Smart Working Paradigms in a Hybrid Working era

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Abstract: If we observe top companies in any industry, we notice they have one thing in common: innovation. Successful business leaders recognize when the same ideas and methods used before aren’t working anymore. Smart, innovative approaches are needed for our hybrid working environment. The ABCD business model shows that present organizations spend the majority of their time on activities related to business administration (A) and doing repetitive work (D). The rest of the time is allocated to dealing with crises (C), and only nominally to improving the ways business is done (B). Digital transformation, competition, and the need for organizations to leverage technology and innovation in the future will ‘force’ organizations to maintain A, increase B, and (strategize how to) decrease C and D. Two initiatives will be unpacked and common elements will be identified as indicators in improving B. Five ways to change the game and become a human-focused organization that promotes innovation are proposed based on our learnings:

People: 1. Encourage a growth mindset of continuous learning, creativity in how problems are solved, and flexibility how work gets done, 2. Encourage innovative thinking; create innovative groups, 3. Build skills, e.g., analytical thinking, innovation, creativity, and initiative,

Workplace: 4. Design a psychologically safe culture, where people are included, can learn, have a sense of belonging, are appreciated, and valued for who they are and what they contribute and challenge.

Technology: 5. Create an experimentation lab to TRY-TEST-ADAPT in rapid cycles to learn and fail/learn fast or advance the innovation. We are faced with multiple, messy issues that require out-of-the-box thinking and innovative solutions. Capturing lessons learned can build leading indicators that will help improve B. A simulation dashboard that quantifies the change is an innovation tool we plan to develop.

Keywords: digital transformation, ABCD model, digital competencies, innovation, human-focused

1. Introduction

Time to improve how we optimize work in a hybrid environment! According to Future of Jobs survey report (World Economic Forum, 2018) by the World Economic Forum, “Over the next 5 years, employers will be giving priority to those who are strong on analytical thinking and innovation, as well as creativity, originality and initiative.” The vast flow, velocity, and variety of information requires digital transformation that further enables data-driven decision-making. A recent Global Innovation Survey by McKinsey (McKinsey and Company, 2022) highlights that “innovation is critical to growth, particularly as the speed of business cycles continues to increase.” Organizations and leaders need to change the status quo and allow their employees to run experiments where they present innovative solutions to reduce costs, improve engagement and satisfaction (Aguirre and Baron, 2020). Challenging the status quo will trigger changes in decision-making culture, workplace design, processes, and approaches in building new skills.

“You can’t manage what you don’t measure”, attributed to both W. Edwards Deming and Peter Drucker, explains why it is important to quantify the status quo. It will help determine which trigger activities enable organizations to shift from A (do the job), C (fight fires), D (repetitive work) to B (improve). In this paper, two case studies are discussed: Case Study 1, Case Investigation for COVID-19 cases, presents the interventions completed to decrease C (deal with high volume of assignments for workforce due to COVID-19 surge of cases) and D (repetitive, manual work for workforce placement). Case Study 2, Contract Procurement Supply Management: Contract Management Staff Orientation presents the interventions completed to decrease C (reduce re-work and errors) and D (manual update of content and tracking of employee knowledge checks and completion of training materials). Both case studies are examples of approaches to improve the ways business is done (increase B) in Alberta Health Services.
In addition to the technical upgrades needed to successfully complete these two projects, there also was performance support for the staff who would follow the new processes and use the new tools. From a systemic perspective, the blended solution design also included interventions that addressed human-centric needs of all involved staff. There were seven areas of note:

1. individual skills/competencies building in hybrid environment, including technical skills and soft skills (Edmondson, 2018);
2. process differences and aspects of communication and collaboration (Cross and Baron, 2021);
3. activities that happen when in the office (Davey, 2022);
4. culture, including psychological safety (Grant, 2021; Hancock et al., 2021; Ishak, 2017; and Klau, 2021);
5. management and addressing control issues for performance (Finn et al., 2021; Pistrui and Dimov, 2018; Ashford, 2021);
6. doing meaningful, purposeful work (Edelman, 2021; Imperative, 2022);
7. health and vitality (DDI, 2021).

Each one of these will be briefly discussed as appropriate for each of the case studies.

2. Methodology

The case study approach is useful when we need to understand a problem in depth and consider the approaches that need to be deployed in relation to the design, planning, analysis, interpretation and reporting of case studies. Case studies help in understanding and explaining connections and pathways resulting in changes proposed to create a new policy/process or update a current one; introduce service development. Another benefit of the case study is that it offers additional insights into the implementation gaps that exist and why one implementation strategy can be used over another.

There are three main types of case studies: intrinsic (typically undertaken to learn about a unique phenomenon), instrumental (uses a particular case to gain a broader appreciation of an issue), collective (involves studying multiple cases simultaneously or sequentially in an attempt to generate a still broader appreciation of a particular issue). In this paper, collective case study was used for Case Investigation: Automation of Workload Distribution (Case Study 1) and instrumental case study was used for Contract Monitoring Staff Orientation (Case Study 2). See Table 1.
Table 1: Case Study components: Data Collection, Data Analysis, Solution, Reporting

<table>
<thead>
<tr>
<th>Description</th>
<th>Case Study 1: Automation of Workload Distribution</th>
<th>Case Study 2: Contract Monitoring Staff Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Collection</td>
<td><strong>Quantitative</strong>: Process workflows, data structure and sources, analysis of data quality</td>
<td><strong>Quantitative</strong>: Process steps, content to be mapped, themes, curriculum</td>
</tr>
<tr>
<td></td>
<td><strong>Qualitative</strong>: Front line users storytelling, job shadowing, working group discussions, observations, results collected from testing prototypes</td>
<td><strong>Qualitative</strong>: Storytelling of process from current to future, work group discussions, results from testing Proof of Concept</td>
</tr>
<tr>
<td>Analysis of data</td>
<td>Comparison and analysis of data embedded in different models and workflows to inform best accuracy and repeatability</td>
<td>Review of orientation concept and creating a map structured by role and topics/theme assigning the corresponding metadata and related structure for the content hub</td>
</tr>
<tr>
<td>Solution</td>
<td>Decision matrix included comparison of four platform and their abilities related to web data visualization, server with Python interpreter and easy knowledge transfer of the solution</td>
<td>Review of existing online learning options and selection of the one that responds best to the end users/content management team and leaders</td>
</tr>
<tr>
<td>Reporting</td>
<td>Describe in detail the steps involved in selecting the automation flow and Machine Learning (ML) model, transparency in the steps involved, methods chosen and how interpretation and conclusions were reached. The transparency helps Sponsors and end users with trustworthiness of the report.</td>
<td>Provide learners and leaders with ability to track progress of learning and determine where content can be augmented or knowledge checks be adjusted to ensure accuracy and compliance with the Contract monitoring requirements.</td>
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Provincial Population and Public Health leaders were looking for a solution to be able to rapidly adjust the day-to-day workflow and be able to adapt in real time the assignment of staffing (increase B). Due to pandemic, the workload increased as workforce changed and the current processes could not scale.

Based on root cause analysis, the overall solution has three components: automation, prediction, simulation. This case study presents the automation component.

A cross-functional team (IT developers, analytics, business representatives, educators, instructional designers) was assigned to explore potential options, such as rule-based algorithms and/or Artificial Intelligence (AI) optimization algorithms/patterns to automate and optimize the manual processes that are time consuming and repetitive (C, D). The intended outcome of this work was to build an automation model that was flexible enough when 11 criteria and 81 variables were changing. Testing and using feedback loops to refine the model were essential in order to build trust in the Case Investigation team to adopt the model in their day-to-day work. If the model proved to reduce the gap, implementation would follow based on the stakeholders’ approval. Options to assess efficiency, effectiveness, and benefits gained were explored once the automation model was approved and implemented. The project team conditions/parameters were:

Problem: Case Investigation activities are complex and include multiple variables: high volume of new hires (approximately 2,300 staff) that needed to be oriented and trained, weekly changes in workforce availability that require distribution per teams based on their qualifications, large volumes of both licensed and unlicensed health professionals (averaging 100-150 at times) to be oriented in one week and experienced/inexperienced staff.

Gap: Processes that relate to workforce distribution are mainly manual and require increased number of hours to organize and schedule the Contact Investigators.

Goals: Increase efficiency and effectiveness in workload distribution processes (Decrease from 10h/day estimated manual work to 0h/day when automation is embedded in the process); create an automation model that can be replicated for other potential applications. However beneficial a new automated process can be and support decision-making and simplify the employee’s process, the real test is how it interacts with the other aspects of the process, team and worker. Interdependencies play a critical role in affecting the outcomes. Leaders must plan a strategy that takes into account the interactions among all components of the business. They need to anticipate the complex interrelationships surrounding change. For example, feasibility (stability of the automation process), sequence (which parts of the process change first), location (online, on premise access...
to the tools), staff competencies (new knowledge and skills), management of the solution, culture change (advance digital transformation), employee motivation are part of the matrix of change.

**Outputs**: In the Case Investigation: Automation of Workload Distribution project, the leaders carefully selected the interventions that could lead to a seamless implementation. **Feasibility** was addressed by comparing the manual results to the automated results, testing the solution for accuracy through repeated tests; **sequence and location** were addressed by shadowing the activities/tasks completed by the staff when handling data and transition points; **new staff competencies** were built through education, and simulation of steps; **culture change** was gradually introduced through team meetings, communication of the change and rationale, promoting the vision for creating internal efficiencies; motivating employees by acknowledging their effort and ability to learn new ways of doing work and adapting it in their day-to-day work. The implementation package included:

1. Daily Automated Staff Assignment (DASA), automated process flow and assignment of staff - Online platform in SharePoint with tools integrated with Tableau (See Figure 2),
2. List of baseline parameters,
3. Service model that provides details regarding the type of changes that can be requested to be made to DASA,
4. Decision-making dashboards (Visualization of staff assigned/not assigned, Staff Count/group/day),
5. audio visual education training materials located in an online library,
6. 493 staff trained in how to use DASA.

![DASA: Daily Auto Staff Assignment](image)

**Figure 2**: DASA Automation workflow

3.1.1 **Outcomes**:
- Automatically assigned an average of 1,200 staff. The impact after 6 weeks of using DASA decreased the initiation phase from 6-8 hours to 1-2 hours; decreased the review and adjust phase from 4 hours to 2 hours. The automation led to 8h/day time savings. The result of the automation intervention increased B, improved A, and decreased C, D.
- Staff were trained in digital competencies: information management, document management, data analysis, data interpretation using visualization tools.
- Staff satisfaction quotes: “Infinitely better”, “This is quite amazing to see come together!”

When we map the case study to the ABCD model, gaps to be improved are identified and aligned with the interventions that trigger changes in C and D and increase in B. See Figure 3.
Employees require constant upgrade of their skills (digital competencies, professional designation, etc.). Contract management staff, similar to the team in a surgical Operating Room, needs to have 100% compliance when they manage contracts and the fine details related to them. It requires skilling of the program’s function and upskilling of concepts, operational requirements and processes, etc. CPSM, Risk & Internal Controls leaders assessed the need to develop performance support tools for the staff to obtain the required accuracy and consistency in their work output. A team with members representing the business and technology/analytics was structured and a project was scoped. The objective was to develop self-guided learning for staff with ability to complete knowledge checks and course correct, based on the responses received. The project parameters were:

4.1.1 **Gaps: Identified gaps included:**
- Time and resources required to manually: (1) Guide staff through orientation and walk them through materials; (2) Track learning progress of each staff member;
- Metrics to gauge learner’s initial understanding of the materials and catch early on where re-training focus areas needed to be;
- Build competencies for staff

**Goals:** Increase efficiency of staff time used for learning; increase accuracy of deliverables required for the roles. When we relate to people and workplace interventions we have to be strategic in the learning process: Employees go through a learning journey from day one in a job. “Ebbinghaus’ forgetting curve informs that people forget half of the information they learn just one hour after learning it, more than 70% after one day and 90% after 30 days. The challenge for learners is to find a way to focus on the bits of information that are most important to them and retain them in long-term memory”. New ways to structure the learning process and receive only the relevant information to do the job have to be introduced in the business operations. For example, skills and competencies development built in such a way that learners follow learning paths as concise as possible; learning process created to allow learners to absorb new information at a comfortable pace; develop online quizzes and test to ensure progress tracking and repetition; provide rewards for the effort of learning; encourage continuous learning and create space for it.

**Outputs:** Contract Monitoring Orientation online platform created the safe space for employees to learn and test their knowledge: learning paths were created for two roles with curated resources for each; concise lessons were
prepared to help learner focus on what is important, promoting microlearning; short online knowledge tests were
developed to trigger recall of information and retention.

A Self-guided Contract Management (CM) Learning Pathway (developed in SharePoint) that helps staff navigate
through the CM Program’s background documentation, business functions, frameworks, and processes. Staff
can complete lessons that are associated with their role and monitor their learning progress. See Figure 4.

Figure 4: Self-guided Learning Pathway (example for Senior Advisor – 17 lessons)

4.1.2 Outcomes:

- The management of the Learning Pathway content is reduced once the library is set up with metadata
  for easy find/search and the version control is enabled for quick follow-up of updates
- Tracking of learner progress and quiz results is automatic; the supervisors can draw conclusions where
  they need to further clarify or add new content
- Staff can develop their own learning path as they complete the modules at their own pace
- New digital competency skills (online learning) are developed within the staff
- The Monitor component of the solution will assist leaders in developing metrics for learner’s progress

When we map the case study to the ABCD model, gaps to be improved are identified and aligned with the
interventions that trigger changes in C and D and increase in B. Figure 5.
5. Conclusions

“In the post-pandemic future of work, nine out of ten organizations will be combining remote and on-site working, according to a new McKinsey survey of 100 executives across industries and geographies. The survey confirms that productivity and customer satisfaction have increased during the pandemic.”

Leaders and teams need a new model in this hybrid world. How can this be achieved?

According to Forbes (Lital, 2021) the organizations need to: (1) Step up their digital game by embedding latest digital tools to create insights in the processes and measure progress; (2) Pay close attention to your employees’ needs and requests as they are part of designing the hybrid work plan and their input is a necessity; (3) Keep work asynchronous, at least at first and analyze the value of meetings; (4) Hold everyone accountable by using two approaches, agile and sprint, which provide the teams a framework for staying on task and collaborating effectively in a hybrid world; (5) Don’t forget that balance is needed. There needs to be a balance between people working collaboratively and on their own. Periodically, let individual brains marinate individual ideas before the team assemblies again. Optimal collaboration requires at least some “alone time.”

According to Case Study 1 and 2, and aligning with Forbes recommendation, the aim in the next 10 years is to fully leverage innovation and technology within the organization. Performance support tools, workplace conditions, and human-centric considerations need to be put in place. A set of three tools are introduced to respond to that: (1) Measure Progress Tool: ABCD Model to measure B from current to future when starting an initiative (Figure 6); (2) Change Management Tool: Initiative Intervention Map (Figure 7); (3) Change Management Tool: Human Centric intervention (Figure 8)
Figure 6: Measure Progress Tool: ABCD Model to measure B from current to future when starting an initiative.

- **A**: Administer the Business, Do the Job
- **B**: Build the Business, Improve
- **C**: Cater the Crisis, Fight Fires
- **D**: Do the 'Dumb' (rework, repetitive work)

Figure 7: Change Management Tool: Initiative Intervention Map
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Figure 8: Change Management Tool: Human Centric intervention

These tools are to be tested and validated in the initiatives and projects ahead and assist in measuring how work changes over time.

References

Alberta Health Services, (2022) “About AHS”, [online], https://www.albertahealthservices.ca/about/about.aspx
Imperative. (2022) “The Imperative Workforce Purpose Index 2022” [online], https://uploads-ssl.webflow.com/5eae27a3939555a4dd8db2ca/6233a375f23927913ba2ef1f_Imperative_Workforce%20Purpose%20Index%202022.pdf
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University of Alberta (Alberta School of Business), University of Calgary (Haskayne School of Business, Executive Education), and Alberta health Services (AHS). (2019) “AHS Achieves Results”, Lecture – Executive Education Program