

## 6 Step Guide: Identify, Analyze, and Act on Skills Intelligence Data in Healthcare



### Introduction

Data is reshaping our lives and work. Whether it's collecting real-time data from machinery like a jet engine to enhance performance or tracking online browsing activity to personalize advertising, data is uncovering new insights and guiding decisions. In today's healthcare landscape, data plays a crucial role in shaping strategy, improving patient outcomes, and driving operational efficiency.

Just as data from medical devices informs treatment decisions, skills intelligence data empowers Human Resources (HR) teams to strategically manage talent. By understanding the skills required for healthcare roles, HR can enhance recruitment, retention, and employee development, ultimately leading to better patient care.



44%

of workers' core skills  
are expected to change  
in the next five years



Source: World Economic Forum, *Future of Jobs Report 2023*.

## Why Skills? Why Now?

Healthcare is one of the most rapidly evolving sectors, driven by technological advancements, changing patient demographics, and evolving regulatory landscapes. The demand for specific skills in healthcare is constantly shifting, making it essential for organizations to adapt. According to projections, 44% of all workers will require reskilling by 2025 and this trend extends to healthcare. Non-technical skills such as empathy, communication, and adaptability are becoming increasingly essential for healthcare professionals, alongside technical expertise. Recognizing this, healthcare organizations must prioritize skills intelligence to ensure their workforce remains agile and competent.

## What is Skills Intelligence Data?

In the healthcare sector, skills intelligence data refers to insights derived from analyzing the skills needed within an organization against those possessed by employees. This data guides HR in various crucial functions, including recruitment, training, and succession planning. This white paper explores how healthcare HR teams can unlock skills intelligence data through a tailored 6-step process.

**Skills Intelligence Data:**  
The gap between your  
workforce's existing  
skills and capabilities  
versus current needs  
and future demands of  
the organization.




Figure 1: Skills gap analysis.



## Step 1: Identify Skills for Existing Roles

The initial step involves modeling the ideal skill set for existing job roles within the organization. Job role analysis methods are used to create these models, focusing not on exhaustive lists of tasks but on understanding how successful employees spend their time and the underlying skills that contribute to their success. It is important to include clinical staff and managers to pinpoint both technical competencies and critical non-technical skills such as teamwork and problem-solving. By understanding the unique skill requirements of each role, HR can ensure that the right people are in the right positions to deliver quality patient care.

The key to successfully running these interviews is to focus on real-world examples both of successes and failure, in other words, a lot of tell me about a time when..., and to extract the skills that led to success or would have been helpful in to avoid failures. As this process is applied across multiple roles, it's important to look for transferable skills. These are typically soft or power skills that start to show up as important to success across multiple roles – this will become more important as you move through the process. 

In addition to identifying skills, documenting and tracking regulatory compliance requirements in healthcare is of paramount importance due to the highly regulated nature of the industry. Failure to comply with these regulations can result in severe consequences, including fines, legal penalties, loss of accreditation, and reputational damage. Moreover, compliance ensures patient safety, data security, and quality of care delivery. By tracking regulatory requirements proactively, healthcare organizations can mitigate risks, maintain operational efficiency, and uphold their commitment to providing safe and effective healthcare services to patients.



## Step 2: Identify Emerging Skills Requirements

The next step is to identify the skills your workforce needs to stay competitive in the future. Given the rapid advancements in medical technology and healthcare delivery, healthcare organizations must anticipate future skills needs. Successful organizations continually evolve by penetrating new markets, introducing additional services and procedures and improving existing ones. Skill forecasting, though not an exact science, begins with a thorough grasp of the organization's strategic direction and the skills essential for its execution along with an understanding of how the market is changing. Strategic planning methodologies and tools such as scenario planning, and PESTLE and SWOT analysis are useful for surfacing future skill requirements. Once these skills are identified, they then need to be mapped to specific roles in the organization or “parking lotted” to designate they don’t have a home and the organization needs to consider either extending existing roles or creating new ones. So, it is also crucial to involve those who have a strategic view of each role in the process, what it will need to look like and which skills will be required in future years.

## Step 3: Define Skills & Proficiency Levels

To transform skills definitions into actionable data, a simple word or binary description of a skill is insufficient. Skills need to be defined and measured, which requires a clear description of the skill and a continuum of proficiency levels. Ideally, these proficiency levels (See Figure 2) could include evidence indicators expressed as action verb statements. Action verbs are better suited for assessing whether a person has demonstrated a skill at a specific level or not. For each job role, a proficiency level is selected to define the expected skill performance within that role, determining which skills and proficiency levels are necessary for successful job execution.

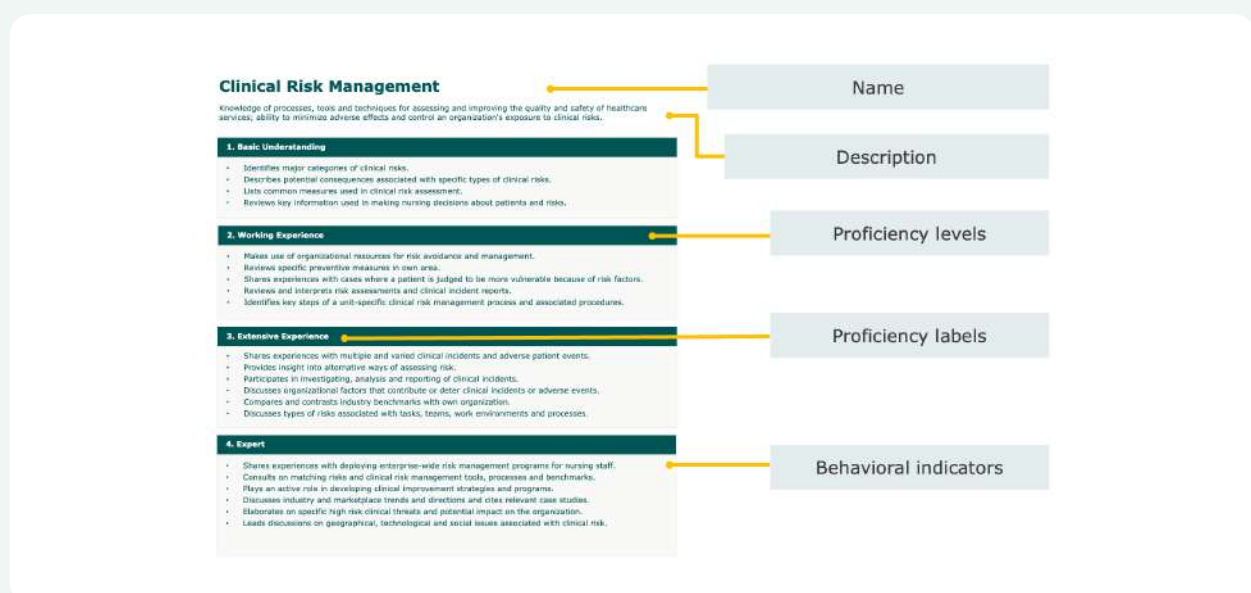


Figure 2: Skill definitions with proficiency levels.

## Step 4: Validate Skill Profiles

Once a skill profile is developed for a role and proficiency levels are defined, there's often a need to confirm or further narrow the skills and to decide what level of proficiency of a skill is needed for a given role. At Lexonis, we have had increasing success with using our online survey tools to scale this process and include a much broader set of stakeholders from across the organization. The data that we capture using our [online tools](#) helps us to answer the following questions:

- Which skills did most people select for the specified job?
- What proficiency levels did they choose and what was the average proficiency level?
- What was the priority ranking for each skills chosen i.e. how important did people rate the skills for the job?

**Job Role Survey / Nursing Jobs / Staff Nurse - RN**

Below is a set of competencies which are to be considered for this job role. Select only those which you believe are critical for the role.

- To see all information, hover over the competency name to see the full description in a pop up box.
- Once you have decided on a competency, use the adjacent grid to identify the appropriate level of proficiency of the competency for this role.
- Hover over the grid numbers to the competency to view the proficiency level information in a pop up box.
- Click in the grid to choose the Competency and corresponding Proficiency Level. Your choice will be automatically saved and those which you have chosen will show with a green check mark.
- If you make a mistake, click the green check mark to deselect your choice.

**Description**

- Provides nursing care of patients; assesses patient needs, ensures patient safety, devises, implements and monitors a nursing plan of care.

**Responsibilities**

- Providing support to medical team in synthesizing assessment data to identify problems, formulate goals/outcomes, and develop plans of care for patients, and families.
- Administering medications and treatments; monitoring for side-effects and effectiveness of the treatment prescribed; documenting patient history, symptoms, medication, and care given.
- Collaborating with other medical staff to assess and monitor the physical, psychological, and social needs of patients.
- Comforting patients, family members and care givers; educating them on patient's condition, care given, medication, self-care skills, and next steps.

**Functional Competency Framework**

Competency	0	1	2	3	4
Nursing					
Clinical Decision Making and Judgement				✓	
Clinical Risk Management				✓	
Diagnosis					
Health Information Documentation - HNU					
Health Teaching and Health Promotion					
Healthcare Knowledge					
Medical Devices and Tools					
Medication Administration and Prescription					
Nursing Assessment and Care - HNU					
Nursing Code of Ethics					
Nursing Resource Management					

**Working Knowledge**

- Prepares effectively for the testing and explains procedure to patient.
- Assists providers in conducting diagnostic tests.
- Records information obtained from diagnostic tests accurately.
- Examines the patient and consults with providers to determine additional testing.
- Communicates effectively with patient regarding condition.

Figure 3: Interface to capture feedback on job requirements.

For this approach to work the interface must be very simple to use – ours is. The user reads the instructions provided and for the specified job (Information Security Architect) they can review the descriptions of the skills and behaviors, select them if they are deemed critical to success for the job; they can select the proficiency level and provide feedback on the job description, key responsibility statements and other client-defined fields. For instance, in this example, the participant has chosen Application Security at proficiency level 3 as a skill critical for success in this job, based on the description of the behaviors for that proficiency level.



## Step 5: Update or Create a Job Architecture

A job architecture (sometimes called job structure or job catalogue, or hierarchy) refers to a schematic of how jobs within an organization relate to one another. Job architecture typically includes: job function, job families job levels, job titling conventions and career paths. movement.

### Job Functions

Description of roles based on recognized professional domains or areas of expertise. These include operations, finance, engineering, procurement, and more.

### Job Families

Job families are a way to categorize roles that perform similar types of work and may require similar skills, knowledge, and/or expertise. Historically, job families were a subset of job functions, but today with matrixed organizations and organization structures, job families may include roles from across multiple functions.

### Job Levels/Bands/Grades

Job levels denote the stature of a position such as entry-level, mid-level, senior-level or executive. These levels provide insight into an individual's progress in their career journey and a perspective on potential growth opportunities within and between families.

### Titling Conventions


The titling convention provides governance based on a set criterion as to how a role will be designated with a universal set of descriptors like specialist, manager, or director. These conventions help organizations avoid title creep where titles are negotiated or designated without basis.

### Career Pathways

This refers to creation of potential career advancement paths, either vertically within a function (promotions), horizontally across functions (transfers) or diagonally (promotion and/or transfer). Career pathways provide visibility of traditional, linear progression routes and non-linear pathways that reflect an aspiring employee's fit based on their transferrable skills or potentially adjacent skills.

A job architecture provides governance for talent management applications including workforce planning, career paths, compensation and succession planning. Without a systematic job architecture, organizations run the risk of building their talent management strategy on a faulty or inequitable foundation.

## Step 6: Assess Individual Skills

Simply identifying which skills and competencies are needed for business success is not very useful if the organization does not know which ones their current employees possess and the degree to which they possess them. The next critical step is to assess and validate employee skills levels. Historically, organizations have captured their skills data in spreadsheets or not at all, but there is much new technology available that has made it possible to do this at scale and more easily such as Lexonis Talent  Scope. There are several ways to assess and capture the assessment of employee skills. The following are some examples along with key characteristics, but this is not an exhaustive list:

### Multiple-choice Exams and Tests:

- Metrics: Well-defined - pre-set questions and answers with score-to-level mappings.
- Repeatability: Very good - same score returns same level.
- Flexibility: Poor - only achieved by expanding range of questions asked.
- Type: Objective.

### In-depth Structured Interviews:

- Metrics: Defined - interview has a defined structure and metrics for assigning assessment levels.
- Repeatability: Good - defined structure of interview ensures that the interviewees' experience will be largely similar.
- Flexibility: Good – interviews have scope for tailoring questions and assessment to interviewee responses.
- Type: Mostly objective, elements of subjectivity.

### Self-Assessment with Manager Validation (Figure 4):

- Metrics: Limited – only metrics in place are based on skill description interpretation.
- Repeatability: Average – limited number of assessors, plus capacity to have a detailed discussion of assessment allow the assessment to be repeated for individuals.
- Flexibility: Good – Self-assessor can draw on different evidence grounds based on their own experiences, but manager validation ensures that these grounds are quality-checked for accuracy.
- Type: Mostly subjective, elements of objectivity.

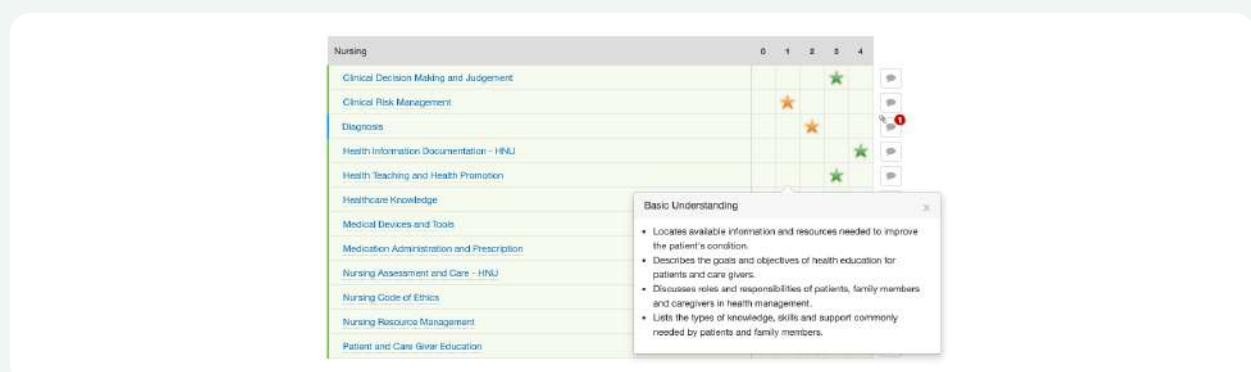


Figure 4: Self-assessment with manager validation.

## Peer-Feedback

- Metrics: Limited – Peer feedback has defined assessment structure, but content of assessments are only constrained by assessor interpretations of skill definitions.
- Repeatability: Limited – each assessment is the result of a unique set of assessors, meaning that each assessment will be nearly unique.
- Flexibility: Very good – plurality of perspectives from different assessors ensure that the overall assessment will provide a very broad set of assessment inputs for the individual.
- Type: Subjective.

## Mining the Data

Once the assessments are complete, there is a lot of data available to better understand what the organization's capability looks like. The following are a few examples of the insights revealed by utilizing skills intelligence data.

## Individual Skills Gaps

An individual employee's skills gaps (See Figure 5), refers to the difference between the skills that are required for them to perform their job successfully and the skills and levels of proficiency that they possess. This is why the definition of job roles using skills with proficiency levels is so important – it is not possible to quantify a skill gap if no proficiency levelling is in place. This data can be used by the employee to direct their learning and by managers to inform coaching and performance conversations.

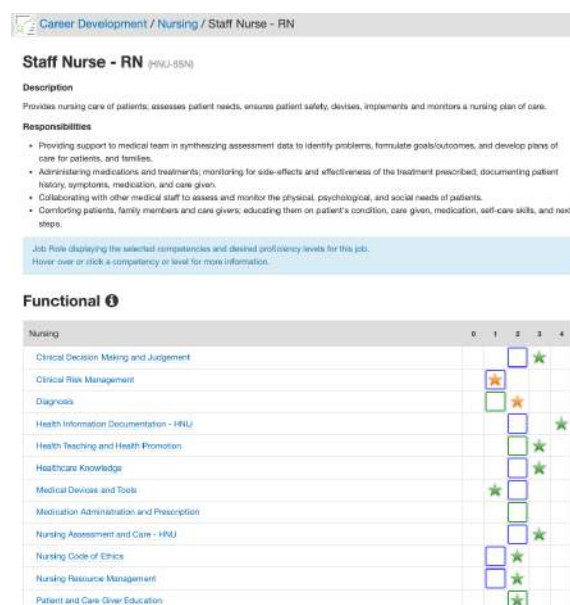


Figure 5: Individual skills gap analysis.



## Career Pathways

Once skill data is set, software, like Lexonis TalentScape, can use that data to highlight other roles that may be a good fit for an individual's career development based on their skills. In Figure 6, you can see how roles are presented as a traditional progression; roles can also be suggested based on the individual's matching skills.



Figure 6: Career pathways.

## Capability Grid and Compliance Tracking

Software such as Lexonis TalentScape can include views such as the Capability Grid (see Figure 7), which provides an overview of the organization's capability against each of the skills and levels included in the skills framework. This data can be used to identify areas of strength and to spotlight capabilities that require development or recruitment for the organization to successfully deliver its objectives.

Views such as the Capability Grid are also useful for compliance tracking. Used for this purpose, each employee skill may have an expiry date and for regulatory compliance purposes, views such as the Capability Grid can surface skills that are due to expire and that will require updated certification, qualification and refresher training. Skill assessments can also be configured to incorporate different types of evidence, which for instance, may be a regulatory requirement for that skill.

The screenshot shows the 'Functional' tab of the Capability Grid. It displays a table with skill categories on the left and levels (0, 1, 2, 3, 4) on the top. Green circles with numbers indicate the current level of capability for each skill.

Functional	0	1	2	3	4
Cardiology					
Cardiac Patient Care			1		
Heart Function Monitoring			1		
Customer Support					
Customer Interaction			2	1	1
Healthcare					
Alternative Medicine					1
Clinical Policies and Standards			2	1	1
E-Health Information Systems			2	1	1
Health Information Concepts and Terminology					1
Healthcare Center Operations					1
HEALTHCARE INDUSTRY					
Healthcare Information Systems				2	1
Healthcare Regulatory Environment			2	1	
Infection Control					1
Medical Ethics			2	1	1
Medical Record Keeping			2	1	1
Medical Records Systems			2	1	1
Patient Rights			2	1	1
Homecare					
Home Based Healthcare Services					1

Figure 7: Capability Grid.

## Organizational Skills Gaps

At an organizational level, when there is a skills gap, it means that there is a mismatch between the skills that are needed for the organization to be successful and the skills that are currently available through its workforce. Skills data can be aggregated to show when employees are assessed below the required skill level for their job. In Figure 8, the number in each circle represents the number of employees assessed and validated at that level who require a higher level of proficiency based on their job role. This data provides a very clear roadmap for where an organization needs to develop or hire new skills.

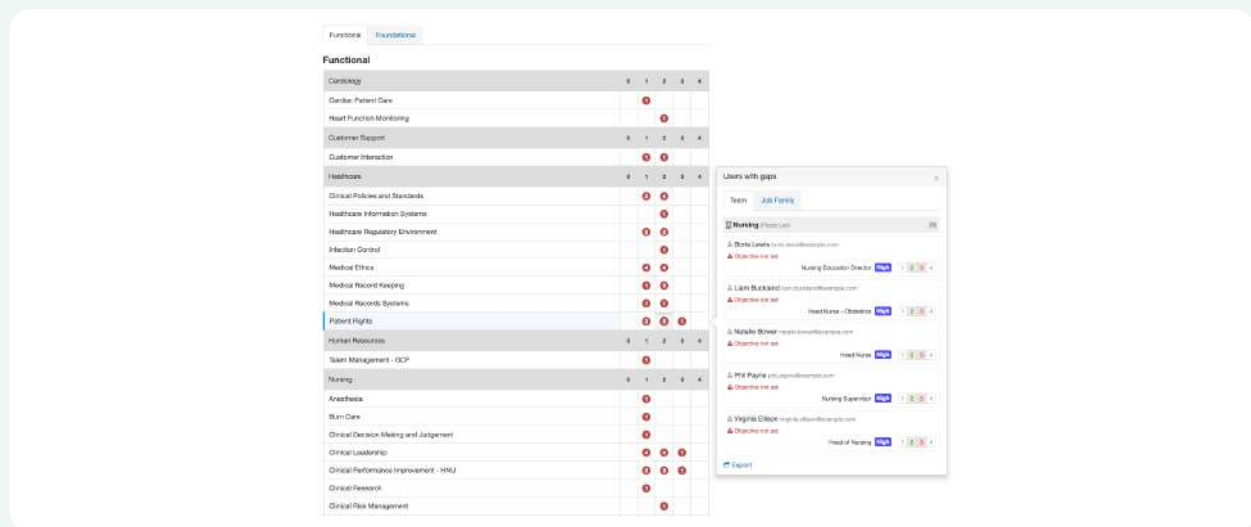


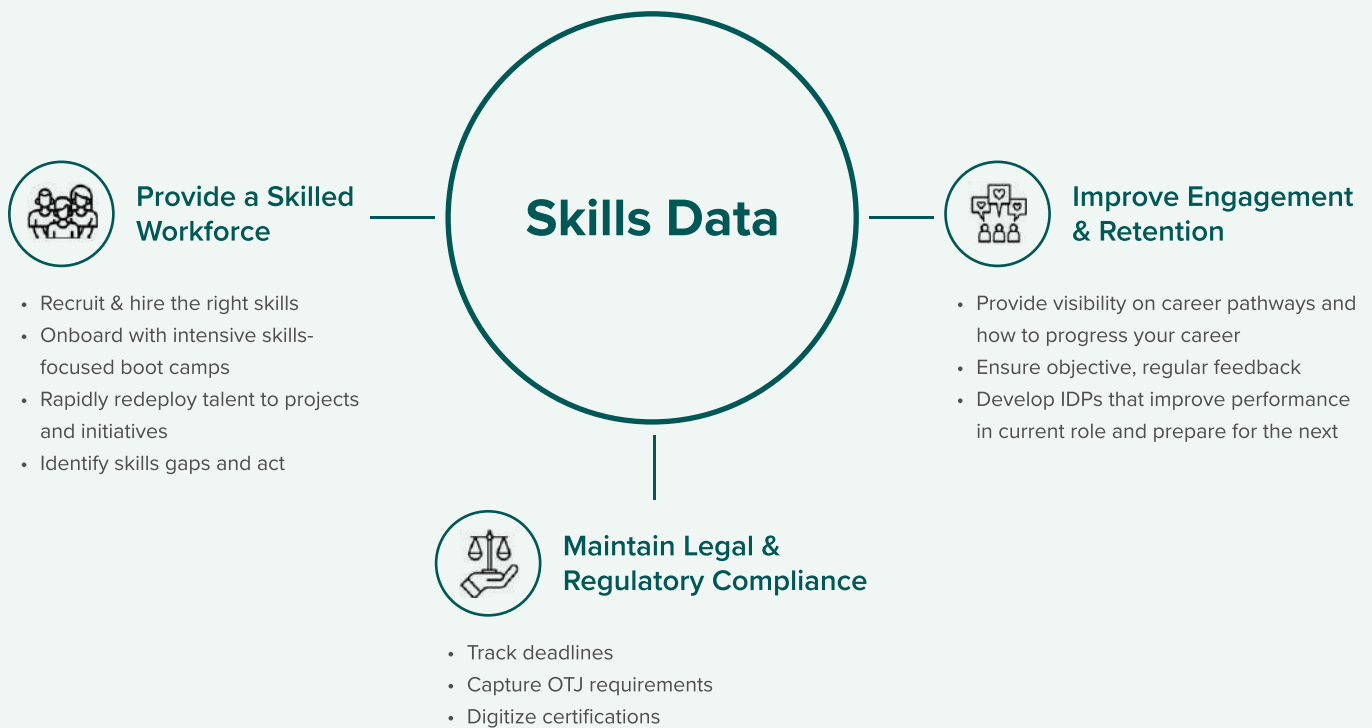
Figure 8: Organizational Skills Gap Analysis.

## Conclusion

For organizations to succeed in an increasingly complex and rapidly changing job labor market requires new tools and approaches. HR teams need data that will:

- Help to focus internal or external hiring efforts to close critical skills gaps.
- Provide visible and actionable career pathways that support employee engagement.
- Ensure employees get objective, constructive feedback to improve engagement and retention.
- Surface business-led learning and development needs and the programs needed to address them.
- Provide visibility of certifications, credential management and on-the-job training to ensure legal and regulatory compliance.

Capturing and acting on skills intelligence data is a very powerful approach to fulfilling the above requirements that and one that provides HR and Talent Management teams data that they can act on. Furthermore, such data boosts organizational performance and enable HR to play a strategic role within the organization.



**Are you ready to take the next step  
in your skills initiative? Let's talk.**

**312 961 2526**

**lexonis@lxdcentral.com**

