openly admit that we do not KNOW the HOW TO in those novel situations the clients are facing. We intentionally help clients to surface their wisdom as equal partner, sharing intelligence and perspectives to carry out joint design on what will be the best for the organization. Getting to be future ready, many of us self-initiate and persevere in the deconstruction process of our past ways of mastery, and learn—in some areas—to be novices again.

» We also have revisited what some of the core OD values really mean in practice, not just as rhetoric but as values in action; e.g., engaging in lifelong learning, working with diversity to create traction for fresh ideas, helping the system to reveal itself to itself (action research)—doing its own discovery. Not to mention, from the beginning, to raise the client’s ability to self-organize, encourage people to be “expert” in their own areas of concern, and passing on skills and know-how to the clients so that they will have sufficient ability to sustain their own change.

» We have kept watch of the methodological implications from the changing context and many of us figured out, unless we stretch our intervention repertoire, we will render ourselves unfit to support clients. So many of us have been eager to learn from other disciplines and embrace them in our OD practice—from IT, from economic behavior, from network mapping, teaching ourselves rapid learning and prototyping cycle, etc. We understand the importance of the action-reflect-revise-action and plan cycle, with the emphasis on action, small experimentation, ongoing developmental evaluation. We know how important it is to pass our skills to leaders we work with.

» We work intentionally to build strategic alliance partnership work with other professional communities—HR, Talent Management, Leadership Development, strategists, customer insight teams, economists, service delivery teams, etc., in order for us to stay on the sharp edge of innovation in supporting organizations not just to move, but to practice the way to be “future ready.”

**The Focus of Our Work in the Future**

The following are some of the crucial types of work we will both need to engage in more as well as continuously gain mastery from.
1. Teaching system thinking to clients
   a. INPUT. Helping organizations to become externally savvy regardless of ranks, divisions, locations so to enable the input data be on the tip of everyone’s tongue to ask, “What? So what? Now What?” We need to gain mastery in the strategic scenario planning processes.
   b. THROUGH PUT. Helping the organization to understand and know how to ensure internal changes happen at the same speed as external changes. How to match the internal alignment to support the strategic ambitions of the organization within the context it functions.
   c. OUTPUT. Supporting organizations to continuously work with their staff and various stakeholders—especially their customers and consumers—about how to make their output—be it products or services or both, relevant to those who consume them in order to stay relevant.

2. Focusing on patterns and behavioral work
   Both Schein and Burke have expounded that “without touching culture, nothing has been touched.” This area of work is mainly about pattern identification and pattern shifting. Much of the ability to initiate, run, and be successful in operating a future ready organization is dependent on the ability of the system leaders and members to adopt “fitter” behavior patterns.

   We need to support behavior patterns that foster the future ready organization:
   - Operate on the basis of collective intelligence, sharing information, generating new ideas with others;
   - Co-operative competition to drive innovation and creativity;
   - Blurring of organizational boundaries and proactively moving towards virtual collaborative scenarios;
   - Self-manage productivity and self-organization to form groups to bid for projects of their interest;
   - Strong in central support but not central controls—with the center playing supportive and facilitative roles;
   - Willing to take calculated risks and engage in rapid prototyping cycles;
   - Build flexible structures to enhance agility;
   - Leaders become network weavers and innovation stimulators;
   - Include customers and citizens as part of the policy formulation task force;
   - Participation in making major decisions becomes an organization default position; and
   - Cross skill sharing and utilization to achieve quick turnarounds, innovation, etc.

3. Focusing on the middle
   In his latest edition of Productive Workplace, Weisbord asked OD practitioners to focus on working with the middle. Barry Oshry’s (2007) work on system dynamics has always pointed to the key roles of the middle. When one looks at the type of organizations that have survived and thrive, we know it is the supervisors, the line leaders, the functional leaders, the strong operational core (the middle) who hold the roles to reshape the new way of working.

   Our job is to re-think how to be innovative to turn middle managers into OD practitioners who know how to diagnose and intervene in different types of situations; who know sufficient group dynamics that they can experiment with other forms of group working together; and who have basic facilitation skills to build the type of work team that will know how to network, resolve conflict, and know how to collaborate and build constructive relationships.

4. Meshing with executive leadership education
   OD professionals need to become key partners with those who hold the budget and the content approval of executive and different layers of leadership development. Future-oriented leaders need to know a different range of topics that, so far, have not been successful in making it into the ongoing type of leadership development program:
   - What is an organization and how to build and maintain “fit,” “effective,” and “healthy” organizations?
   - What are group dynamics, and how to use group dynamics to build leading edge thinking?
   - How to work with complex and chaotic change, especially what to do with emergence.
   - How to be a system thinker.
   - How to do network mapping and become a network weaver.
   - How to become skilful dialogical containers, using their dialogical skills to stimulate meaningful dialogue across boundaries.
   - How to hold the ongoing tension of polarities facing them as leaders, e.g., front room and back room, clockware and swarmware, sufficient boundary differentiation and loose coupling, sufficient structure, and emergence, etc. Leaders need
to know how to think and work in a polarity management manner—especially when things are ambiguous and a clear logic of decisions is not evident.

5. Keeping our core work core

Finally, we should continue to do what we have been doing for a long time.
- Work with the whole system.
- Work on the duality of building organization effectiveness and health.
- Build effective working groups and pass on such skills to members of any work group.
- Be more customer/consumer/patient/citizen centric. This external perspective will stand all organizations in the right position to survive.
- Understand how to achieve an optimal balance between external and internal focus. When an organization can achieve the right balance between managing internal organizational efficiency and effectiveness and externally delivering “good growth,” they will be in a strong place.
- Understand Weisbord’s concept about building community in the workplace, as he talked about when there is mutual support to harness energy, productivity will go beyond imagination through community. Regardless of which new way of “organizing,” relationships remain as the top work for all.
- Engage and improve in our “pattern identification” and “pattern shifting” work, and continue to expand our applied behavioral science through the emergence nature of work and the work place.

Summary

Being Future Ready is an exciting and complex topic for both organizations and practitioners. We will need to do more work sharing our practice, research data, and experiences. We are facing new scenarios for which there has been little guidance. This topic deserves the attention of an edited volume in which a community of practitioners begins to focus on answering this question with concrete experiences and case studies to abstract from experience to principles, concepts, and theories.

We are confident that the field of OD is equipped to come alongside with leaders to work things out as long as we remain faithful learners in the field of applied behavioral science. OD, more than any field, has the knowledge, tools, and practice platform to support organizations to continue their evolutionary journey.

References


Mee-Yan Cheung-Judge, BSc, MA, PhD, is a “scholar-educator-practitioner” working globally with organizations to deliver powerful transformational change. She is a senior visiting Fellow of Roffey Park Management Institute in the UK and the Singapore Civil Service College. She founded the OD Network in Europe and has been the Dean of the NTL European OD certificate. She is the author of numerous OD articles, books, and reports. Cheung-Judge was a recipient of the ODN’s Lifetime Achievement Award in 2013, the Richard Beckhard Award for Contribution to the Field of OD by IODA in 2016, and UK HR Magazine voted her one of the top influential thinkers in the field of HR in 2008, 2013, 2014, 2015, and 2016. She can be reached at lmycj@quality-equality.com.

