

# The importance of data upskilling

If employees understand data, automation and skills they'll need in the future, they can make a big impact—both within their departments and in the organization as a whole. But many companies consider data skills to be IT's domain, so they may miss out on the value of upskilling non-tech workers.

### How does upskilling benefit employees?

When employees understand automation, visualization or agile project management, they're more empowered to control their own work outcomes, which will likely lead to increased job satisfaction and professional growth.

### How does upskilling benefit the organization?

When people have the tools to exercise creative thinking and resolve problems, the organization can see higher productivity, deeper and faster insights—and more innovation.

### Three key upskilling areas - defined

Data preparation involves processing raw data to remove errors, normalizing data formats and structuring it to be used for business purposes. This includes loading data, data fusion, data cleaning, data augmentation and data delivery.

**Design thinking** is an iterative process that teams use to put themselves in the shoes of users and find innovative solutions to problems.

Agile project management delivers a project through several iterations from start to end, which helps companies move faster and experience the benefits of a project before its completion.



# Five departments that benefit from upskilling – use cases and benefits

#### Finance



Finance personnel conducting financial statement analysis or preparing monthly reconciliations could automate parts of this work after receiving digital upskilling training. Automate workflows and create data visualizations to solve these day-to-day pain points and save time.

### Marketing Ops



Lead data from multiple, disparate sources needs to be normalized to align with standards in the CRM system of record. Consolidated data cleansing can be automated and loaded into data visualization tools for more complete and accurate information about return on marketing investments.

#### **Operations**



Optimize inventory level suggestions for manufacturing production with a combination of project ideation and management based on design thinking and agile management.

Automations to collect order and inventory data combined with AI to analyze data and provide suggestions.

Delivered via data dashboard.

### Human Resources



Track employee data and review performance management process with automations pulling and normalizing data from disparate systems. Leverage data visualization for reporting on employee retention, performance, diversity and more.

### Information Technology



Design thinking and agile project management are used to develop the strategy and tactics for creating a user-friendly system where automations and Al are utilized to handle common IT requests, freeing systems analysts to focus on more important tasks.

### **Upskilling Benefits**

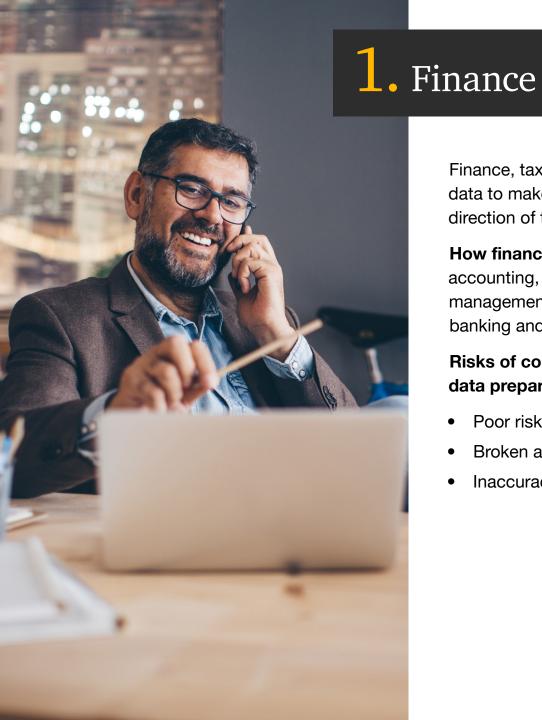
- » Data normalization
- » Data visualization
- » Data management
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Finance, tax and accounting professionals use data to make predictions and guide the financial

How finance gets its data: From ERP, accounting, CRM, sales forecasting, risk management, financial reporting, treasury, banking and more.

### Risks of continuing non-standard data preparation:

Poor risk management

direction of the company.

- Broken audit trails
- Inaccuracies in data and insights

### Benefits of investing in upskilling:

- Faster data cleaning and integration
- Better compliance (e.g., fewer errors, higher quality)
- Faster time to insights

Finance employees who learn to build data roadmaps and customize data visualizations can help streamline balance sheets and other finance processes.



2. Marketing operations

Marketing professionals use data to understand their customers. Marketers who understand the insights derived from data can use them to better target the right customers at the right time—and stay ahead of the competition.

### How marketing gets its data:

From CRM, sales forecasting, marketing automation, web analytics, CMS, email, social media monitoring, bid management, event marketing, webinar/webcasting and more.

### Risks of continuing non-standard data preparation:

- Missing customer and campaign insights
- Operating with less agility than competitors
- Investing in the wrong campaigns or channels

### Benefits of investing in upskilling:

- Better market positioning
- More wallet share in your space
- Justifying the need for budget
- Validating ROI of investments
- Leading projects with agile project management
- Solving problems with design thinking

Marketers who understand data can use it to fuel their creativity and stay ahead of the competition.



# 3. Human resources (HR)

HR professionals use data to collect information on employee behavior in order to identify patterns that can lead to a better understanding of engagement, turnover and other metrics.

### **How HR gets its data:**

From HR management, healthcare management, learning platforms, background/reference checks, onboarding and more.

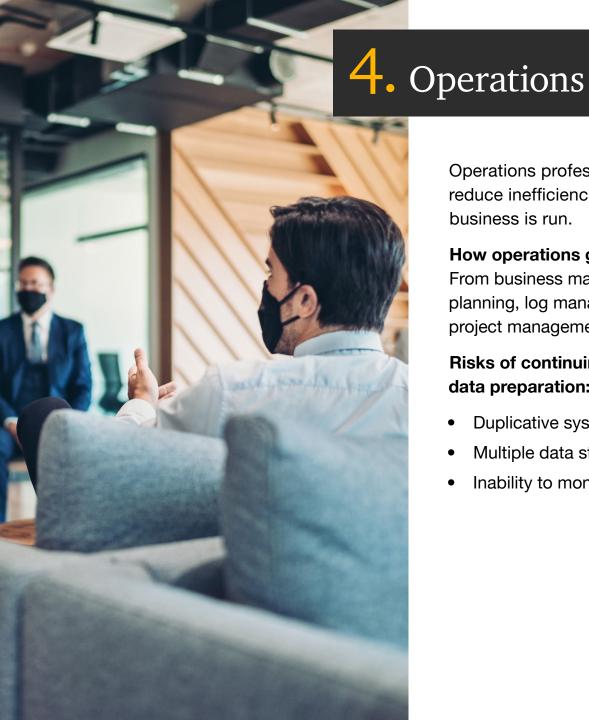
### Risks of continuing non-standard data preparation:

- Inability to track and understand turnover
- Employment-related lawsuits around data collection
- Inability to track and understand labor costs (e.g., increases)

### Benefits of investing in upskilling:

- Attracting and retaining talent
- Discovering workforce trends and future needs
- Evaluating staff efficiently
- Ability to connect people to each other and the company

Using data to pinpoint underlying organizational needs can give HR professionals better information about the kinds of upskilling needed to fill skill gaps.



Operations professionals use data to help reduce inefficiencies and streamline the way a business is run.

### How operations gets its data:

From business management, ERP, demand planning, log management, asset management, project management and more.

### Risks of continuing non-standard data preparation:

- Duplicative systems
- Multiple data standards
- Inability to monetize data efficiently

### Benefits of investing in upskilling:

- Faster data cleaning and integration
- More robust data security
- Cost savings
- More efficient projects with agile project management

Upskilling in agile project management specifically can help operations professionals foster better communications across teams and build better models for continuous improvement.





Most IT professionals have the skills to process data and build automations. But even IT can benefit from upskilling. Their data skills can make a bigger impact when combined with soft skills that promote creativity, collaboration and innovation.

### How IT gets its data:

From IT management, project management, security monitoring, log management, asset management, network monitoring and more.

## Risks of continuing non-standard data preparation:

- Inappropriate data use (leading to errors, security or compliance issues)
- Communication breakdown among teams

### Benefits of investing in upskilling:

- Innovation through soft skills, like design thinking
- Iterative project development through agile project management
- Ability to better collaborate with sales, marketing and project teams

IT's data skills can make a bigger impact when combined with soft skills that promote creativity and innovation.

### Start upskilling your employees today

Having to call IT for help with data slows your access to insights and can diminish innovation. In contrast, when you give your people the tools they need, they'll be more productive, purposeful and satisfied.

Stay ahead of the curve with PwC ProEdge, the revolutionary way to upskill your people and prepare your organization for tomorrow. This unique platform allows you to pinpoint critical skill gaps and effectively help close them with automatically generated personalized learning pathways. Leading curated content, coursework and hands-on learning empower your workforce to make an immediate impact at scale. ProEdge enables your people to perform at their highest level—giving them the power to help transform your entire organization.

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