Pearson Online Learning Services

COVID-19 Education & Employment Impact:

The Growing Importance of Upskilling

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Actionable Take-Aways

The following educational trends will follow the needs in the workforce as a result of the impact of COVID-19 and the recovery process. Institutions should consider the following actions.

Create Alternative Credential Programs	Partner with Industry	Launch High-Impact Programs
Rationale: • Speed-to-market with emerging skills • Students need up-skilling and re-skilling in key areas, not necessarily full degree programs • Student uncertainty in a time of big changes leads to lower commitment levels for long-term and large financial investments in education • Students are looking for flexibility	**Rationale:** • Employers are looking to address skills gaps of current employees • IT, Data, and Security are strong focus areas in multiple fields • Employers are looking to fulfill needs of their workforce, but do not have the expertise in education – partnerships are key	**Rationale:** • Programs should have entry pathways for career changers due to the higher number of students in this category • All jobs need increased focus on IT due to the "digital transformation," with special needs in data, cybersecurity, programming languages • Healthcare focus is on nursing specializations and a surging need for Speech-Language Pathologists • All business areas report a growing need for Project Management, Process & Analysis, and Strategy

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Actionable Take-Aways *(Continued)*

Institutions should consider the skills and field sub-areas on the following slides to operationalize the emerging or focused skills to existing degrees in the following ways:

- **Adjusting the core curriculum** through relevant assignments or projects

- Adding **new concentrations or tracks** to programs

- Adding in-demand **industry certifications as part of the curriculum**

- Partnering with industry field leaders for specialized **upskilling or reskilling**

- Launching **alternative credential programs** that target these areas.

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COVID-19 Employment Impact

COVID-19 Employment Impact: Future Work Trends

Navigating New Skills

- Separation of critical skills and roles
- Transition from designing for efficiency to designing for resilience
- Increase in organization complexity

- **Skills gaps** will become apparent in the workplace, with employers seeking current employees and new hires that are flexible to upskilling.
- Employees will seek educational opportunities to **quickly upskill**.
- These educational opportunities will most likely be in the form of **alternative credentialing**.

Changing Roles

- 32% of organizations are replacing full-time employees with contingent workers
- (De-)Humanization of employees

- Contingent workers are more cost-saving and flexible. This requires remaining **full-time employees to upskill to fit changing organization needs.**
- More employers are viewing employees as "workers first and people second." Other employers are recognizing the humanitarian crisis of the pandemic.

Data Trends

- Expanded data collection and use

- As employers collect more data, this will **drive the need for more within the data fields** (data science, data analytics, etc.)
- Employees might need to **upskill within a data specialty area**

Social Roles

- Expanded employer role as social safety net
- Increase in remote working
- Emergence of new top-tier employers

- **Physical and mental well-being** are areas employers are focused on to assist their current workforce
- **Flexible work systems** will continue beyond the immediate pandemic crisis and will need **additional infrastructure and IT support**
- Employees and applicants will judge organizations by how they handled the pandemic

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COVID-19 Employment Impact
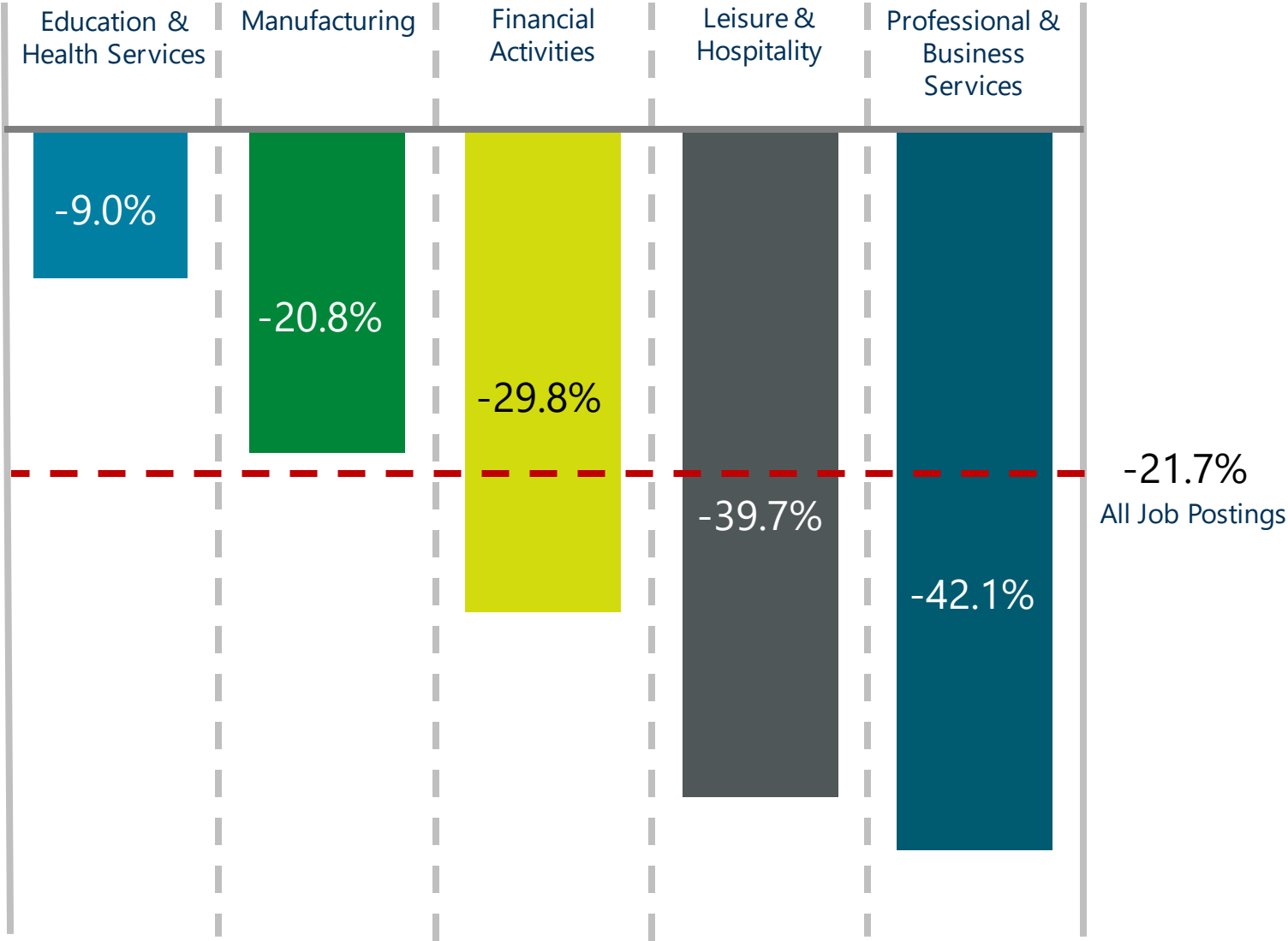
As of **September 4, 2020, total job postings in the US decreased by 21.7%** since January 1, 2020.

- Education & Health Services   -9.0%

- Manufacturing   -20.8%

- Financial Activities   -29.8%

- Leisure & Hospitality   -39.7%

- Professional & Business Service   -42.1%

Source: Burning Glass Technologies

COVID-19 Employment Impact

These sectors represent the top 3 industries where demand exceeds supply, reinforcing that these continue to be great priority areas for growth and innovation.

	Job Postings	Demand vs. Supply	Most In-Demand Fields
Healthcare/ Nursing	Increased demand during the COVID-19 crisis with highest number of job postings of all industries	Demand > Supply by **44%** Industry with largest supply/demand discrepancy	• Registered Nurses • Other Nursing Specialties (Intensive/Critical Care Nurse, Medical Surgery RN, OR RN, etc.) • Speech-Language Pathologists
Business	Industries where business occupations' unemployment rates are lowest including: Educational Services, Information, Management of Companies/Enterprises, Transportation & Warehousing, Utilities, and Wholesale Trade	Demand > Supply by **21%** #2 Industry with supply/demand discrepancy	• Project Management • Business Process & Analysis • Business Strategy
Information Technology	Due to recent increases in online shopping, demand in multiple areas of IT has grown, from web development to cybersecurity	Demand > Supply by **17%** #3 Industry with supply/demand discrepancy	• All job fields growing due to digital transformation • Programming Languages • Software Development, Skills, & Credentials

COVID-19 Employment & Economic Recovery

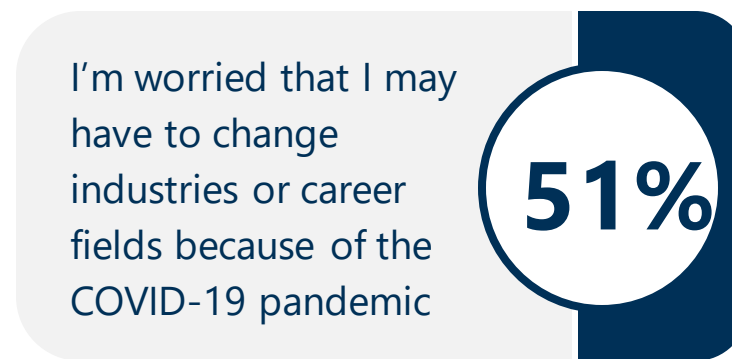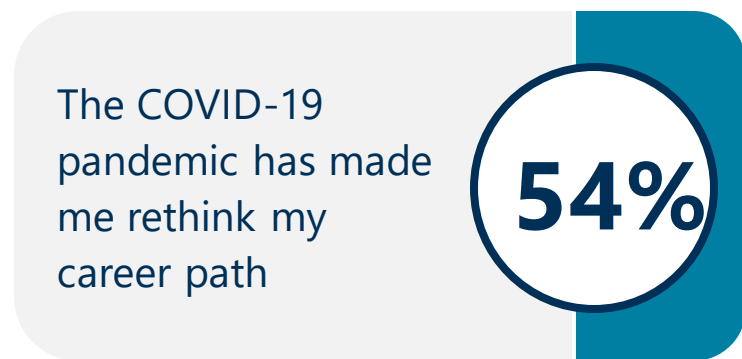Pearson

COVID-19 Employment and Economic Recovery
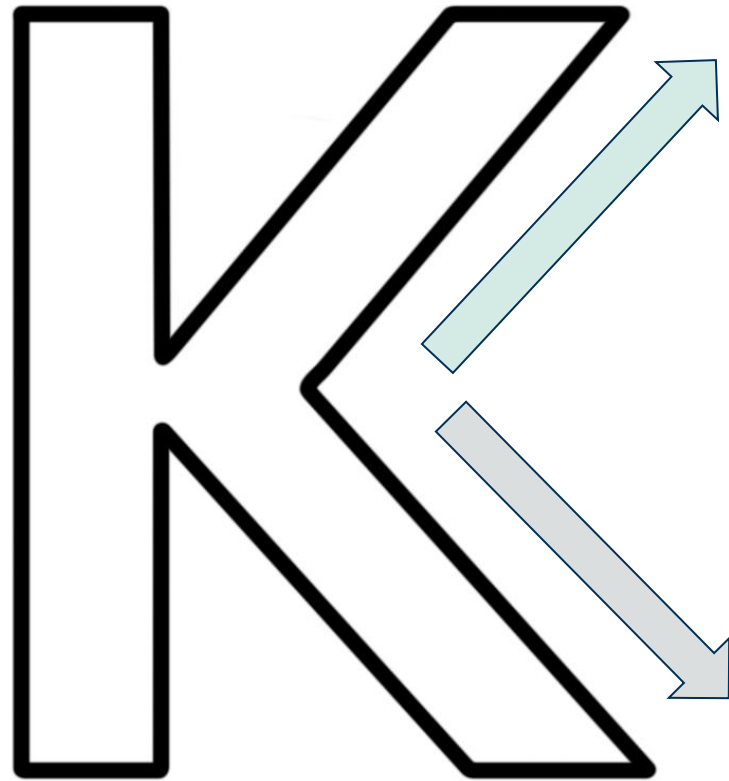
- Higher levels of education
  - 63% of workers with at least a bachelor's degree worked entirely from home
- Professional jobs and industry sectors able to work remotely
  - Sectors ranging from tech to finance to public service are not directly impacted by the shutdown
- Some industries will continue to thrive as their products or services directly support work, education, health, or simply daily life in a pandemic
  - Technology
  - Retail
  - Software

- Lower levels of education
  - Among workers with a high school degree or less, 20% worked entirely from home, as did 27% of workers who have completed some college or an associate degree
- Remote work not possible
  - Sectors where remote work is not possible, including hotels, travel, entertainment and restaurants, have workers facing shortened hours or outright unemployment
- For some industries there is no end in sight to the economic turmoil
  - Travel
  - Leisure/Entertainment
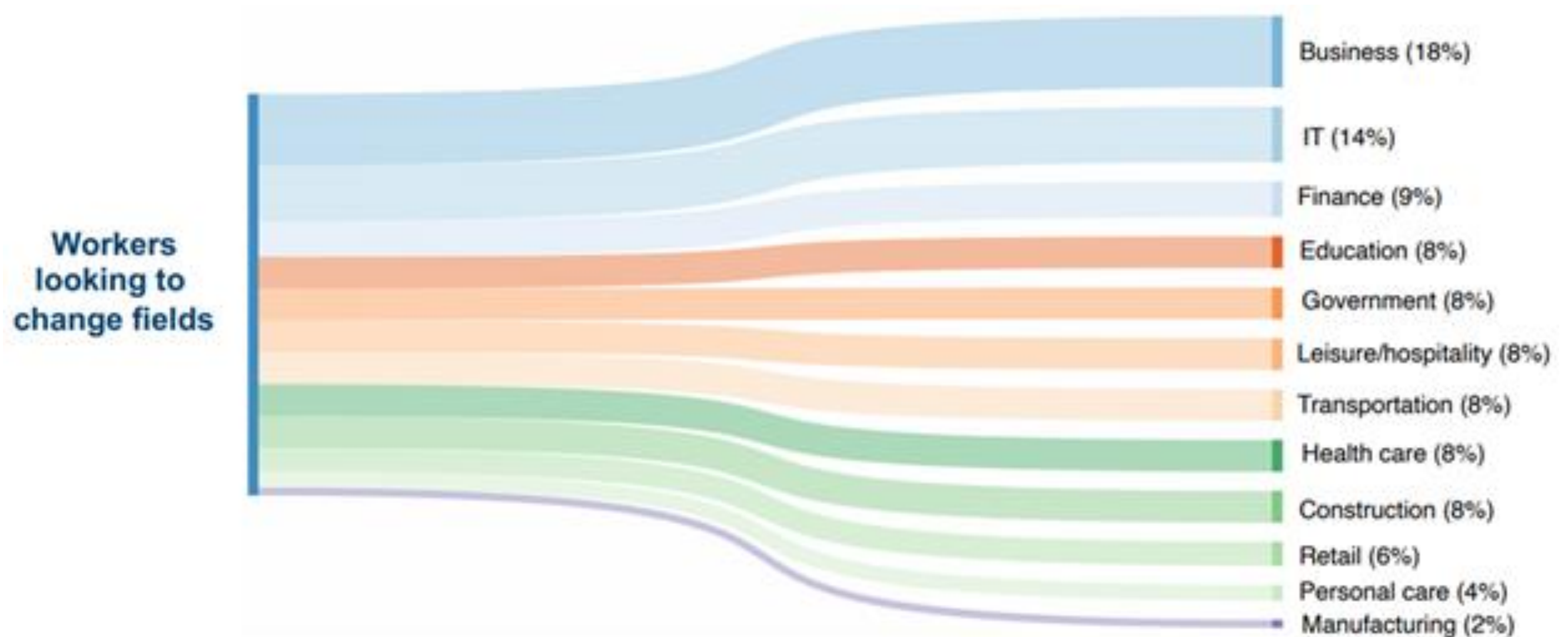 - Hospitality
  - Food Services

COVID-19 Employment and Economic Recovery

- According to a recent survey we conducted with Google, workers in **Healthcare** and **Education** feel more secure in their jobs compared to those in other industries, so their desired learning is focused on upskilling to stay relevant and competitive in the marketplace.

- However, those in other industries are most interested in switching industries completely and we need to make sure we are targeting them appropriately with messaging related to a career switch.

- Strada Center for Consumer Insights Public Viewpoint survey also finds that workers in **Business**, **Education**, and **Healthcare** are the least likely to change fields, while workers in **Information Technology**, **Finance**, and **Manufacturing** jobs are the most likely to change fields.

- According to Pearson's Global Learner Survey, the majority of people in the U.S. are rethinking their career.

The COVID-19 pandemic has made me rethink my career path   **54%**

I'm worried that I may have to change industries or career fields because of the COVID-19 pandemic   **51%**

COVID-19 Employment and Economic Recovery

- Workers who are looking to change fields are most interested in transitioning into Business and IT
- The most important reason for wanting to change fields was to improve finances
- The credentials most attractive to them are bootcamps and certificates

Workers looking to change fields

Business (18%)
IT (14%)
Finance (9%)
Education (8%)
Government (8%)
Leisure/hospitality (8%)
Transportation (8%)
Health care (8%)
Construction (8%)
Retail (6%)
Personal care (4%)
Manufacturing (2%)

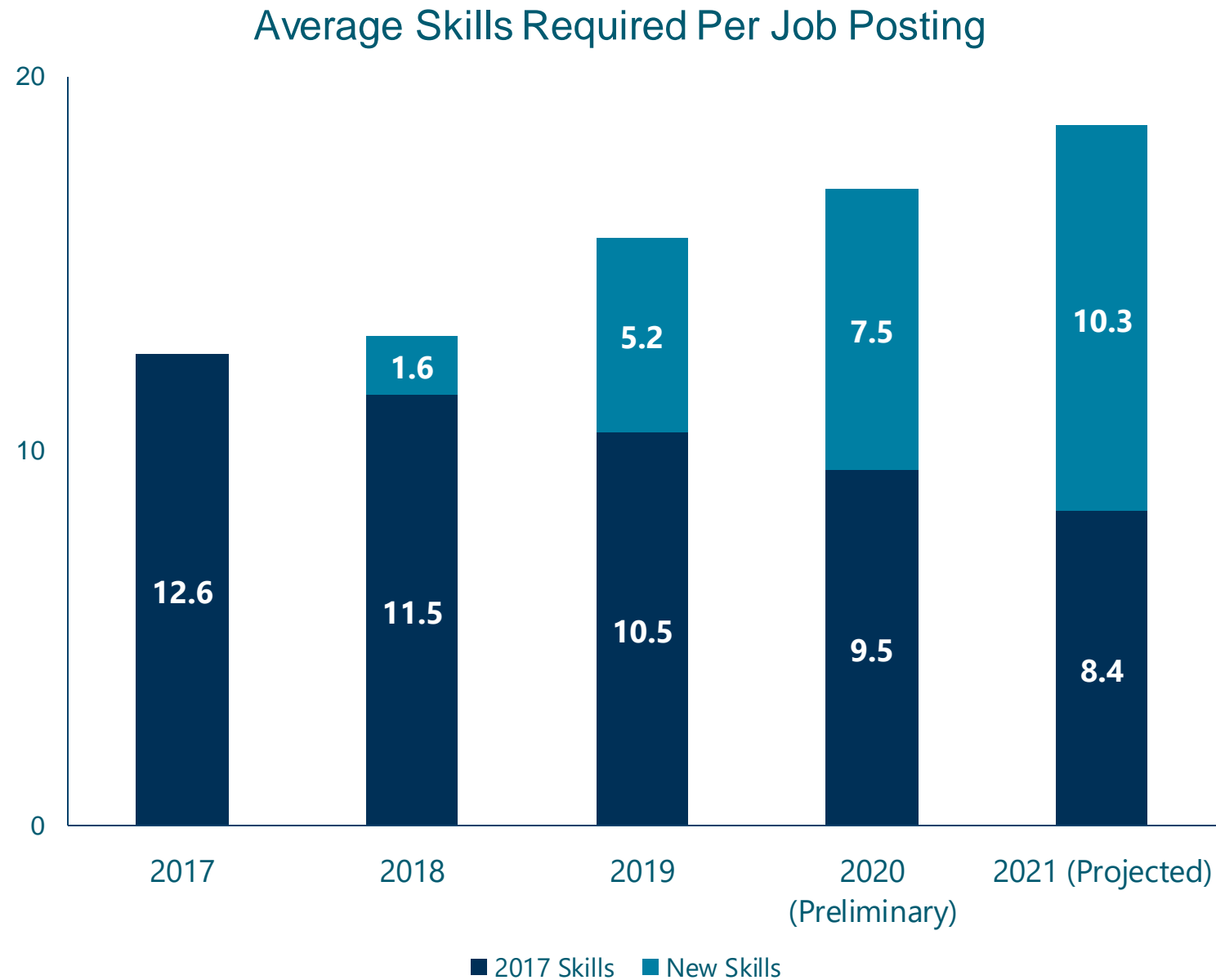# Addressing Upskilling & Skills Gaps

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Addressing Upskilling & Skills Gap

High unemployment will likely increase the skills gap, as employers won't be able to hire everyone back, can afford to be picky, and will favor workers with future skills. By seeking candidates with high-growth premium skills, companies will have a unique opportunity during the recovery to build the workforce they need for the future.

Skills Gap	Upskilling	Reskilling
The divide between an organization's skill needs and the current capabilities of its workforce or jobseekers	The process of learning new skills or of teaching workers new skills at their current jobs	The process of learning new skills in order to perform a different job, or of training people to do a different job

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Addressing Upskilling & Skills Gap

Average Skills Required Per Job Posting

Year	2017 Skills	New Skills
2017	12.6	
2018	11.5	1.6
2019	10.5	5.2
2020 (Preliminary)	9.5	7.5
2021 (Projected)	8.4	10.3

Legend: ■ 2017 Skills ■ New Skills

Source: Burning Glass Technologies
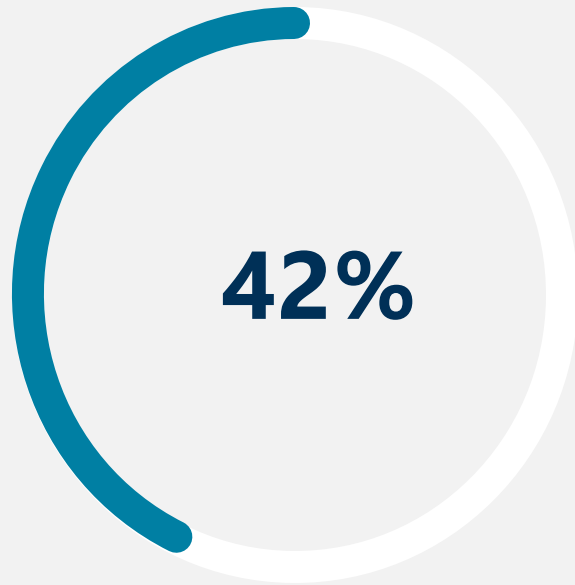
Increasing New Skills

- Only 16% of new hires possess the skills needed for their current jobs and the jobs of the future

- Existing roles may require up to 10 new skills by 2021

- The number of skills required for a single job is increasing by 10% year over year

Addressing Upskilling & Skills Gap

42%

The World Economic Forum estimates that 42 percent of the skills required from the global workforce will change between 2018 and 2022

54%
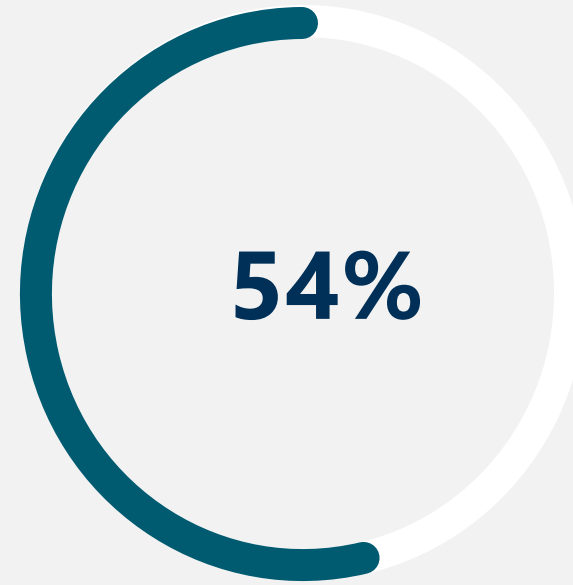
By 2022, no less than 54 percent of all employees will require significant reskilling and upskilling

30%

Gartner TalentNeuron data finds over 30% of the skills needed three years ago will soon be irrelevant

Addressing Upskilling & Skills Gap

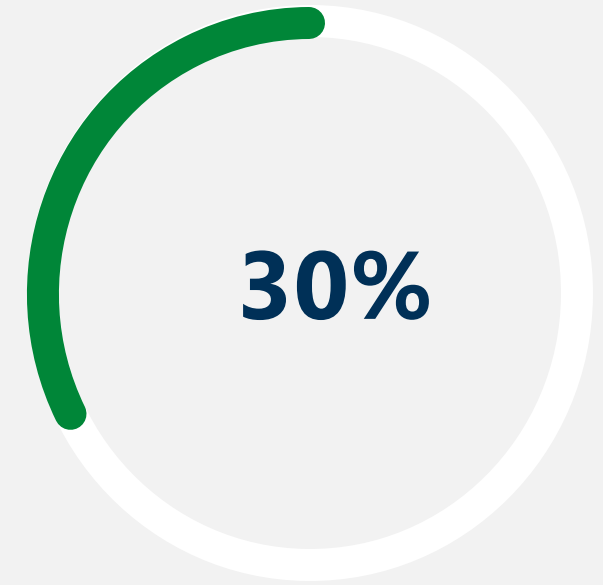- Pearson's Global Learner Survey finds that uncertainty and insecurity with the job market has driven the need for upskilling. 45% of those surveyed found themselves in need of further education due to a change in their job/job status.

- Of those who found themselves in need of further education, new skills, changes in technology, and job insecurity were the main causes.

45%

Found a need of further education because their job/job status changed

Among those employed who found themselves in need of further education

41%

Skills needed that hadn't been learned in school or college

39%

Required to use a new form of technology or a new software in job

33%

Concerned with losing/have lost job

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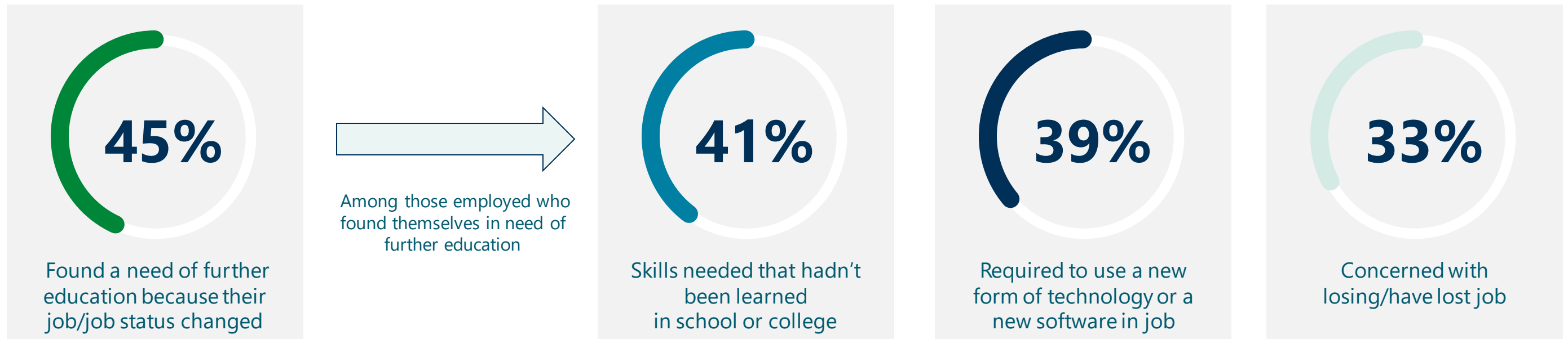
Addressing Upskilling & Skills Gap: Content Areas

IT & Digital Skills

Prior to the pandemic, it was clear that skills such as digital literacy, numeracy, creative problem solving, and emotional intelligence were increasingly in demand in the era of the Fourth Industrial Revolution.

Automation is being adopted and implemented at an increased rapid rate due to the pandemic, making the need for **IT and digital skills** imperative for the future job market.

In the first quarter of 2020, IT skills that were most in demand revolved around structures and systems due to the rapid shift to remote work; now, the data suggests that businesses are more confident to return to new product and project development.

Soft Skills

Burning Glass data from post-COVID job postings, April 1 through August 25, find that **15 of the top 20 skills being requested are soft skills**.

This concurs with a report by Deloitte Access Economics finding **two-thirds of all jobs by 2030 will be made up of soft-skill-intensive occupations**, so developing and enhancing soft skills now will be key to finding employment in the future job market.

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Addressing Upskilling & Skills Gap: Approach and Methods

Alternative Credentialing

Shorter programs could be especially useful to students right now; students may be far less willing to sign up for long-term program commitments due to lifestyle and employment changes.

In a post-pandemic economy where education consumers are looking to upskill at a lower cost and shorter time frame, it makes sense that demand for **certificates, bootcamps, and microcredentials** would grow.

Pearson Advance will help to address immediate skill gaps and employment preparedness.

Industry Alignment

Connections with employers will be even more critical than before – this is where Accelerated Pathways can help.

Employers' needs are rapidly changing, and the educational marketplace needs to expand to include more **industry-aligned alternatives to traditional degrees**.

As students reconsider their education needs, it will be critical to demonstrate the value that our programs can offer during this period of economic uncertainty.

In addition to providing data on program graduates' career outcomes, it will be essential to monitor and assess program offerings to ensure alignment with employer demand.

Opportunity in Non-Degree Areas

The upskilling/reskilling movement presents a **unique opportunity for our partners to innovate and grow**, ensuring their students are set up for success in the post-pandemic market.

With Pearson Pathways, current and prospective students can discover the right courses, certificates, or programs to help them fill their skills gaps and achieve their goals.

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Key Focus Areas:

Healthcare, Business, and Information Technology

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Key Focus Areas

Some jobs have survived the pandemic better than others. Which are they? Why are they resilient to the crisis? What jobs and skills will be in demand when the pandemic is over?

Knowing these answers will help the workforce and businesses adjust themselves to the new job landscape. It will also help the education system produce much-needed human resources for future job markets.

The following slides look at the key focus areas of **Healthcare**, **Business**, and **Information Technology** to show which occupations and skills are in demand now and show indicators of longevity after the pandemic is over.
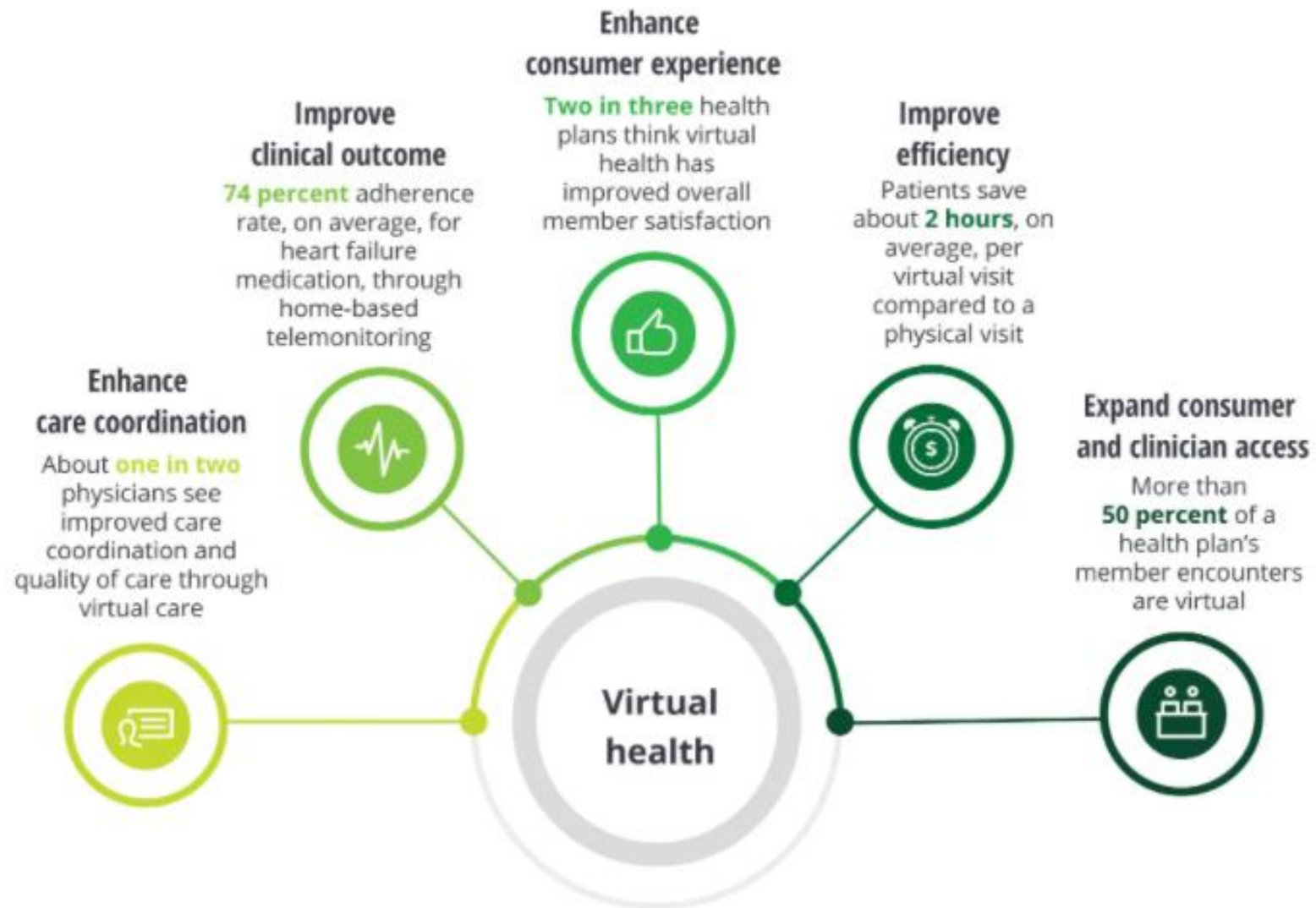
Institutions should consider adding these skills to existing degrees through **adjustments to the core curriculum**, adding **new concentrations** or tracks in programs, adding in-demand **industry certifications**, partnering with industry field leaders (for **upskilling or reskilling**), and/or by launching **alternative credential programs** that target these areas.

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Healthcare

- Increased demand during the COVID-19 crisis with the **highest number of job postings of all industries.**

- **Demand for healthcare practitioners is greater than the supply by 44%.** In terms of industry, this has the biggest demand discrepancy, double that of the next highest industry, which is business.

- The highest demand appears to be with **Registered Nurses** and other **nursing specialties** (such as intensive/critical care nurse, medical surgery registered nurse, operating room registered nurse, etc.); **Speech-Language Pathologists** are also in high demand.

- 50% of healthcare execs feel ¼+ of healthcare will move to **virtual delivery** by 2040.

- 94% of survey respondents expect that next-gen data and interoperability solutions will enable **widespread data sharing.**

Healthcare

Enhance care coordination
About **one in two** physicians see improved care coordination and quality of care through virtual care

Improve clinical outcome
74 percent adherence rate, on average, for heart failure medication, through home-based telemonitoring

Enhance consumer experience
Two in three health plans think virtual health has improved overall member satisfaction

Improve efficiency
Patients save about **2 hours**, on average, per virtual visit compared to a physical visit

Expand consumer and clinician access
More than **50 percent** of a health plan's member encounters are virtual

Virtual health

Skills to Focus

- Telehealth
- Telemetry
- Medical/Clinical Informatics
- Mental Health
- Treatment Planning
- Home Health
- Speech & Language Disorders
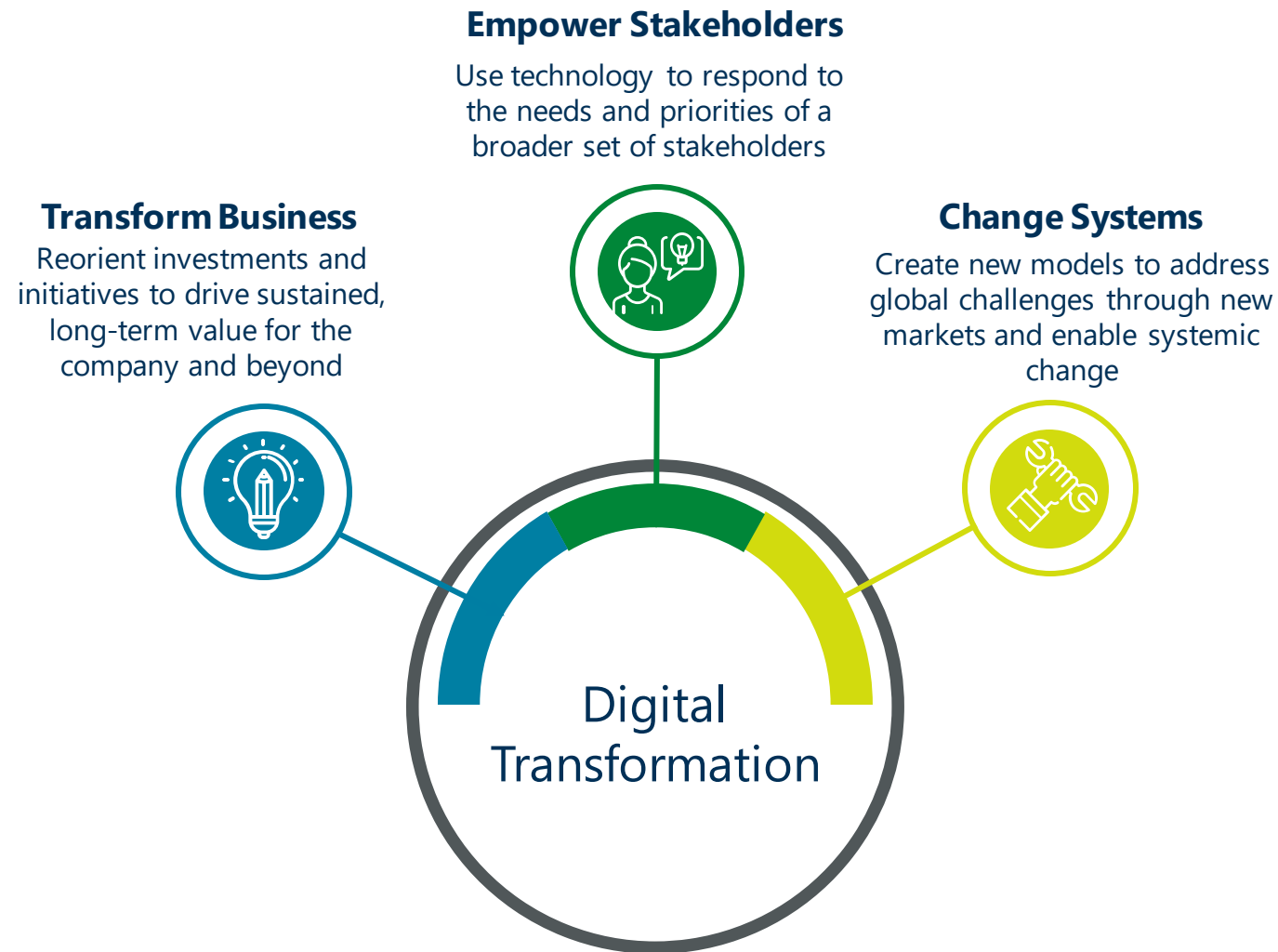
Jobs with Longevity

- Health Information Manager
- Registered Nurses
- Mental Health Counselors
- Speech-Language Pathologists

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Business

- Business-related occupations span across all industries. Industries where these occupations' unemployment rates are lowest include:
    - **Educational Services**
    - **Information, Management of Companies and Enterprises**
    - **Transportation and Warehousing**
    - **Utilities**
    - **Wholesale Trade**

- Job posting demand in business and financial operations is the **second highest industry demand discrepancy, greater than the supply by 21%.**

- Across business job postings, there is high demand for **project management, business process and analysis, financial analysis, and business strategy credentials.**

Business

Empower Stakeholders

Use technology to respond to the needs and priorities of a broader set of stakeholders

Transform Business

Reorient investments and initiatives to drive sustained, long-term value for the company and beyond

Change Systems

Create new models to address global challenges through new markets and enable systemic change

Digital Transformation

Companies must adopt digital business models at their core to compete in a post-COVID world.

Skills to Focus

- Project Management
- Business Process and Analysis
- Financial Analysis
- Business Strategy
- Machine Learning
- Customer Relationship Management
- Change Management

Jobs with Longevity

- Supply Chain Management
- Business/Management Analyst
- Operations Manager
- Project Manager

Information Technology

- Due to recent increases in online commerce, demand in **multiple areas of IT** has grown, from **web development** to **cybersecurity**.

- With larger sections of the workforce and education sectors working virtually, there is a growing demand for **security**, **networking,** and **cloud computing**.

- There is **growing demand in all job fields due to digital transformation**, but those that stand out in job postings have shown increased demand in **programming languages** and other **software skills and credentials**.

![Pearson](Pearson logo)

Information Technology

Growing online presence is creating demand across all industries

Increased need for **automation** and **security** – acceleration of 4th Industrial Revolution

Develop long-term plans for **securing sensitive data** across widely distributed networks

Develop resilience to **future disruptions**

Information Technology

More firms turning to **cloud platforms**

During the COVID-19 pandemic, technology is playing a crucial role in keeping our society functional in a time of lockdowns and quarantines. These technologies will have a long-lasting impact beyond COVID-19 as the world adapts to its new normal.

Skills to Focus

- Machine Learning
- Cybersecurity
- Cloud Solutions
- Web Analytics
- Software Development Tools

Jobs with Longevity

- Cyber/Information Security Engineer/ Analyst
- Software Developer/ Engineer
- Computer Systems Engineer/Architect
- Network/Systems Administrator

Authors

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Pearson Online Learning Services

Andrea conducts primary and secondary academic research to assist in the production of high-quality and executable online degree programs and implementation strategies in a complex learning ecosystem. She partners with internal and external high-level stakeholders to implement efficient and effective programs and manage the quality assurance of implementation.

Cheryl Kimis

Associate Director Market Research

Pearson Online Learning Services

Cheryl partners with internal and external resources to identify business needs and research objectives. She also manages the strategy and execution of quantitative and qualitative research projects and the research specialists in these functions.

ALWAYS LEARNING