

Exploring the Need for a Work Environment Reporting Standard – Development of a Prototype Assessment Approach

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Executive Summary

Organizations need guidance on how to assess and report on the status of their work environments. This case was made in an earlier research report (see https://www.csagroup.org/article/exploring-the-need-for-a-work-environment-reporting-standard/), which highlighted the lack of consistency in how organizations define, assess, and report on their work environments. This lack of consistency makes it difficult for managers, employees, customers, and the general public to distinguish organizations that have strong work environments from those that do not. This study builds on that previous research report by addressing the need for an approach to support more consistent assessment and reporting on an organization's work environment.

This report presents a proposed approach to assessing a work environment. The flexibility of work environment reporting is demonstrated through a review of options and the development of a prototype approach. The prototype approach focuses on the "Job Demands" dimension of work environment reporting, one of the 12 dimensions identified in the previous report. The Job Demands dimension was selected due to its heavy emphasis in both the academic and practitioner literature.

The prototype approach for reporting on Job Demands was the product of four iterations of development. The content and style of international standards that related to work environment issues were reviewed to help provide a basis for the approach proposed here. In the proposed approach, guidelines for assessing and reporting on the Job Demands dimension of the work environment were divided into three sections: process, outcomes, and external awareness. Each section includes both qualitative descriptions with quantitative measurements focused on the state of process development, execution, and organizational awareness. The use of both qualitative and quantitative information provides the context needed to assess and report on work environment issues related to Job Demands. To illustrate the potential application of the guidelines, an illustrative example is provided.

The development of the prototype approach identified some challenges and provided a space for reflecting on important issues to consider moving forward. The 10 items are:

1. What is the "best approach" to tackle the assessment and reporting problem?
2. What comes first, the reporting standard or the work environment assessment approach?
3. How are the benefits of data gathering and assessment balanced with the needs of reporting?
4. What is the optimal granularity for work environment assessment and reporting?
5. What is the right balance between qualitative and quantitative information?
6. How can valuable, trustworthy, and not gameable indicators be established?
7. How is the conceptual overlap between the dimensions of work environment handled?
8. What resources are required to complete a work environment assessment and report?
9. Can a single approach work for all sectors?
10. How should organizations of different sizes and capabilities be accommodated?

Future research involving stakeholders from a range of organizations is needed to test and refine the prototype approach, as well as to identify remaining gaps and extend the approach beyond Job Demands to cover all aspects of the work environment. Active engagement of stakeholders and users of the approach is needed to ensure the final methodology is usable and useful to a broad range of organizations. This will also provide a basis for further improvements to the approach.



There is a need for improved standardization with respect to how information about the work environment is reported.

1 Introduction

In a previous research report [1], it has been shown that there is no widely accepted definition of the term "work environment". Further, there is no single standard or instrument that provides comprehensive guidance for effective reporting on work environment, either as a whole or with respect to the individual dimensions comprising work environment. This makes internal and external monitoring of work environment performance difficult.

This project builds upon the research report mentioned above [1] to develop an approach to assessing work environment, using the "Job Demands" dimension of reporting. Job Demands was one of the 12 dimensions identified in the earlier report (see Appendix A for the complete list and definitions). The approach developed here provides a structured method to gather and report information about the status of the work environment. The method can also help organizations manage and monitor the development of their own high-quality work environments over time.

Work environment, defined here as "all aspects of the design and management of the work system that affect the employee's interactions with the workplace", is a component of corporate social responsibility (CSR) reporting that lacks consistency and standardization [2], [3]. This has led to a large range of indicators being used to report on work environment performance [2]. This diversity of indicators fails to provide a common basis for cross-organization comparisons. There is a need for improved standardization with respect to how information about the work environment is reported. Standardizing work environment reporting is a potentially challenging exercise. The broad and multi-dimensional nature of the work environment (shown by the dimensions in Appendix A) makes it difficult to succinctly and simply summarize it as a whole. The disparate standards and tools currently available for examining and managing its components likely contribute to the disparate reporting approaches observed [2].

There remains a need for specific guidance on how organizations can gather, analyze, and report on information relevant to their work environment. This report provides an example of how organizations can accomplish those goals for the case of the Job Demands dimension of the work environment.

1.1 Aim

This project builds on the outcomes from a previous research report [1] to:

1. Examine the structure of existing standards in order to inform the style and content choices in an approach to assessing a dimension of the work environment.
2. Develop a prototype approach for assessing one dimension (i.e., Job Demands) of the work environment.

2 Development of a Work Environment Assessment Approach

As shown in Figure 1, two different approaches were used to address the two aims. These are further explained in the following two sections.

2.1 Characterizing existing standards related to work environment

The 13 standards (or group of standards) examined (see references [4]–[40]) in the original research report [1]) were reviewed further to characterize the style and tone of the document and contents and to inform the development of an assessment approach for work environment reporting.

Each standard was also examined to determine its characteristics as 1) guidelines or requirements; 2) being auditable or an assessment; 3) self-contained or modular; and if it included 4) a strategic approach for indicators and 5) consideration of contractors and the supply chain. Further details on each of these five characteristics are presented in Table 1.

Figure 1. *Logic Flowchart for the Development of the Prototype Approach*

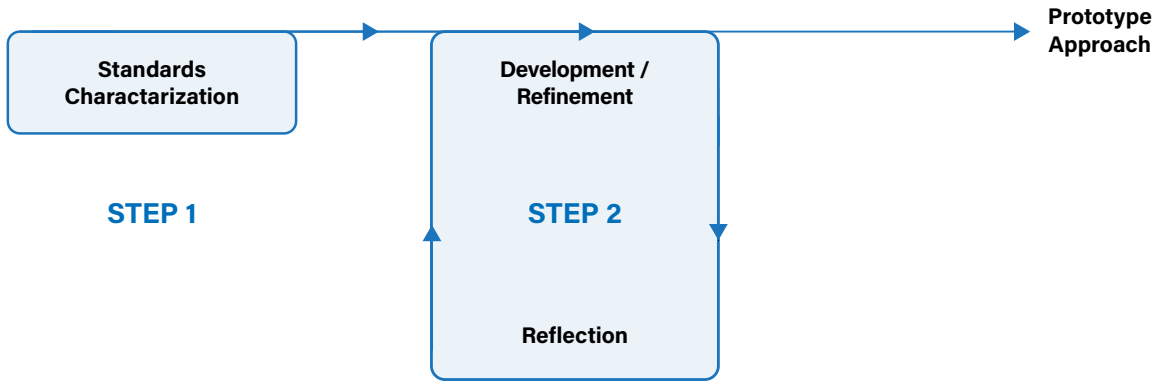


Table 1. *Description of the Characteristics Reviewed in the Standards*

Characteristic	Description
Guidelines or requirements	The scope of the standard with respect to a focus on advising of what people are to do (guidelines) as opposed to stating what has to be done to be in compliance (requirements)
Auditable or an assessment	The user of the standard is able to be audited to the standard and therefore registered as compliant (auditable) or the standard allows the ability to review and check progress via the standard (assessment)
Self-contained or modular	The standard can be successfully used in isolation (self-contained) or is a component of a larger suite of standards (modular)
Strategy for indicators	The approach used to generate reporting values and information
Contractors and supply chain consideration	How the standard considers workers and associates who are not direct employees

2.1.1 Lessons from the characterization of the standards

There were four common approaches and formats used in the reviewed standards. All standards have clear language on what is required to conform to the standard (i.e., its requirements). Different levels of requirements were denoted through the use of terms such as "shall", "should", or "could". In some instances, such as the SA8000 social accountability standard [40], the term "may" was used. The development of an assessment approach for work environment reporting must consider the most appropriate terminology on conveying requirements, as this will define the resolution of information in the assessment, what information might be needed, and how the information might need to be summarized for reporting.

The content and style of the standard depends on its objectives and scope. For example, the Global Reporting Initiative (GRI) [13–36], with an emphasis on CSR reporting, contains a structure that includes a general contextual description of the organization and a report on the management approach. The latter is more specific to a given aspect of an organization (e.g., human rights or occupational health and safety) and is clustered under economic, environmental, and social topic-specific standards. As another example, the International Organization for Standardization (ISO) [37-39] and Canadian Standards Association (operating as CSA Group) [5–12] standards employed a similar structure, from both an organization and terminology (i.e., language used to convey requirements) perspective. Both included appended materials that provided more practical context to the information. As a third example, the SA8000 social accountability standard [40] had a unique style. It employed a management system approach and contained all social accountability requirements in a single document, as contrasted with the GRI's modular approach of being spread over multiple documents [13–36]. Finally, the ANSI/ASSE Z490.1 training standard [4] was conceptually similar but visually different from the reporting approaches of the other standards, using a two-column approach in its presentation. One column of information included the requirements, while the second column contained explanatory information in order to clarify and better understand the requirement.

Further consideration of the specific criteria in Table 1 resulted in the following observations.

Guidelines or requirements: The use of the term "shall" was used to highlight prescriptive requirements within the standards. Standards that did not contain prescriptive requirements, such as ISO 30414 [38], a human resource management standard, and CAN/CSA-ISO 26000 [7], a guidance on social responsibility standard, did not contain this term.

Auditable or an assessment: Two standards were identified as auditable – the social accountability standard, SA8000 [40], and occupational health and safety management standard, CAN/CSA Z1000 [6]. Organizations meeting the requirements of these standards could receive formal certification. Other standards provided guidance for non-mandatory internal auditing (e.g., CAN/CSA Z1003/BNQ 9700-803 [12]) or guidance for assessing external services or to audit and improve internal programs (e.g., ANSI/ASSE Z490.1 [4]).

Self-contained or modular: All standards could be considered in some manner as self-contained and usable in isolation. The GRI [13–36], with its different categories, could be considered modular, while the workplace ergonomics standard (CSA Z1004 [5]) is structured to be used with the CAN/CSA Z1000 occupational health and safety management standard [6]. Similarly, the focus of the psychological health and safety in the workplace standard (CAN/CSA-Z1003/BNQ 9700-803 [12]) has been structured to allow alignment with other relevant management standards, i.e., those organized around the five elements of policy, commitment, and engagement; planning; implementation; evaluation and corrective actions; and management review and continual improvement.

The strategy used for indicators: Most of the reviewed standards include an element with respect to indicators and performance measurement. This included formulas for calculating information (GRI [13–36]); suggestions of metrics to report (ISO 30414 [38]); requirements with

respect to generating objectives and targets (CAN/CSA Z1000 [6]); determining what could be assessed and the possible data sources (CAN/CSA-Z1003/BNQ 9700-803 [12]; or approaches to ensuring the credibility of reporting (CAN/CSA-ISO 26000 [7]).

The consideration of contractors and supply chain: Contractors and the supply chain are, technically, considered in all but one (ANSI/ASSE Z490.1 [4]) of the standards reviewed. For the CSA Group standards reviewed [5–12], the reference to contractors and the supply chain occurs primarily in the definition section by expanding on the definition of "User" or "Worker". Other standards include contractors and the supply chain in the general text of the document or as a note. SA8000 [40] was the only standard that had a stand-alone section (i.e., section 9.10 in SA8000) dedicated to supplier and contractor issues.

2.1.2 Application to a future assessment approach

The standards reviewed had a variety of structures, which is unsurprising given the range of ways they examine the work environment and its components. Each of these approaches have their strengths and weaknesses, such as how logic is aligned with an illustrated framework, how explanatory information is presented (e.g., annex in the CSA Group standards [5–12] versus two-column format in the ANSI/ASSE Z490.1 standard [4]), or how contractors and external workers are presented and addressed (e.g., separately in SA8000 [40] versus within the user or worker definition in the CSA Group standards [5–12]).

Establishing an overarching framework to the assessment approach, as in CSA Z1004 [5], might be beneficial as it could provide structure to the process and a consistency across the assessment of the work environment dimensions. A consistent and familiar structure should improve usability as a user moves from one dimension of the work environment to the next, regardless of whether the framework mimics one or more of the existing approaches, or is a hybrid, or is completely novel. In developing an assessment approach this could include consistent headings, themes, or logic flow (e.g., considering processes, outcomes, and elements outside of the organization) through the approach.

Adopting a tone (e.g., "shall", "should", or "could") similar to the existing standards also provides a communication style and format that is recognizable nationally and globally. This can help guide the structure, style, and output of an approach to assessing the work environment so that it better aligns with any future reporting standards and the expectations of users of the assessment approach and the outcomes.

2.2 Development of an assessment approach

To demonstrate the assessment approach, a single dimension of the work environment was chosen to develop a prototype approach. The complete list of work environment dimensions previously identified include the following (see Appendix A for definitions of each dimension):

- Job Demands
- Health and wellbeing management and outcomes
- Work environment design and maintenance
- Learning and development, work control
- Leadership structure, support, and worker participation
- Work structure and stability
- Work-life balance and work experience/performance; respect and inclusion
- Recognition and benefits
- Work type and location
- External factors of influence

In this report, the "Job Demands" dimension was chosen for the development of a prototype approach. The choice of this dimension was made due to its wide use in the academic and practitioner literature. The Job Demands construct – physical, mental, psychosocial – was refined from the original report [1] by replacing the term "psychosocial" with "emotional" to better reflect that component within the psychosocial element in Job Demands. The intent would be to include other work environment dimensions once the basic design and structure of the tool was established.

An iterative design approach was used in the development of the assessment approach. Cycles of design and development, review of approach (i.e., information, execution, style), and refinement were completed in order to improve, modify, and advance the assessment approach. Each successive cycle built off the previous assessment approach. A new iteration of the assessment approach was initiated after review of the previous stage of development to highlight strengths and weaknesses of the approach.

The proposed approach that evolved from this process is discussed in detail in the following section. Representative content of all assessment approaches that led up to and included the full proposed approach can be found in Appendix B to Appendix E along with notes about the challenges experienced with each of these approaches.

3 Proposed Assessment Approach

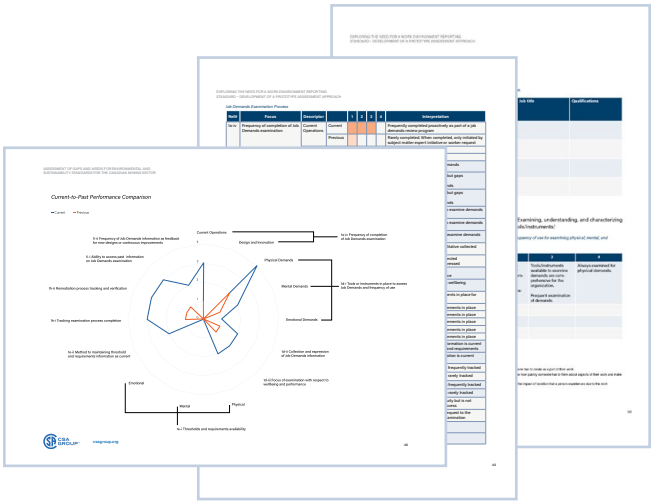
The proposed approach (fully described in Appendix E) is intended to help assess the status of the organization and generate information that is meaningful for reporting, which can then be shared internally and/or externally. The approach can be used to guide an organization and inspire improvement based on where it rates on any of five identified progressive levels of assessment.

The evolution of this assessment approach is built upon the challenges and shortcomings identified in four iterations – described briefly here. For example, there was a reduction in the formality of the standards language and lack of structure of the first approach (detailed in Appendix B), which had been guided and influenced directly by the reviewed standards. The scoring and classification approaches that were separated in the second iteration (Appendix C) were embedded within the flow of the single proposed document (Appendix D).

The interview-like flow of the second iteration (Appendix C) was maintained through to the proposed approach (Appendix E). The transition from the third iteration (Appendix D) to the proposed approach (Appendix E) addressed the need to guide a user when moving from data gathering to reporting. The added examples of a generic text report and summary visuals (also provided in Appendix E) were created to inspire potential reporting approaches.

The proposed assessment approach incorporates qualitative and quantitative elements, something that was highlighted as important for communication of information in the previous research report [1]. This also reflects information about structure and tone gleaned from the review of the standards. The use of qualitative and quantitative information shares some similarity with the GRI [13–36], which has qualitative descriptors of processes and numerical indicators of outcomes.

Select Examples of Appendix E from this Report



We believe both forms of information are important for comparable, comprehensive, and understandable work environment reports. A further similarity to the GRI [13–36] is the modular nature that is possible with this approach. Conceptually, the structure for assessing Job Demands could be applied to the other work environment dimensions. However, the interrelationships between dimensions means that the structure in assessing a part of Job Demands may overlap with other dimensions. The extent of this overlap, and strategies to deal with it, requires further attention as these other dimensions are added into the prototype approach.

The proposed approach provides a novel means to review and assess a dimension of the work environment. It is a base on which more work can be completed and creates a strong starting point for developing an assessment approach for other dimensions. The approach requires more development work, which could potentially involve some reshaping and/or refinement. For example, in the exercise of generating a generic report, it became clear that not all of the details and information in the assessment seemed suitable for a CSR-like report – though the information could be deemed important for an organization looking to grow its capabilities and might have implications in other aspects of the assessment in the future. The time and resources required to complete an assessment will have to be carefully reviewed and considered in future work. Assessments that take too long or are too complicated in relation to the perceived benefit are less likely to be used. It is anticipated that, after an initial investment in the first assessment in an organization, subsequent "update" assessments will be much shorter and easier to complete.

The future direction that this approach should take needs to be informed by a broader audience with experience in assessing work environments and preparing CSR reports. A diverse group of reviewers could provide guidance on what information should percolate to the top for reporting, on what is an acceptable time requirement to do this assessment, and highlight any uses or applications for this approach that have been overlooked. A diverse group of organizations should be recruited to check the extent of consistency across organizations in order to minimize the need for creating multiple assessment approaches specific to a given sector. Regardless, the prototype approach presented here is a concrete basis for future conversations on development, as well as conversations on the quality of the work environment of an organization through its application.

4 Challenges and Reflections

This work acts as a pilot investigation into the development of an approach for assessing the work environment. As it is, the proposed approach can be applied in an organization to better understand the Job Demands component of the work environment. What follows in this section is a brief discussion of some challenges that were faced in developing the prototype approach, as well as reflections on important issues that need to be considered moving forward.

This identification of challenges and reflections is not to detract from the work that was done. Instead, it is to make readers aware of concerns that have arisen, or may yet arise, that could challenge the acceptance and uptake of the proposed approach and the development of any future assessment approach. It is also an identification of items that should be flagged for further investigation to understand the impact on future use and possible areas for improvement that could strengthen the capabilities of the proposed approach.

1) What is the "best approach" to tackle the assessment and reporting problem?

Assessing the work environment can involve many different approaches and methods. It may take some work to achieve the "best approach" for assessing, as well as reporting on, the work environment. This study identified four different approaches for the Job Demands dimension of the work environment (seen in Appendixes B to E). Though it is believed that each successive approach is an improvement on the previous one, it does not necessarily mean that the "best approach" has been developed – further work is warranted. Taking the user-centred approach to the development of an assessment approach and reporting tool would also permit exploration of a structure that is either common

for all organizations or that allows adaptation to different organizational sectors and geographical regions. This would involve getting views from multiple stakeholders.

While the proposed approach is intended to facilitate work environment reporting, it can support internal improvement objectives as well by illustrating different levels of success and process execution. The levels can demonstrate what is needed to further improve the organization. A balance must thus be struck in the tone of the approach between general guidance for improvement and precise prescription of what needs to be completed in an organization for it to improve its work environment, along with what needs to be reported. Obtaining the right balance between guidance and prescription should help to create an approach that is transferable within and between organizational sectors, allowing adaptability while retaining comparability between organizations' approaches.

2) What comes first, the reporting standard or the work environment assessment approach?

An assessment approach provides the foundation for reporting on work environment performance. The outcomes of the assessment approach provides the user with feedback on the current state of their organization to effectively report on the given dimension, as well as some guidance on what improvements are needed. The assessment approach should have value as both an internal and external reporting tool.

A challenge in developing an assessment approach is determining the desired outcomes. Confusion about the desired outcomes could result in the assessment approach missing the mark or having an inappropriate scope (be it too broad or too narrow). This creates a chicken-and-egg scenario in deciding what is needed first for development: Is it the work environment reporting requirements or the information that is important for a thorough work environment assessment approach? Interactive development approaches, that engage stakeholders in the process, are helpful to resolve these kind of design challenges.

Figure 2 illustrates the tension that exists between the work environment report and the assessment approach. The requirements for the report dictate what is needed from an assessment, while the capabilities of the assessment dictate what is available to report. Further, any work environment reporting standard provides requirements directly for the report and indirectly for an assessment approach. However, developing an assessment approach based solely on the needs of work environment reporting could be misleading. An assessment approach that is driven off of the information requirements and targets established from work environment reporting guidance may lead to something being overlooked; this would certainly be the case based on existing work environment reports and associated guidance. Development of an assessment approach without a target for the reporting requirements also creates a problem with respect to establishing the specificity of information needed within a dimension. If the scope of the developed assessment approach is too narrow and specific as a result, then a work environment report may be overloaded with too much detailed information. Conversely, if the assessment approach is too broad and vague, then important information may be disregarded. The requirements for reporting and assessing the work environment need to be balanced

Figure 2. *Depiction of How a Work Environment Standard Influences the Needs of Reporting and the Needs of an Assessment Approach*



so that an assessment approach effectively provides information for reporting as well as effectively assesses the work environment. Stakeholder involvement in future development would help define the targets for work environment reporting requirements along with target activities for an effective assessment approach.

3) How are the benefits of data gathering and assessment balanced with the needs of reporting?

The process of developing a mock report from the proposed approach highlighted the balance that is still needed between data gathering and assessment compared to information that is necessary for reporting. There are elements in the assessment approach that have value for a user looking to assess the Job Demands dimension within their organization. Whether all of the details and minutia of some of these aspects are worthy of sharing in a report is still unknown and require further stakeholder engagement to clarify. An optimal level of reporting detail is yet to be determined. However, for an organization looking to improve the understanding and management of Job Demands, these elements in the proposed approach can provide information as building blocks for future success.

4) What is the optimal granularity for work environment assessment and reporting?

When considering a dimension like Job Demands, it is possible to suggest examining a job or a task down to a microscopic level to truly understand what is experienced by the worker. The opposite end of the spectrum involves asking a reviewer to comment on whether an organizational process exists or not. The optimal resolution of information can change depending on the focus of the audience.

Knowing the audience is key, especially if the use of the assessment approach is aspirational beyond simply external reporting. Much like finding the balance between guidance and prescription of what is needed in an organization, a balance point needs to be located for the granularity of information. This balance point likely has implications when considering any flexibility necessary in an assessment approach that is transferable across organizations and different sectors. Choosing something at too high a level (coarse granularity) could leave reporting information watered down and difficult to interpret meaningfully. Choosing too fine a resolution (fine granularity) could overburden any resulting report and overwhelm the audience with irrelevant detail. Fine resolution is not completely unacceptable if a mechanism exists to effectively summarize the information for reporting purposes.

5) What is the right balance between qualitative and quantitative information?

In the evolution of the proposed approach in this study, the amount of qualitative and quantitative information varied. An effective balance of these types of information will likely depend on the dimension being assessed and the target audience for a report.

For example, the reporting approach of the GRI [13–36] builds from qualitative descriptions to quantitative information in support. The GRI approach provides context to the quantitative values; however, not all people are comfortable with qualitative data, which can be perceived as subjective and opinionated. Further, qualitative data can make comparisons difficult. As demonstrated in the GRI documents, both quantitative and qualitative data are necessary for a thorough report.

6) How can valuable, trustworthy, and not gameable indicators be established?

A range of stakeholders are needed to develop an assessment approach that is user-friendly. Potential users of the reporting standard must be consulted in future work in order to understand their information needs. Similarly, people generating the information need to be consulted to see what capabilities they have to meet the demands of the audience but also what information may be getting overlooked as important. What should not be lost in the discussion is the need to create information that is verifiable, reliable, and not gameable. The integrity and trustworthiness of the data need to be ensured otherwise the information could be discredited and the approach to work environment reporting as a whole could be undermined.



Auditing and organizational assessments have the general goal of improving the processes, environment, and outcomes of the organization.

7) How is the conceptual overlap between the dimensions of work environment handled?

In the early stages of this study, the division by dimensions was found to be fuzzy. Boundaries of the Job Demands dimension showed potential overlap with other dimensions; i.e., the dimensions can interrelate in complex ways. This appeared to potentially cut off valuable information that would be needed to properly review a single dimension. The concept of dimensions – that is the subcomponents that comprise the work environment (e.g., job demands; health and wellbeing; management and outcomes; work environment design and maintenance – see Appendix A for full list) were developed in the previous research report [1] as a means to bound and provide scope to the work environment definition. This concept of discrete dimensions provides more manageable "chunks" of the work environment to facilitate discussion and target the next level of development of a reporting standard or an assessment approach.

That the dimensions showed some overlap means that either the dimensions are not as crisply defined as they need to be or that, from the perspective of the organization as a whole, the contents within the dimensions are fluid, overlapping, and full of important interactions that should not be ignored. Using a dimension-by-dimension approach, in which each dimension has its own assessment and is a subsection of the report, is likely still the best way initially to develop an assessment approach to ensure that a comprehensive view of the work environment is maintained.

A review of a work environment assessment as a whole, with all dimensions represented, may ultimately lead to a "dimensionless" approach without specific subsections to avoid any confusion or restrictions of information. At this time, we believe it is more important that any reporting guidance cover all relevant aspects of work environment rather than strictly enforcing the boundaries between conceptual dimensions. Further collaboration with stakeholders can help clarify the best approach here.

8) What resources are required to complete a work environment assessment and report?

Auditing and organizational assessments have the general goal of improving the processes, environment, and outcomes of the organization. The cost-benefit of the resources required to execute these programs is always of concern. The time investment and personnel resources required to complete this proposed approach at this preliminary stage are unknown, and it would need to be assessed as part of future developments of the approach. An initial assessment would very likely require a greater

investment of time compared to subsequent assessments, while successive assessments could be faster and easier as the user would be looking to verify or update the existing information, and the sources of information in the organization would have already been established.

9) Can a single approach work for all sectors?

An intention in the proposed approach is that it is developed to be "sector neutral". This means that the same approach can be applied in service, manufacturing, hospitality, and other different organizations without requiring any significant or substantial alteration.

In the specific case of the "Job Demands" dimension, one can easily anticipate the different Job Demands that exist in, for example, mining compared to computer programming, or in hotel service compared to specialized manufacturing that supports agriculture. If someone was to investigate the specific demands on a person in each of these industries, then the values and points of interest could be quite different. Ideally, the same assessment approach and reporting structure could support reporting this wide variety of Job Demands.

It is possible, though, that looking at the capabilities of an organization to review, plan for, and assess Job Demands, assuming the processes are in place to complete these activities, might not be that different from one organization to another. If future research finds this is the case, then a single approach may be able to be applied equally across different organizations and sectors. If there is substantial enough difference in organizations where, for example, a generic approach overlooks significant information, such as specific detailed outcomes, then different assessment approaches may be needed. Trials with organizations from different sectors are needed.

10) How should organizations of different sizes and capabilities be accommodated?

Much like the challenge with supporting different sectors, there is also a potential challenge with organizations of different sizes and financial capabilities. Smaller organizations and organizations with less operating capital may be challenged to find the resources to complete an initial work environment assessment and report, whether these be limitations in financial or personnel resources. While the intent of the proposed approach is to help minimize the resources required to prepare a standard work environment report, it may be possible to further reduce the initial cost of developing the report using modularity and graded assessment and reporting approaches. In a modular approach, specific topics could be included initially and then extended each year towards a complete report. Graded reporting would allow for more cursory (less granular) reports in the beginning, which would be enhanced to full reports over time (e.g., shifting from Level 1 to Level 3 reporting). The issue of resource needs and managing the demands of an assessment and reporting remains an issue to explore with stakeholders in different organizations.

5 Conclusion

This report presents a prototype approach on how to assess and report on the Job Demands dimension of the work environment. This prototype approach was created based on a review of standards applicable to the work environment and on applying iterative design and development cycles.

The proposed assessment approach is a single, continuous document that includes qualitative and quantitative information that may be reported. It contains three sections that focus on processes used to examine Job Demands, outcomes, and external awareness of how Job Demands are considered by other organizations that have a supporting role to the organization being assessed.

Through the exercise of developing the prototype approach, ten challenges or items have been identified that need consideration and future development:

1. What is the "best approach" to tackle the assessment and reporting problem?
2. What comes first, the reporting standard or the work environment assessment approach?
3. How are the benefits of data gathering and assessment balanced with the needs of reporting?

4. What is the optimal granularity for work environment assessment and reporting?
5. What is the right balance between qualitative and quantitative information?
6. How can valuable, trustworthy, and not gameable indicators be established?
7. How is the conceptual overlap between the dimensions of work environment handled?
8. What resources are required to complete a work environment assessment and report?
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Improving the usability of this approach so that it is of relevance to many different industries requires further research. Developing a singular assessment and reporting approach that is applicable to all sectors and organizations may be challenging. The focus might be better placed on developing an approach that can be adapted by different organizations, yet has sufficient consistency to allow comparison across many different organizations. Further research in collaboration with a variety of organizations and stakeholders is required.

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7 Appendices

Appendix A

Consolidated Work Environment Dimensions from the Literature, Instruments, and Stakeholder Comments, and a High-Level Description of the Focus of the Dimension (from [1]).

Dimension	Description
Job Demands	The mental, physical, and psychosocial demands of work
Health and wellbeing management and outcomes	The proactive management and tracking of physical and mental health and wellbeing
Work environment design and maintenance	The layout, setup, and construction, and ongoing maintenance of the work environment
Learning and development	The skills development and guidance in support of knowledge to complete work tasks as well as continued personal development and growth
Work control	The autonomy of work, ability to control tasks, pace, and timing
Leadership structure, support, and worker participation	The organizational approach to the structure, social support, and inclusion of workers in decision making
Work structure and stability	The short and long-term viability of work, clarity of roles, and alignment of work with skills
Work-life balance and work experience/ performance	The coordination with, and support of, life inside and outside of work, including hours flexibility, overtime, advanced scheduling, along with the enjoyment and value of time at work and subsequent commitment to work and ability to perform
Respect and inclusion	The equality and support of all regardless of background, gender, work association/ organization, and collective bargaining
Recognition and benefits	The compensation, benefits support, and effective promotion
Work type and location	The style of work (salary, contract, or self-employed) and location with the organization (home/within/supply chain)
External factors of influence	Factors external to the organizational work environment that impact the work experience, e.g., external distractions due to socio-economic aspects of the local area or the perception of the organization with respect to social responsibility

Appendix B

Standards Style Driven Approach

This first approach developed was inspired by the standards reviewed and adopted a style that matched the format and structure (e.g., shall vs. should vs. could) to inform the questions within the assessment approach. This top-down approach was guided by what might be in a reporting standard and was dominated by a list of short answer questions in a few sections but without any subsections to more finely delineate the concepts.

Challenges identified with this approach include:

- Too formal (leaned heavily on standards language) and difficult to use
- Not bounded/structured enough
- Separated too much from being able to score/classify elements of Job Demands in the work environment

The text that follows is an excerpt of the first section from the standards style driven assessment approach developed in the first iteration.

The reporting organization shall report the following information for the organization and for those organizations that are contributing to the organization through the supply chain:

a) A description of the processes in place to assess and estimate worker wellbeing and performance risk factors in new design, existing design modification, or in current work processes. This should include:

- Description of the physical, mental, and psychosocial risk factor assessment processes in the organization and how this is done pre-emptively and for established work environments.
    - Which should include how the information is tracked for remediation
    - Which should include how the working population and people of varying abilities are considered in the assessment process and thresholds used
        - Which should include if the assessment of differently abled working populations is a legislated requirement for consideration
    - Which could include how the respective information (e.g. assessment process and/or thresholds) is maintained for currency
    - Which could include a description of any capability gaps/resources that prevented any type of assessment from being made
- Description of how perceptual risk factors are assessed
- Description of how frequently this assessment is applied to new design or existing design modification in the organization and through the supply chain, as well as the frequency of assessment in established work environments
    - Which should include the percentage of instance assessment is completed and the total number of opportunities that were available per organization involved
        - Which could include a description of why not all instances were deemed necessary for assessment
- Description of the process(es) in place of how the risk assessed is monetized and connected to performance outcomes
    - Which could include the average and total cost savings/avoidance
    - Which could include the average and total performance outcome
- Description of the organization members or external to organization members involved in the assessment and any change/remediation process
    - Which should include a description of any members whose involvement is required by external or internal legislation
    - Which could include a descriptive summary of the qualifications of the individuals involved in these assessments
- Description of the process(es) in place for workers to request an assessment of Job Demands
    - Which should include the number of these requests made in a specific period of time
    - Which should include how many request responses that are in response to the right of a worker to refuse unsafe work and how many of these requests require mandated remediation
    - Which could include the average response time (days) to respond to assessment requests

Appendix C

Interview Guide with Separated Scoring Rubric Approach

The second iteration of development was structured to reflect an interview process that could guide a user through the act of reflection and data gathering, or could be used to guide an interview with an appropriate subject-matter expert. This appendix includes an excerpt from the document and a corresponding scoring rubric. The document was broken into subsections reflecting process, people involved, employee diversity, communication of information, issue remediation and tracking, and supply chain elements. Supporting the question and answer portion was a separate scoring rubric. The rubric had a number of components that created greater resolution for a given question that was asked in the main document. A 0-4 rating, for example of the level of process development, execution, or awareness, was used (see the rubric below), which allows the users to more easily see and demonstrate their level of status with respect to an ideal or the progress of the organization over time should they have a previous value for comparison. The five-level rating scale was inspired by other organization assessment approaches, such as the five levels of learning or four to six levels of maturity that have been used in the Baldrige self-assessment within the Baldrige Performance Excellence Program [41, 42].

Challenges identified with this approach include:

- Jumping back and forth between interview and scoring has the potential to disrupt the focus of the user.
- The two complementary documents have different resolutions of information that may make them disjointed in their work flow or, because it is more explicit in the rubric, bias a user to the rubric and create a focus on only quantitative data.

The text and table that follows are an excerpt from the interview guide with separate scoring rubric assessment approach that was developed in the second iteration of the assessment approach development. The table acts as a complement to the interview guide and provides a means to quantify elements in the questions posed. A user would choose the appropriate classification for a given line item and could then sum all line items to determine an overall score.

1. Process(es) in place to examine Job Demands:

For (i) **current operations**, and (ii) **design and innovation processes**, describe the approach to examining Job Demands with respect to:

a) Physical demands

b) Mental demands

c) Emotional demands

d) Perceptual demands

For both (i) and (ii) above consider the following:

- Do you have tools or instruments in place to assess the Job Demands?
- What percentage of the examinations of the Job Demands are related to wellbeing and what percentage to performance?
- Do you have thresholds or exposure requirements that must be met with respect to each of the demands being examined?
    - What percentage of Job Demands assessments exceeded a threshold or exposure requirement in the previous year?
    - How do you maintain the thresholds or exposure requirements as current?
- Is the examination of the Job Demands a requirement integrated within organizational processes, something completed only when requested by colleagues or workers, or only self-initiated by a local subject-matter expert?
    - What is the role of the person in the organization responsible for setting this operational standard?
- How do you ensure that an examination of demands is completed?
    - How often was this completed in your recent year (count and/or percentage of opportunities)?
- How is your information about Job Demands collected and expressed – qualitatively, quantitatively, combination of both?

Element	0	1	2	3	4	Score
Design and innovation processes	Nothing.	Rarely with design and only just before launch. Only occasionally within redesign/ innovation/retrofit process.	Frequently in design stage, but only occasionally at redesign and innovation; always with retrofit.	Frequently at all stages of design. Always in design, innovation and retrofit processes.	Always done at all stages and in any design, innovation, or retrofit work.	
Current operations processes	Nothing.	Rarely completed. Completed only by a subject matter expert initiative or worker request.	Occasionally completed proactively as part of a job demands review program.	Frequently completed proactively as part of a job demands review program.	completed proactively for verification, maintence of operations.	
Process completion tracking	No process completion tracked.	Process completion rarely tracked.	Process completion occasionally tracked.	Process completion frequently tracked.	Process completion always tracked.	
Physical demands	No tools/ instruments in place to examine physical demands.	Rarely examined for physical demands.	Occasional examination of physical demands.	Frequently examination of physical demands.	Always examined for physical demands.	
Mental demands	No tools/ instruments in place to examine mental demands.	Rarely examined for mental demands.	Occasional examination of mental demands.	Frequently examination of mental demands.	Always examined for mental demands.	
Emotional demands	No tools/ instruments in place to examine emotional demands.	Rarely examined for emotional demands.	Occasional examination of emotional demands.	Frequently examination of emotional demands.	Always examined for emotional demands.	
Thresholds and exposure requirements	No thresholds or exposure requirements in place.	No thresholds or exposure requirements in place. No method to ensure information is current.	Few thresholds or exposure requirements in place. Method in place to ensure information is current and for some thresholds or requirements.	Thresholds or exposure requirements in place for most relevent job demands. Method in place to ensure information is current and for most thresholds or requirements.	Thresholds or exposure requirements in place for all relevent job demands. Method in place to ensure information is current and for all thresholds or requirements.	
Wellbeing/ Performance	Nothing.	Always examined with respect to wellbeing.	Always with respect to wellbeing. Rarely with respect to performance.	Always with respect to wellbeing. Frequently with respect to performance.	Always with respect to wellbeing and performance.	
Information collection and expression	Nothing.	Only quantitative. No consideration of qualitative.	Quantitative with occasional qualitative.	Quantitative and frequent qualitative.	Quantitative and qualitative always considered and applied equally.	
					Total (Out of 36)	
					Percentage (100 x Total / 36)	

Appendix D

Hybrid-Interview with Embedded Rating Rubrics

The third iteration of the reporting approach reduced the complexity and length of a question to provide more succinct information, meaning more individual and specific questions and answers were added. The approach more conceptually matched the concept of the generic GRI individual disclosure structure – qualitative descriptions followed by quantitative classification or context information [13-36]. This arrangement made the assessment process more linear as opposed to the switching between documents that was required in the previous iteration. More subheadings were added to better illustrate the breakdown of the information within a section and provide better guidance for users.

Challenge identified with this approach included:

- Not necessarily clear on how you go from data gathering to work environment Job Demands information reporting

The excerpt that follows is from the first item of the first section of the hybrid (interview with embedded classification rubrics) assessment approach developed in the third iteration of the development process.

1) Job Demands Examination Process

This section examines the existing process or processes in place to support an examination of Job Demands. It is divided into nine items with a number of subitems.

a) *Process definition*

i. Does the organization have a defined process in place for the examination of the Job Demands in the work environment? ☐ Yes ☐ No

If yes has been answered in the above, describe the general structure of the process that is in place. Identify the name, if the process is of a common format, or a standard process that is similar for comparison (e.g., DMAIC, PDCA).

ii. Would you classify the examination of the Job Demands in the organization as something that is:

- ☐ A requirement integrated within organizational processes
- ☐ Something completed only when requested by colleagues or workers
- ☐ Only self-initiated by a local subject-matter expert

iii. Does the organization have a Job Demands examination process that is specific to:

a) Current Operations ☐ Yes ☐ No

b) Design and Innovation ☐ Yes ☐ No

If yes has been answered in any of the above, describe what makes the process specific to the different operations and/or the differences between these two processes.

iv. The examination of Job Demands can occur throughout a number of activities in an organization. How would you rate the organization with respect to the frequency of completion of an examination and where in the process Job Demands are examined?

Current Operations

0	1	2	3	4
Nothing.	Rarely completed. When completed, only initiated by a subject-matter expert initiative or worker request.	Occasionally completed proactively as part of a Job Demands review program.	Frequently completed proactively as part of a Job Demands review program.	Completed proactively for verification, maintenance of operations.

Previous value (use N/A if nothing completed before) _____

Design and Innovation

0	1	2	3	4
Nothing.	Rarely with design and only just before launch. Only occasionally within redesign/innovation/ retrofit process.	Frequently in the design stage, but only occasionally at the early design stage. Occasionally at redesign and innovation; always with retrofit.	Frequently at all stages of design. Always in design, innovation, and retrofit processes.	Always done at all stages and in any design, innovation, or retrofit work.

Previous value (use N/A if nothing completed before) _____

Appendix E

Addition of Report Summary Guidance to Facilitate the Transition from Assessment to Reporting

The prototype approach (fourth iteration of development) reduced the number of sections to three, focusing on the examination process, outcomes, and external awareness, but increased the number of subsections within a given section in order to better specify the focus of the associated questions. This iteration also expanded the instructional support aspect of the assessment approach. Discussion about the second iteration of the approach began to highlight the need to demonstrate and provide clearer context to the process of information gathering and the follow-up reporting. A companion document was created with instructions and a mock report to demonstrate how to elevate the information obtained within an assessment to a level that could be used for external reporting and communication documents. The structure and organization of the material in the assessment approach was used to guide the flow of the report, building through process related information through outcomes and to complementary aspects of the assessment of job demands. Options for the visual representation of the scoring values were generated, providing examples that are applicable for internal and external reporting.

Challenges identified with this approach included:

- Summarizing the information that would be gathered highlighted the differences in information that might support the processes and information to assess job demands and the reporting of this information. Not all detail was needed for the summary, at the level that it was created.
- As more information gets added to the approach, the length of time to complete an assessment increases. A time of commitment threshold needs to be established to bound the time required to assess a work environment dimension.

The proposed prototype approach with a summary report can be seen starting on the next page.

Assessing the Work Environment to Support Work Environment Reporting

Job Demands

The three sections that follow provide guidance through reviewing the dimension of Job Demands in an organization. A series of questions within each section provides guidance on the information that is needed to gain substantial information about elements within this dimension that support a good work environment. Questions include descriptions, short answers, and ratings. This information can be formalized to generate a report on this dimension of the work environment. An example write-up and data presentation approaches can be found at the end of this document.

Note: While the first attempt at this process will take some time, subsequent updates over the years will be much faster.

1) Job Demands Examination Process

This section examines the existing process or processes in place to support an examination of Job Demands. It is divided into nine items with a number of sub-items.

a) *Process definition*

i. Does the organization have a defined process in place for the examination of Job Demands in the work environment?

☐ Yes ☐ No

If yes has been answered in the above, describe the general structure of the process that is in place. Identify the name, if the process is of a common format, or a standard process that is similar for comparison (e.g., DMAIC, PDCA).

ii. Would you classify the examination of Job Demands in the organization as something that is:

- ☐ A requirement integrated within organizational processes
- ☐ Something completed only when requested by colleagues or workers
- ☐ Only self-initiated by a local subject-matter expert

iii. Does the organization have a Job Demands examination process that is specific to:

a) Current Operations ☐ Yes ☐ No

b) Design and Innovation ☐ Yes ☐ No

If yes has been answered in any of the above, describe what makes the process specific to the different operations and/or the differences between these two processes.

iv. The examination of Job Demands can occur throughout a number of activities in an organization. How would you rate the organization with respect to the frequency of completion of a Job Demands examination and where in the process Job Demands are examined?

Current Operations

0	1	2	3	4
Nothing.	Rarely completed. When completed, only initiated by a subject-matter expert initiative or worker request.	Occasionally completed proactively as part of a Job Demands review program.	Frequently completed proactively as part of a Job Demands review program.	Completed proactively for verification, maintenance of operations.

Previous value (use N/A if nothing completed before) _____

Design and Innovation

0	1	2	3	4
Nothing.	Rarely with design and only just before launch. Only occasionally within redesign/innovation/ retrofit process.	Frequently in the design stage, but only occasionally at the early design stage. Occasionally at redesign and innovation; always with retrofit.	Frequently at all stages of design. Always in design, innovation, and retrofit processes.	Always done at all stages and in any design, innovation, or retrofit work.

Previous value (use N/A if nothing completed before) _____

b) *Support for Job Demands analysis*

What is/are the role(s) of the person(s) in the organization who set the operational requirements and mandate with respect to Job Demands examination?

_____

_____

c) People involved in Job Demands examination

Characterize the people involved in an examination of Job Demands using the table below.

Process (e.g. current, design)	Role/Mandate	Inclusion reason (legislated, bargained, subject-matter expert, etc.)	Job title	Qualifications

d) Tools/instruments to examine Job Demands

i. Job Demands have a number of components that impact workers. Examining, understanding, and characterizing the physical, mental, and emotional demands requires a range of tools/instruments.[1]

Characterize the organization with respect to the tools or instruments in place and the frequency of use for examining physical, mental, and emotional demands. Indicate current (X) and previous (P) for each.

	0	1	2	3	4
	No tools/instruments in place to examine demands. Demands not examined.	Few tools/ instruments in place to examine demands. Rarely examined for demands.	Many tools/ instruments in place but gaps remain to examine demands. Occasional examination of demands.	Tools/instruments available to examine demands are comprehensive for the organization. Frequent examination of demands.	Demands are always examined.
Physical					
Mental					
Emotional					

[1] Physical demands arise due to the physical nature of the work environment, for example, the level of exertion someone has to create as a part of their work.

Mental demands relate to the mental load that has been created in the work environment. For example, this could be how quickly someone has to think about aspects of their work and make decisions within a fixed period of time.

Emotional demands are an aspect of the psychosocial element of the work environment and relate to, for example, the impact of isolation that a person experiences due to the work environment.

ii. Using the table that follows, classify how information about Job Demands is collected and expressed qualitatively, quantitatively, combination of both.

0	1	2	3	4
Only quantitative information collected and expressed. No consideration of qualitative.	Some qualitative information collected. Only quantitative information expressed.	Quantitative with occasional qualitative collected and expressed.	Quantitative and frequent qualitative collected and expressed.	Quantitative and qualitative always considered and applied equally.

Previous value (use N/A if nothing completed before) _____

iii. Characterize the focus of examination of Job Demands with respect to wellbeing and performance using the table that follows.

0	1	2	3	4
Nothing.	Always examined with respect to wellbeing. No performance consideration.	Always with respect to wellbeing. Rarely with respect to performance.	Always with respect to wellbeing. Frequently with respect to performance.	Always with respect to wellbeing and performance.

Previous value (use N/A if nothing completed before) _____

e) Thresholds/requirements

Thresholds or design requirements are guiding pieces of information that are used to ensure Job Demands are at an appropriate level with respect to risk to wellbeing and performance and provide bounding parameters to job design.[2]

i. Characterize the availability of thresholds and requirements within the organization using the following table. Indicate current (X) and previous (P) for each.

	0	1	2	3	4
	No thresholds or exposure requirements in place.	Thresholds or exposure requirements in place for few Job Demands.	Thresholds or exposure requirements in place for some Job Demands.	Thresholds or exposure requirements in place for most Job Demands.	Thresholds or exposure requirements in place for all Job Demands.
Physical					
Mental					
Emotional					

[2] For example, a threshold may indicate the number of acceptable times a person can complete a task, or a design requirement might stipulate a maximum force to operate a switch so that all people are capable to perform the task.

ii. Maintaining current information ensures that the latest standards and knowledge are in place to maximize performance and wellbeing. Describe the process of maintaining information in a current state for the thresholds and requirements and rate your organization for the appropriate level in the table below.

0	1	2	3	4
No method to ensure information is current.	Method in place to ensure the information is current for thresholds and requirements but is rarely used.	Method in place to ensure the information is current and used for some thresholds or requirements.	Method in place to ensure the information is current and used for most thresholds or requirements.	Method in place to ensure the information is current and used for all thresholds or requirements.

Previous value (use N/A if nothing completed before) _____

iii. What percentage of your Job Demands would you estimate are currently:

Comparable to a threshold or requirement _____

Up-to-date _____

iv. What percentage of Job Demands assessments exceeded a threshold or exposure requirement in the previous year?

_____

f) Managing diversity

Describe how employees of differing capabilities and work restrictions are considered when establishing and examining Job Demands.

i. What guides these decisions (e.g., legislation, industry standards)?

ii. Is this considered on a case-by-case situation or a part of regular consideration?

Explain how this differs, if applicable, from the Job Demands examination process described above:

g) Remediation of Job Demand issues

i) Describe the general process for remediation of an issue stemming from Job Demands.

ii) Describe any differences that exist if the remediation is in Current Operations (e.g., different processes, standards/thresholds/requirements, tools).

iii) Describe any differences that exist if the remediation is in Design and Innovation (e.g., different processes, standards/thresholds/requirements, tools).

h) Tracking process completion

It is important to track process completion to ensure work has been executed as intended. Consider the following items with respect to tracking process completion.

i) Job Demands examination process tracking

0	1	2	3	4
No examination process completion tracked.	Examination process completion rarely tracked.	Examination process completion occasionally tracked.	Method in place to ensure the information is current and used for most thresholds or requirements.	Examination process completion always tracked.

Previous value (use N/A if nothing completed before) _____

How many job demands examination activities were completed in the recent year (count and percentage of opportunities)?

_____

How often was verification of the examination process completed in the recent year (count and percentage of opportunities)?

_____

ii) Remediation process tracking and verification.

0	1	2	3	4
No remediation process tracked.	Remediation process completion rarely tracked.	Remediation process completion occasionally tracked.	Remediation process completion frequently tracked.	Remediation process completion always tracked.

Previous value (use N/A if nothing completed before) _____

How many remediation activities were completed in the recent year (count and percentage of opportunities)?

_____

How often was verification of the remediation process completed in the recent year (count and percentage of opportunities)?

_____

What is the average time to correct a job demands related issue requiring remediation?

_____

i) Information warehousing/legacy/feedback

Properly storing and allowing access to information helps to prevent issues from repeating and maintains the information in an accessible manner for years to come.

i) Classify the organization on the ability to access past information and data from the examination or remediation of Job Demands.

0	1	2	3	4
No data is accessible once the issue is closed.	Information is only available via request to the specific people involved in the examination.	Information is centrally organized without a long term management plan (e.g., unstable medium, tied to a specific person with no legacy plan). There is limited accessibility and the information is not searchable.	Information is available in perpetuity but is not searchable and/or with limited access.	Information is searchable, available in perpetuity, and accessible by any person interested.

Previous value (use N/A if nothing completed before) _____

ii) How frequently would previous Job Demands examinations be used as feedback for new designs and continuous improvement initiatives?

0	1	2	3	4
Never	Rarely	Occasionally	Frequently	Always

Previous value (use N/A if nothing completed before) _____

iii) Describe how the information is accessed.

iv) Describe who is responsible for storing and maintaining this information.

v) What provisions are in place to ensure that the information is maintained and accessible in perpetuity?

2) Outcomes

Information gathered in the examination of Job Demands needs to be effectively communicated to interested parties. Consider the following with respect to communications within the organization, outside of the organization, and the type of information communicated.

a) Internal communication

i) Rate your organization with respect to the style of Job Demands information that is communicated internally within the organization.

0	1	2	3	4
No information communicated.	Only quantitative information communicated. No consideration for qualitative information.	Quantitative information communicated. Some qualitative information communicated.	Quantitative information communicated and frequent qualitative information communicated.	Quantitative and qualitative information always communicated along with referent information.

Previous value (use N/A if nothing completed before) _____

ii) Indicate how Job Demands information is communicated within the organization.

☐ Email ☐ Memo ☐ Report ☐ Dashboard

☐ Other (specify) _____

iii) Indicate the target audience(s) for the communication of Job Demands information within the organization.

☐ Manager ☐ Supervisor ☐ Upper management ☐ All employees

☐ Only person requesting information ☐ Other (specify) _____

iv) Describe what is involved in the decision on the target audience for communication of internal information (e.g., internally/externally mandated).

b) External communication

i) Rate your organization with respect to the style of Job Demands information that is communicated external to the organization.

0	1	2	3	4
No information communicated.	Only quantitative information communicated. No consideration for qualitative information.	Quantitative information communicated. Some qualitative information communicated.	Quantitative information communicated and frequent qualitative information communicated.	Quantitative and qualitative information always communicated along with referent information.

Previous value (use N/A if nothing completed before) _____

ii) Indicate how Job Demands information is communicated external to the organization.

☐ Memo ☐ Report ☐ Dashboard

☐ Other (specify) _____

iii) Indicate the target audience(s) for the external communication of Job Demands information.

☐ Investor/Shareholders ☐ Monitoring organizations ☐ General public

☐ Other (specify) _____

iv) Describe what is involved in the decision on the target audience for the communication of information external to the organization. (e.g., internally/externally mandated).

c) Job Demands impact on wellbeing and performance

i) Rate your organization with respect to how the outcomes of the impact of Job Demands are reported with respect to employee wellbeing and/or performance outcomes.

0	1	2	3	4
Nothing reported.	Always reported with respect to wellbeing. Nothing reported with respect to performance.	Always reported with respect to wellbeing. Rarely reported with respect to performance.	Always reported with respect to wellbeing. Frequently reported with respect to performance.	Always reported with respect to wellbeing and performance.

Previous value (use N/A if nothing completed before) _____

ii) For instances of scoring less than 4 in (i) above, indicate what percentage of the outcomes of the impact of Job Demands are reported with respect to employee wellbeing and what percentage of the outcomes are reported with respect to performance.

Wellbeing _____ % Performance _____ %

3) External awareness

Work environment reporting requires consideration of the external organizations supporting the work of your organization. This section involves reflecting on the awareness of the Job Demands examination processes and communication of information between your organization and those that are connected to it.[3]

a) Process awareness

i) Indicate your general awareness of the Job Demands examination process of supporting organizations.

0	1	2	3	4
No awareness outside of organization.	Some awareness of tier 1 related organizations.	Awareness of the majority of tier 1 related organizations.	Awareness of all tier 1 related organizations. Some awareness beyond tier 1 organizations.	Awareness of all associated organizations.

Previous value (use N/A if nothing completed before) _____

[3] In the section that follows, tier 1 refers to an organization external to your organization but is directly connected to you. Anything beyond tier 1 is in support of a tier 1 connection and is therefore indirectly connected to your organization.

ii) For each of the tiers that you are aware of, provide the total number of organizations in the tier, the percent of the organizations with a Job Demands examination process, the percent of the operations that a Job Demands examination has been completed, and indicate if this information is estimated or verified.

Tier number	Have a Job Demands examination process (%)	Operations with completed examinations (%)	Verified or estimated

Explanatory notes:

iii) Compare the capabilities of your organization to examine Job Demands with the average capabilities of the tiers of organizations.

Tier	Poorer than	Equal to	Better than	Not possible to rate

iv) For each tier, describe the qualifications of the people completing the Job Demands examination, if known.

b) Information communication

For each tier, indicate the level of communication of Job Demands information between tiers and throughout tiers.

		Information able to communicate		
Communication	In place (y/n)	Remediation	Follow-up	Lessons learned
Directly with organization				
Between tiers				
Through all tiers				

From Assessment to External Reporting

One suggested method for taking the information from the assessment approach to an external report is by writing a summary of the information of each component in the approach as you progress sequentially from start to finish. Scoring tables and graphs could be used to visualize some of the information and complement the reporting.

The text, figures, and tables that follow provide a generic example of how to connect this information in a report format for an arbitrary organization. Examples of ways of visually displaying the different classification levels throughout the assessment approach can be found after the demonstration text. Items connected to the assessment approach are denoted within the text by, for example (1a-i), which indicates the section and corresponding subcomponent in the assessment approach with which the corresponding sentence has been written in the reference.

Work Environment at XYZ – Job Demands

Organization XYZ has recently created a process to examine Job Demands of the work environment *(from 1a-i)*. The process can be generally described as ----------, which shares similarities with ---------- *(from box of 1a-i)*. As we are still in the early stages of implementation, this process is currently completed by request *(1a-ii)*. However, by (date) we expect to have this fully integrated in formal operations. A part of this future improvement will also include being more proactive in the review of design and innovation activities. Our process is currently limited to examining our current operations *(1a-iii)*.

Well-equipped for success

We believe that to ensure a healthy and well-performing workforce we need to identify risks before they happen. That is why our #### director has established a goal of our program to have our # member team of xxxxx certified personnel review the Job Demands for our employees every quarter *(1a-iv, b, c)*. This team is well-equipped and the assessment shows a trend of ongoing improvement. We are currently a leader in our ability to assess physical Job Demands, have recently improved our ability to assess the mental aspect of Job Demands and have a plan in place to improve on our ability to assess the emotional Job Demands.

Being a leader

Our team is constantly looking for new and better ways to understand, communicate, and benchmark the work of our employees, doing so in partnership with our front-line workers *(1d-i, ii, iii, e-i)*. In the past year we have started a task force to review how mental and emotional demands are reviewed and what standards should be met to be world class *(1e-i)* with the goal of improving our comparison information from x% of jobs to x% by the end of #### *(1e-iii)*. Our "Take No Risk" initiative aims to drive our jobs exceeding thresholds to zero by the end of the year and proactively keep it there *(1e-iv)*. Likewise, our "Lifelong Experience" program is an initiative planned to ensure that we exceed legislated requirements for inclusion and diversity of worker capabilities. The lessons learned from these two initiatives will be embedded in our new design and innovation processes that we have in development *(1f-ii)*.

Taking care of our own

Getting better means finding faults and identifying ways to improve. When we find a problem we activate our response team of XXXX, tracking our progress until completion. Our team does x, y, and z to make sure that the issue is taken care of *(1g-i)*. In the past year we completed ## Job Demands examinations, ## remediations, verified XX % as complete, and took an average of # days to resolve an issue *(1hi, ii)*. Our "Close the loop. Close the door" project slated for the coming year addresses our need to improve the tracking of lessons learned in the organization by providing a stable, accessible warehouse of information so past mistakes are not repeated *(1i-i, v)*.

Sharing is caring

At XYZ we believe in setting our employees up for healthy performance – a healthy workforce is a high performing workforce and a happy workforce. We demonstrate this to our workers in our publication of a Job Demand value for each job.

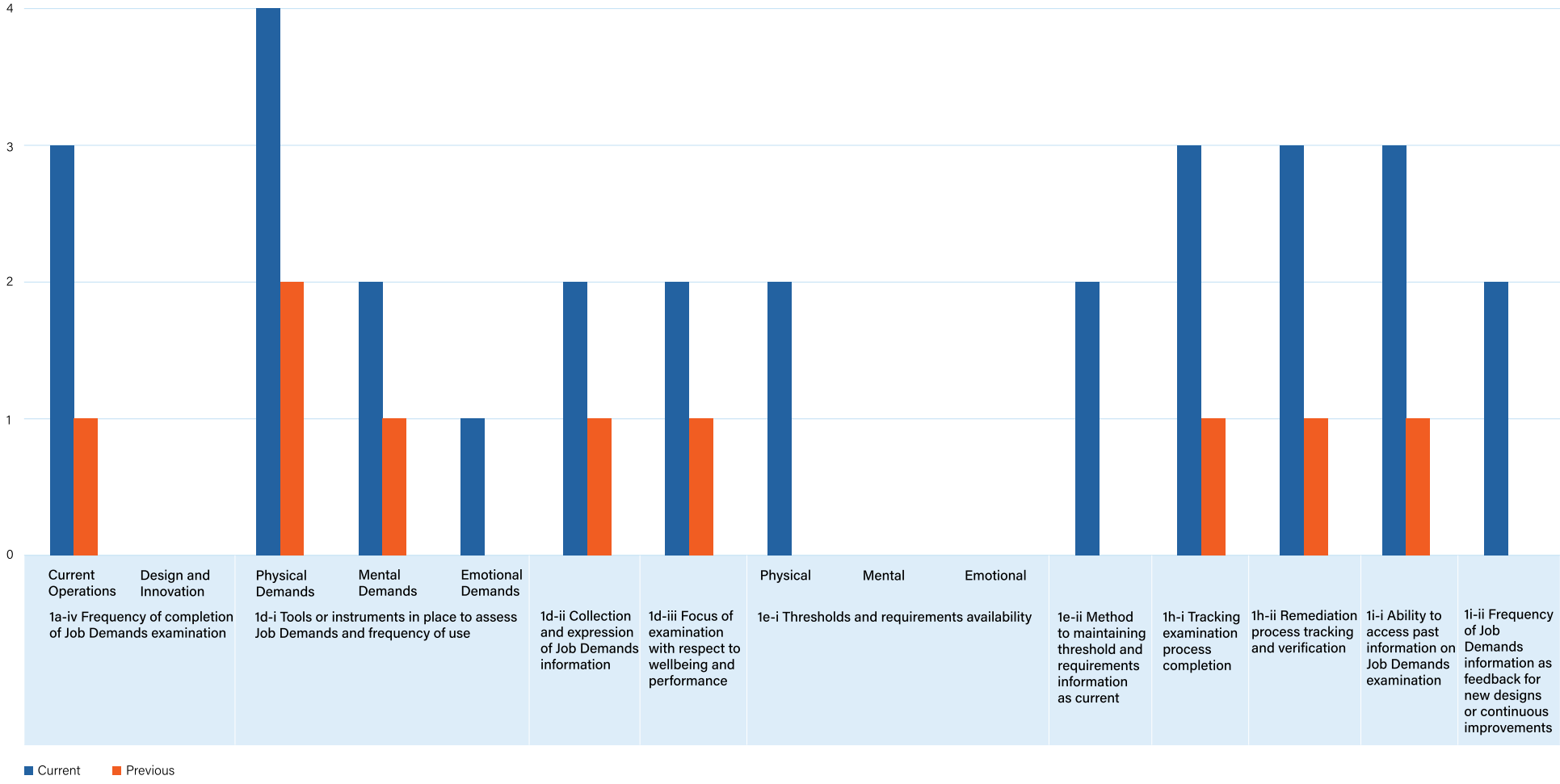
Awareness beyond the company

At XYZ we don't just want to support our employees but make sure those outside of our company are supported properly as well. We are working hard to make sure our house is in order and now expect the same from those that support us and from those we support. That is why we have recently started to require organizations that we directly deal with to demonstrate their commitment to effectively managing their Job Demands (3a-i) and put a process in place to communicate Job Demand information and concerns through the supplier network.

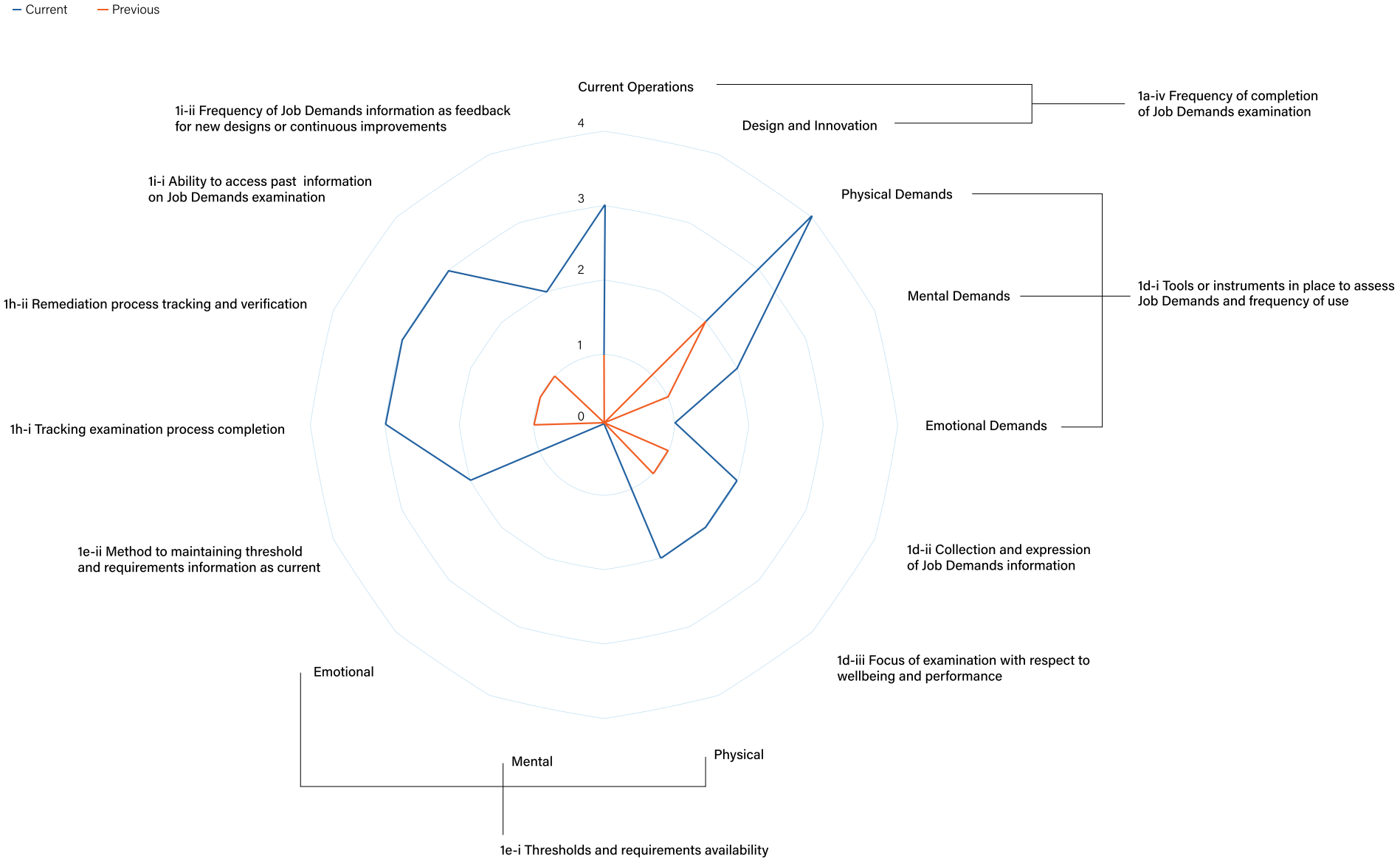
Job Demands Examination Process

Ref#	Focus	Descriptor		1	2	3	4	Interpretation
1a-iv	Frequency of completion of Job Demands examination	Current Operations	Current					Frequently completed proactively as part of a job demands review program
			Previous					Rarely completed. When completed, only initiated by subject matter expert initiative or worker request
		Design and Innovation	Current					Nothing
			Previous					Nothing
1d-i	Tools or instruments in place to assess Job Demands and frequency of use	Physical demands	Current					Always examined for physical demands
			Previous					Many tools/instruments in place but gaps remain to examine demands Occasional examination of demands
		Mental demands	Current					Many tools/instruments in place but gaps remain to examine demands Occasional examination of demands
			Previous					Few tools/instruments in place to examine demands Rarely examined for demands
		Emotional demands	Current					Few tools/instruments in place to examine demands Rarely examined for demands
			Previous					No tools/instruments in place to examine demands Demands not examined
1d-ii	Collection and expression of Job Demands information		Current					Quantitative with occasional qualitative collected and expressed
			Previous					Some qualitative information collected Only quantitative information expressed
1d-iii	Focus of examination with respect to wellbeing and performance		Current					Always with respect to wellbeing Rarely with respect to performance
			Previous					Always examined with respect to wellbeing No performance consideration
1e-i	Thresholds and requirements availability	Physical	Current					Thresholds or exposure requirements in place for some Job Demands
			Previous					No thresholds or exposure requirements in place
		Mental	Current					No thresholds or exposure requirements in place
			Previous					No thresholds or exposure requirements in place
		Emotional	Current					No thresholds or exposure requirements in place
			Previous					No thresholds or exposure requirements in place
1e-ii	Method to maintaining threshold and requirements information as current		Current					Method in place to ensure the information is current and is used for some thresholds and requirements
			Previous					No method to ensure that information is current
1h-i	Tracking examination process completion		Current					Examination process completion frequently tracked
			Previous					Examination process completion rarely tracked
1h-ii	Remediation process tracking and verification		Current					Remediation process completion frequently tracked
			Previous					Remediation process completion rarely tracked
1i-i	Ability to access past information on Job Demands examination		Current					Information is available in perpetuity but is not searchable and/or with limited access
			Previous					Information is only available via request to the specific people involved in the examination
1i-ii	Frequency of Job Demands information as feedback for new designs or continuous improvements		Current					Occasionally
			Previous					Never

Current-to-Past Performance Comparison



Current-to-Past Performance Comparison



Outcomes

Ref#	Focus	Descriptor		1	2	3	4	Interpretation
2a-i	Style of Job Demands information communicated internally		Current					Only quantitative information communicated Some qualitative information communicated
			Previous					Only quantitative outcomes communicated No consideration for qualitative
2b-i	Style of Job Demands information communicated externally		Current					Only quantitative outcomes communicated No consideration for qualitative
			Previous					Only quantitative outcomes communicated No consideration for qualitative
2c-i	Reporting of outcomes with respect to wellbeing and/or performance		Current					Always reported with respect to wellbeing Rarely reported with respect to performance
			Previous					Always reported with respect to wellbeing Nothing reported with respect to performance

External Awareness

Ref#	Focus	Descriptor		1	2	3	4	Interpretation
3a-i	Awareness of Job Demands examination processes of supporting organizations		Current					Minimal awareness of tier one related organizations Minimal to no awareness beyond tier one related organizations
			Previous					No awareness outside of organization

CSA Group Research

In order to encourage the use of consensus-based standards solutions to promote safety and encourage innovation, CSA Group supports and conducts research in areas that address new or emerging industries, as well as topics and issues that impact a broad base of current and potential stakeholders. The output of our research programs will support the development of future standards solutions, provide interim guidance to industries on the development and adoption of new technologies, and help to demonstrate our on-going commitment to building a better, safer, more sustainable world.

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