O*NET® Toolkit for Business

Contents

Employers’ Quick Reference Guide to O*NET

Why Should You Use O*NET? ........................................1
How Can You Use O*NET? ............................................2

OnLine Guided Tour

About the O*NET Database and O*NET OnLine ......1
Using O*NET OnLine .....................................................2
Getting Oriented to O*NET OnLine.........................3
My Next Move.............................................................3
Hot Technologies........................................................6
Using Find Occupations..............................................5
Understanding Summary, Details, and Custom Reports .........6
Performing a Skills Search ...........................................6
Using O*NET Crosswalks .........................................9
Search Tools and Technology .....................................10

O*NET at Work: Writing Job Descriptions

The Employer’s Challenge ............................................1
Writing an Effective Job Description ............................1
Benefits to the Employer .............................................5
Sample Job Description..............................................6

O*NET at Work: HR Planning, Employee Reskilling and Retention

The Employer’s Challenge ............................................1
Example 1: Human Resource Planning .......................1
Example 2: Employee Reskilling and Retention ..........5
Benefits to the Employer .............................................6

Content Model
This Occupational Information Network (O*NET®) Toolkit for Business provides a wealth of background information on the features of O*NET, and details its many uses for human resource professionals and employers.

Your Toolkit (www.onetcenter.org/action.html) contains:

**Employers’ Quick Reference Guide to O*NET.** A brief overview of the features of O*NET, giving basic information on O*NET and how it serves as a resource to assist businesses with everyday needs, complete with brief instructions on how to get started.

**O*NET OnLine Guided Tour.** A guided tour of the features and capabilities of O*NET OnLine, demonstrating the breadth and depth of the information available. This guided tour demonstrates how users can navigate through O*NET OnLine and provides real world examples of occupational and skills searches, or specific details of one or more occupations. This tool also describes O*NET OnLine’s many resources on accommodations, disabilities, and workplace issues.

**O*NET at Work.** Two case studies provide an overview of how O*NET can be used in specific human resources and management functions. The case studies—Writing Job Descriptions and HR Planning, Employee Reskilling and Retention—provide step-by-step, detailed descriptions to demonstrate O*NET’s use in specific business processes.

**The O*NET Content Model.** Provides both graphic and written descriptions of the conceptual framework that underlies the O*NET database.

Together, these tools equip your business to become a power user of O*NET.
Employers’
Quick Reference Guide to O*NET

Downloading the O*NET Database
At the upper right of the O*NET OnLine home page, click on O*NET Sites then click the link to the Resource Center (https://www.onetcenter.org).

O*NET Database
O*NET is brought to you by:
O*NET Project
Employment and Training Administration
U.S. Department of Labor
Mail Stop C 4526
200 Constitution Avenue, N.W.
Washington, DC 20210
www.doleta.gov/programs/onet
National Center for O*NET Development
P.O. Box 27625
Raleigh, NC 27611
www.onetcenter.org

O*NET Questionnaires
Generic, customizable O*NET Questionnaires can be found at - https://www.onetcenter.org/questionnaires.html. These questionnaires can be used as a starting point to collect occupational data in support of a wide-range of economic/workforce investment activities and human resource management functions. You can modify them to meet your particular needs.

The O*NET Database may be downloaded free, for importing into other systems. The O*NET database includes all the occupational information in O*NET OnLine. This information can be used to facilitate career exploration, vocational counseling, and a variety of human resource functions, such as developing job orders, position descriptions, and aligning training with current workplace needs.

Click the Current data files heading on the left of the page.

For more information about using O*NET, or about O*NET products or technical reports, please see www.onetcenter.org. The O*NET Toolkit for Business is available at www.onetcenter.org/action.html.
Why Should You Use O*NET?

O*NET is a free, easy-to-use occupational information system that can help your company save time and effort by leveraging its human resource capabilities. From start-up to Fortune 500, every business faces challenges in defining job requirements, developing accurate job descriptions, and implementing effective personnel development strategies. In a technology-driven, highly competitive, and rapidly evolving marketplace, human resource professionals, line managers, and decision-makers all need current, accurate occupational intelligence.

Key O*NET Business Benefits

Time savings: Developing job descriptions can be time- and labor-intensive. O*NET OnLine puts current, searchable information on hundreds of occupations at your fingertips, including education and experience, apprenticeable specialties, work activities and typical tasks, as well as knowledge, skills, and abilities. You can easily copy O*NET information and tailor it to your company’s specific needs—letting you develop quality job descriptions in a fraction of the time. Developers can integrate O*NET tools into their own website or web-enabled application using O*NET Web Services (services.onetcenter.org).

Efficiency: O*NET data is easy to find, easy to search, and easy to understand—giving you meaningful occupational information and analytical support instantly. This means that you can address a wider range of human resources issues in less time, with less effort.

Consistency: O*NET standardized occupational descriptors make it much easier to compare work across a broad range of functions and levels.

Effectiveness: O*NET provides comprehensive and current information for a wide range of occupations. This translates into better targeted recruiting efforts, more effective training, and better defined career paths.

Added Value: O*NET standardized descriptors create a common language that is an applicable tool for a mobile and rapidly changing world of work. O*NET descriptions are based on rigorous research and the input of industry experts.

Cost Savings: Tracking down all the information you need for Human Resource planning can be expensive. O*NET OnLine brings together occupational information with links to additional resources, such as employment outlook, wages, and other labor market information. All the data is available 24 hours a day, seven days a week, with no fee for use.

To take advantage of O*NET information, use the quick reference information on the next few pages—or see the O*NET OnLine Guided Tour for more in-depth information, tips, and techniques for getting the most from O*NET OnLine. For a more detailed description of the O*NET information, see the Content Model Reference Card.
How Can You Use O*NET?

Log onto O*NET OnLine

Just visit https://www.onetonline.org to check out O*NET, run a search, or link to dozens of valuable resources for occupational and career-related information.

The O*NET Database provides occupational information within the following categories:

- **Worker Characteristics:** Abilities, Interests, Work Values and Work Styles
- **Worker Requirements:** Skills, Knowledge and Education
- **Experience Requirements:** Experience, Training, Skills and Licensing Requirements
- **Occupation Specific Information:** Titles, Alternate Titles, Tasks, and Tools and Technology
- **Occupation Requirements:** Work Activities, Detailed Work Activities, Organizational Context, and Work Context
- **Workforce Characteristics:** Links to labor market information, occupational outlook and wage information

O*NET OnLine Search Options

- **Find Occupations** allows you to search for occupations by entering a title, phrase or code into the Keyword Search box, or by using one of the “Browse by” options: Bright Outlook, Career Cluster, Green Economy Sector, Industry, Job Family, Job Zone, and STEM Discipline (Science, Technology, Engineering and Mathematics disciplines).

- **Advanced Search** lets you “Browse by” O*NET Data to find occupations by many different descriptors; lets you use Skills to find Occupations matching the skills you have or plan to acquire; lets you use specific Tools or Technology Skills to find high demand occupations; lets you use Detailed Work Activities and Tasks to find similar occupations.

- **Crosswalk** lets you search for an O*NET-SOC occupation using codes or titles from other classification systems such as: the Dictionary of Occupational Titles (DOT), the Military Occupational Classification (MOC), the Registered Apprenticeship Partners Information Data System (RAPIDS), the Standard Occupational Classification (SOC), Education, and the Occupational Outlook Handbook (OOH).

- **Hot Technologies** lets you search occupations using important technologies frequently included in employer job postings.

Valuable Related Links

O*NET OnLine offers a wide variety of links to other valuable occupation-related sites. Each Summary, Details, or Custom Report includes the option of linking directly to Wages and Employment Outlook Information for that occupation on CareerOneStop. There are also links to the U.S. Department of Labor, other government agencies, as well as links to information on disability, accommodations, and workplace issues.

Summary, Details, and Custom Reports

O*NET OnLine provides information at several levels. **Summary** information is designed to provide a quick overview, focusing on the most important information on the occupation. **Details** information gives more comprehensive information. **Custom** information allows users to create their own customized reports.
Download the O*NET Database

The O*NET Database may be downloaded free, for importing into other systems. The O*NET database includes all the occupational information in O*NET OnLine. This information can be used to facilitate career exploration, vocational counseling, and a variety of human resource functions, such as developing job orders, position descriptions, and aligning training with current workplace needs.

Downloading the O*NET Database

- At the upper right of the O*NET OnLine home page, click on O*NET Sites then click the link to the Resource Center (https://www.onetcenter.org).

- Click the Current data files heading on the left of the page.

O*NET Questionnaires

- Generic, customizable O*NET Questionnaires can be found at - https://www.onetcenter.org/questionnaires.html.

- These questionnaires can be used as a starting point to collect occupational data in support of a wide-range of economic/workforce investment activities and human resource management functions. You can modify them to meet your particular needs.

O*NET Center Home Page

For more information about using O*NET, or about O*NET products or technical reports, please see www.onetcenter.org. The O*NET Toolkit for Business is available at www.onetcenter.org/action.html.

**O*NET is brought to you by:**

O*NET Project
Employment and Training Administration
U.S. Department of Labor
Mail Stop C 4526
200 Constitution Avenue, N.W.
Washington, DC 20210
www.doleta.gov/programs/onet

National Center for O*NET Development
P.O. Box 27625
Raleigh, NC 27611
www.onetcenter.org
This Guided Tour is designed to help you use O*NET® OnLine more efficiently. While O*NET OnLine has a friendly, easy-to-use interface, this guide and reference tool may speed the learning curve for site navigation and search strategy.

About the O*NET Database and O*NET OnLine

O*NET (the Occupational Information Network) OnLine is a centralized online resource that enables you to access occupational information in the O*NET database. O*NET OnLine offers links to other valuable online occupational resources, including federal agencies and programs.

The O*NET database is the nation’s primary source for occupational information. It offers:

- A common language and consistent descriptors for both worker and occupational information. Because O*NET information is regularly updated and is based on careful research and analysis of “real world” occupational data, it is a useful tool for a wide array of management and human resource activities.

- A unique approach to organizing and presenting occupational information. The O*NET “Content Model” gives employers convenient ways to hone in on information specific to a particular occupation, yet also lets them compare occupations using common skills, job attributes, and worker attributes.

- A helpful analysis and decision support system for many key business functions. Human resource professionals, business forecasters, industry analysts, organizational consultants, and line managers find O*NET information valuable in achieving objectives such as:
  - Efficiently developing accurate job descriptions
  - Developing more targeted and effective employee development programs
  - Aligning organizational development initiatives with identified workplace needs
  - Defining recruitment goals
  - Expanding the pool of quality candidates for open positions
Using O*NET OnLine

The O*NET database houses the occupational descriptors and data that can be accessed through O*NET OnLine. O*NET OnLine is a convenient and easy-to-use interface to the O*NET database.

Logging onto O*NET OnLine

This guided tour is most helpful if you log onto O*NET OnLine at https://www.onetonline.org and follow this map to get familiar with its functions and features. Or you may select O*NET OnLine from the O*NET Home Page (https://www.onetcenter.org) to reach O*NET OnLine.
Getting Oriented to O*NET OnLine

O*NET OnLine is designed to be intuitive. It’s easy to navigate through the web site and easy to search the database. But because there are several different levels and types of information provided, it’s helpful to get a sense of what each category of information is and how it can be used.

O*NET OnLine home page overview

This home page is largely dedicated to O*NET OnLine’s search options. The other key information available here includes:

- **OnLine Help**: Assistance for navigating, searching, and retrieving information from O*NET
- **What’s New**: Link to other O*NET products and tools
- **What is O*NET**: Link to information about O*NET data, applications, and research
- **My Next Move**: A web-based interactive tool for new job seekers, students, and other career explorers to learn more about their career options. Provides the **O*NET Interest Profiler**, a tool that offers customized career suggestions based on a person’s interests and level of education and work experience.
- **Hot Technologies**: Search occupations using important technologies frequently included in employer job postings

An email link for your comments and suggestions for O*NET
About O*NET OnLine search options

O*NET OnLine offers four easy search functions.

**Occupation Quick Search** provides quick access to finding occupations by keyword or code.

**Find Occupations** allows you to search for occupations by entering a title, phrase or code into the Keyword search box, or by using one of the “Browse by” options: Bright Outlook, Career Cluster, Green Economy Sector, Industry, Job Family, Job Zone, and STEM Discipline (Science, Technology, Engineering and Mathematics disciplines).

**Advanced Search** lets you “Browse by” O*NET Data to find occupations by many different descriptors; lets you find Occupations using Skills you have or plan to acquire; lets you use specific Tools or Technology to find high demand occupations; lets you use Detailed Work Activities and Tasks to find similar occupations.

**Crosswalks** lets you search for an O*NET-SOC occupation by entering a code from one of several other occupational classification systems.

**Toolkits** can be used to create custom reports.

- Custom allows the user to select the descriptors of interest as well as the scale (Importance or Level of expertise) and minimum ratings desired for a customized report.
  - **Importance** ranks the relative importance of an attribute for a particular occupation.
  - **Level** is an indicator of the relative level of expertise required for a skill, knowledge area, or ability.

While the same skill can be important to a number of different occupations, the skill level needed for each occupation may be different. For example, critical thinking ranks as Important for both Art Directors and Craft Artists. But the Level rating for critical thinking for Art Directors (57 on the Level scale) is higher than for Craft Artists (45 on the Level scale).

O*NET Rating Scales

O*NET descriptors are rated on several different numeric rating scales, which all range from 0 to 100. The Importance and Level scales are applied to Skills, Knowledge, Ability, and Work Activities descriptors. In some domains additional scales are also used. Users can also choose to include the scale anchors used in the O*NET Questionnaires, as well as Detailed Work Activities. Detailed Work Activities provide information on the common work activities required across occupations. These cross-occupational descriptors are less specific than Tasks, which are occupationally specific. They are provided within each of the more general Work Activities with which they are associated. In the Work Activities Outline view, an occupation’s hierarchy of generalized, intermediate, and detailed work activities, and occupation-specific task statements is shown.

For Example:

Checking Skills at a minimum Level of expertise of 50 and Work Activities at a minimum Importance rating of 90, along with scale anchors and Detailed Work Activities, generates the report on the next page.
Users can search for occupations by:

- Keyword or O*NET-SOC code
- Browsing by Bright Outlook
- Browsing by Career Cluster
- Browsing by Green Economy Sector
- Browsing by Industry
- Browsing a list of Job Families
- Browsing by Job Zone levels
- Browsing by STEM educational area (Science, Technology, Engineering and Mathematics)

Results for a Quick (Art Directors) Search are listed in a rank order that is calculated on the relevance of the occupational title, alternate titles, description, tasks, and detailed work activities associated with the word or words you entered.

Clicking on How Do They Match and then clicking on the key symbol shows which key words were matched for each occupation. Click on one of these icons to bring up a list of the alternate titles, tasks, and work activities matching your search query. The words of the search query are highlighted, to easily see where a match occurs.
Understanding Summary, Details, and Custom Reports

When you search for occupational information, O*NET lets you review information at a variety of levels. The sections below illustrate these different options by showing a sample of O*NET data retrieved for a search of the occupational title “Art Directors.”

▼ Summary

Summary Reports are displayed when first selecting an occupation. They provide up to five descriptors rated 50% or higher on the Importance scale for each occupational and worker characteristic.

Summary Example:

For Art Directors, two Interests categories received high importance ratings.

▼ Details

The Details Reports option provides complete information, including ratings of relative importance, on all the occupational and worker descriptors. This information is useful for in-depth analysis and for comparing occupations.

Details Example:

Details reports on all six Interests categories, including importance ratings. When the “+” icon appears next to an item, you can click it to see a list of related occupations with this same Interest, Skill, etc.. For example, selecting the “+” icon next to Artistic occupations shows occupations where that skill is an important part of the work. Click on any listed occupation to see its full Summary report.
Custom

Custom allows the user to select the descriptors of interest as well as the scale (Importance or Level of expertise) and minimum ratings desired for a customized report.

- Importance ranks the relative importance of an attribute for a particular occupation.
- Level is an indicator of the relative level of expertise required for a skill, knowledge area, or ability.

While the same skill can be important to a number of different occupations, the skill level needed for each occupation may be different. For example, critical thinking ranks as Important for both Art Directors and Craft Artists. But the Level rating for critical thinking for Art Directors (57 on the Level scale) is higher than for Craft Artists (45 on the Level scale).

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For Example: Checking Skills at a minimum Level of expertise of 50 and Work Activities at a minimum Importance rating of 90, along with scale anchors and Detailed Work Activities, generates the report on the next page.
Custom Report Example

At the bottom of Summary and Details reports is a list of Related Occupations. In Custom reports, you may choose to view Related Occupations as well as occupations that Crosswalk with the selected occupation.

Related Occupations for Art Directors
Wages and Employment Information

O*NET OnLine provides national wage and employment information at the bottom of each Summary or Details Report. In addition, the user can select to be taken to CareerOneStop for state wage and trends information.

Performing a Skills Search

Skills Search lets a user identify occupations that utilize specific skills. This search strategy could help employees locate other positions within an organization or help an HR professional develop career ladders within a company. When you select Skills Search, a screen displays definitions for six broad skill categories:

- Basic Skills
- Complex Problem Solving Skills
- Resource Management Skills
- Social Skills
- Systems Skills
- Technical Skills

Under each skill category, you can select any number of the more specific skills listed. Then click Go at the bottom of the page. The Skills Search Results page will display a list of occupations that match the selected skills, along with a count of the skills matched.
Using O*NET Crosswalks

Crosswalk Search lets you search for related O*NET-SOC occupations using codes or titles from other classification systems:

► RAPIDS – Registered Apprenticeship Partners Information Data System (RAPIDS)
► DOT – Dictionary of Occupational Titles
► Education – Classification of Instructional Programs (CIP)
► Military – Military Occupational Classification (MOC)
► SOC – Standard Occupational Classification

Search Technology Skills & Tools

The user of the Technology Skills & Tools Search enters the name of a specific tool or software product to find occupations which may use that tool. For example, the following is a partial list of the results for “Tax software”:

► 13-2011.01 Accountants
► 13-2021.01 Assessors
► 13-2082.00 Tax Preparers

Saving O*NET Information

You can print and save any information retrieved from O*NET Details and Custom Reports.

► See Save Table and click on XLS or CSV at the top of any table of information.
► These links let you view or download the data as an XLS (Excel) or CSV (Comma-Separated Values) file.
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O*NET at Work:
Writing Job Descriptions
Describing jobs within an organization is a common task that can consume large amounts of time and resources. This example application demonstrates how human resource personnel can use O*NET® to develop job descriptions faster, better, and cheaper.

The Employer’s Challenge

Vitality, Inc. is a mid-size professional services company with a growing information technology (IT) department. To better meet internal demand for technical support, the company needed to create several technical support or “help desk” positions, and to develop a new position description for computer support. Bob Garcia, the Human Resource (HR) Manager, turned to O*NET information to help identify job requirements for computer support work.

Writing an Effective Job Description

Job descriptions provide information to guide many human resource applications. The amount of detail required depends on the intended use. The more detail provided, the greater the breadth and depth of human resource applications that may be addressed. The HR Manager determined that O*NET information could provide a starting point for developing job descriptions more efficiently.
Step 1: Identify Job Tasks, Responsibilities, and Work Context factors that will be part of the newly created positions.

The HR Manager accessed the internet and typed in https://www.onetonline.org. At the O*NET OnLine home page, he selected Find Occupations. From the Find Occupations screen, he was able to access the database of information describing work for computer support occupations.

Using Keyword search, the HR Manager typed in “computer support” and clicked GO.

The first match listed on the resulting screen was “Computer User Support Specialists.” The HR Manager selected this occupation and a Summary Report was displayed.

The HR Manager then selected Custom reports, which provides options for what information the user wants displayed on the occupation.

On the Find Occupations screen, the user typed “computer support” in the Keyword search box.

The user then clicked on the Go button.

The job description that the HR Manager and IT Manager developed using O*NET information is shown to the right. The language for the job description was taken from O*NET OnLine. The red text was contributed by the staff.

Benefits to the Employee

The employer realized the following benefits:

- The time invested in developing the job description was reduced from an average of 24 hours to 8 hours.
- The cost to the employer was reduced dramatically from approximately $1,440 to approximately $480.
- The job description was created using a standardized and common language.
- The standardized language used made it much easier to compare work across functions and levels.
- The new O*NET based description was of much higher quality than the less specific descriptions used in the past.
- Through O*NET OnLine links, the employer accessed additional information on the Internet, such as current U.S. salaries, current and projected employment, and related training.
Next, the HR Manager decided what information describing the work of Computer User Support Specialists he wanted to see.

The user selected the Tasks, Work Activities, and Work Context check boxes.

The user clicked Go to create the Custom Report.

For selected O*NET Descriptors on the Custom Report Menu, users can choose the minimum score for the items displayed and the type of scale, such as Importance or Level.

The HR Manager copied the brief occupation description to the job description document he is creating (see page 6).

A sample of job titles obtained from incumbents is provided.

Users can download the tables for selected O*NET descriptors by clicking on either XLS or CSV by Save Table.

Activities are listed in descending order of importance.

* The Work Context Questionnaire is included in the O*NET Questionnaires found at https://www.onetcenter.org/questionnaires.html.
The HR Manager printed the Custom Report and asked the IT Manager to highlight Tasks, Work Activities, and Work Context information relevant for the position. Once the IT Manager highlighted the important information about the work of Computer User Support Specialists, the information was copied to the draft job description (see page 6).

Next, the IT Manager added information to customize the job description to the needs of Vitality, Inc. The HR Manager gave the Work Context Questionnaire* to employees in the information technology department to complete. This gave him information about social and physical factors in the workplace. Social factors include supervision, responsibility and customer service interaction. Physical factors include aspects of the environment that affect the employee’s physical comfort. This information was also added to the draft job description.

**Step 2: Identify the Knowledge, Skills, and Abilities that are important for performing the identified tasks.**

Returning to the Custom Report Menu in O*NET, the HR Manager created another Custom Report to access information on Knowledge, Skills, and Abilities. Working with the IT Manager, the HR Manager copied the appropriate language from the O*NET Custom Report for Computer User Support Specialists to the draft job description.

The user chose to examine Knowledge and Skills by Level rather than Importance.

To see a list of more occupations where that Knowledge or Ability is an important part of the work select the + icon. Click on any listed related occupation to see its full Summary report.

Information about Abilities was copied from O*NET in the same manner as Knowledge and Skills.

* The Work Context Questionnaire is included in the O*NET Questionnaires found at https://www.onetcenter.org/questionnaires.html.
Once the information was gathered using O*NET OnLine, the HR Manager and the IT Manager completed a draft of a job description. They presented this draft to people in information technology functions within the company for final revisions.

The job description that the HR Manager and IT Manager developed using O*NET information is shown to the right. The language for the job description was taken from O*NET OnLine. The red text was contributed by the staff.

Benefits to the Employer

The employer realized the following benefits:

- The time invested in developing the job description was reduced from an average of 24 hours to 8 hours.
- The cost to the employer was reduced dramatically from approximately $1,440 to approximately $480.
- The job description was created using a standardized and common language.
- The standardized language used made it much easier to compare work across functions and levels.
- The new O*NET based description was of much higher quality than the less specific descriptions used in the past.
- Through O*NET OnLine links, the employer accessed additional information on the Internet, such as current U.S. salaries, current and projected employment, and related training.
Sample Job Description:

Computer Help Desk Specialist

Summary of Work Activities and Responsibilities: Provides technical assistance to internal computer system users for word processing, electronic mail, spreadsheet, database, and project management applications. Answers questions and resolves computer problems for system users in person or over the telephone. Prepares and conducts evaluations of software and hardware and makes recommendations to management for review. Monitors software, hardware, and peripheral equipment to detect errors, evaluate effectiveness, and resolve problems. Installs software, hardware, and peripheral equipment and performs minor repairs. May be required to prepare and conduct training for system users. Help Desk Specialists are results oriented, capable of working on their own and making decisions. Work is performed from a central, well equipped technology center or at user stations. (This summary is a compilation of information found in the O*NET Custom Report for Computer User Support Specialists)

Typical Tasks:

1) Installs and performs minor repairs to hardware, software, and peripheral equipment in a system using [insert required software] following design or installation specifications.
2) Confers daily with staff, users, and management to determine requirements for new systems or modifications.
3) Reads technical manuals, confers with users, and conducts computer diagnostics to investigate and resolve problems and provide technical assistance.
4) Enters commands and observes system functioning to verify correct operations and detect errors.
5) Refers major hardware or software problems or defective products to vendors or technicians for service.
6) Maintains record of daily data communication transactions, problems and remedial action taken, and installation activities.
7) Conducts office automation feasibility studies, including workflow analysis, space design, and cost comparison analysis.
8) Reads trade magazines and technical manuals, and attends conferences and seminars to maintain knowledge of hardware and software.
9) Inspects equipment and reads order sheets to prepare for delivery to users.
   (from the Tasks section of the Custom Report)

Knowledge, Skills, and Abilities: Must have knowledge of electronic circuit boards, processors, chips, and computer hardware and software, including applications and programming. Must understand the principles and processes for providing customer services. Knowledge of instructional methods is helpful but not required. (from the Knowledge section of the Custom Report) Must be able to determine what is causing operating problems and decide how to solve them using active listening and critical thinking skills. (from the Skills section of the Custom Report) Must have the ability to communicate clearly, both orally and in writing, and use deductive and mathematical reasoning to detect, diagnose, and solve computer and system related problems. (from the Abilities section of the Custom Report)

Education and Experience Requirements: People in this position must have a Bachelor's Degree in Management Information Systems, Computer Science, Information Technology, or a related computer field, and two years of experience in computer support and service. Must have experience with [insert required software]. (from the Job Zone - Education section of the Custom Report)
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O*NET at Work: HR Planning, Employee Reskilling and Retention
Two important challenges in today’s workplace are 1) how to keep up with the changing skills requirements of jobs and 2) how to retain employees with the proper skills. This example application shows how Reliant Bank used O*NET® to help address these challenges.

The Employer’s Challenge

Reliant Bank, a medium-sized financial services company, has had difficulty ensuring that it has employees with the right skills to handle its computer and information technology applications. With changes in hardware and software technology, as well as user requirements, the company has needed to continuously work on reskilling its workforce.

The President of Reliant Bank feels that it has had too much turnover from its computer and information technology (IT) jobs. Exit interviews have indicated that a primary reason for turnover is that employees want to upgrade their skills and be positioned for career advancement opportunities.

The bank has not had a framework for addressing these issues. Sharon Rogers, the Human Resources (HR) Manager, determined that the O*NET system provides the framework and tools to help address these challenges. The following examples show how the HR manager addressed 1) Human Resource Planning — the identification of future skills requirements and how to position the organization for fulfilling these requirements, and 2) Employee Retention — facilitating the development of employees and positioning them for career advancement opportunities when they become available.

Example 1 Human Resource Planning

Human Resource Planning addresses the organization’s future employee needs by providing a systematic process for determining current versus future knowledge and skill requirements. It requires identifying the types of knowledge, skills, and abilities needed at a future point in time and then comparing this to what is currently available. The difference, or gap, may then be addressed.

Work analysis information, as provided by O*NET, can be a critical component of an effective HR Planning process. The Reliant HR Manager decided to use O*NET to help address the organization’s HR Planning and employee reskilling and retention issues.

The HR Manager also determined that the greatest need was in the area of information technology. Specifically, the needs were in hardware and software application support. She took these steps:
Step 1: Identify future staff needs.

The HR Manager met with line managers to identify future staff needs. They decided to concentrate on defining needs two years in the future. The strategic business plan for the next two years was reviewed. To accomplish its business plan, Reliant Bank needed approximately an eight percent (8%) increase in staff for computer hardware and software support.

Step 2: Define Work and Worker Requirements of future staff needs

The HR Manager reviewed information in O*NET OnLine. She accessed the Internet and typed in https://www.onetonline.org.
More information was needed on the nature of work in computer maintenance and support.

The user went to the Find Occupations screen and selected Computer and Mathematical under Job Family.

The user then selected Go.

On the Job Family list screen the user selected “Computer User Support Specialists.” The Summary Report for this occupation was displayed. However, the HR Manager wished to customize the report and so she chose Custom on the View Report line.

Next, the user chose to investigate Tasks, Knowledge, Skills, and Abilities by checking the appropriate boxes within the Custom Report Menu.

For selected O*NET Descriptors on the Custom Report Menu, users can choose the minimum score for the items displayed and the type of scale.

The user selected the Level scale for Knowledge and Skills.

The user then selected Go.

The user reviewed the key tasks of Computer User Support Specialists. The list of tasks in O*NET provides clarity about the application of Knowledge, Skills, and Abilities.

Tasks are listed here.
More information was needed on the nature of work in computer maintenance and support. The user went to the Find Occupations screen and selected Computer and Mathematical under Job Family. The user then selected Go.

On the Job Family list screen the user selected “Computer User Support Specialists.” The Summary Report for this occupation was displayed. However, the HR Manager wished to customize the report and so she chose Custom on the View Report line.

Next, the user chose to investigate Tasks, Knowledge, Skills, and Abilities by checking the appropriate boxes within the Custom Report Menu.

The user selected the Level scale for Knowledge and Skills. The user then selected Go.

For selected O*NET Descriptors on the Custom Report Menu, users can choose the minimum score for the items displayed and the type of scale.

The user reviewed the key tasks of Computer User Support Specialists. The list of tasks in O*NET provides clarity about the application of Knowledge, Skills, and Abilities.

The user then reviewed the Knowledge areas.

Users can download the tables for selected O*NET descriptors by clicking on the “save table” link.

Knowledge areas are listed in descending order by Level.

The user then reviewed the Skills.

Skill areas are presented in descending order for Computer User Support Specialists.

The user then reviewed the Abilities.

Abilities are listed in descending order of Importance.

Step 3: For gaps, define Knowledge, Skills, and Abilities required.

The HR Manager compiled the O*NET information into a listing for the target job. This was reviewed by the IT manager and selected members of the IT staff. They reported that the information was an excellent framework for the “job of the future.” They added additional information that was specific to Reliant Bank’s hardware and software environment and completed the effort within an hour.
Step 1: Identify future staff needs.

The HR Manager met with line managers to identify future staff needs. They decided to concentrate on defining needs two years in the future. The strategic business plan for the next two years was reviewed. To accomplish its business plan, Reliant Bank needed approximately an eight percent (8%) increase in staff for computer hardware and software support.

Step 2: Define Work and Worker Requirements of future staff needs

The HR Manager reviewed information in O*NET OnLine. She accessed the Internet and typed in https://www.onetonline.org. Occupation Quick Search enables the user to search for occupations by keyword or code. It can be accessed in the header of each O*NET OnLine screen or by selecting Find Occupations on the home page.

Step 4: Create a master plan for acquiring or repositioning employees to address future needs.

The HR Manager then worked with line managers to develop a concrete plan of action for developing and acquiring employees with the required skills. A description of the jobs and job requirements was posted for current employees.

Example 2 Employee Reskilling and Retention

The second issue that the HR Manager addressed was employee reskilling and retention. What skills are required in the future? How can employees assure that they have the skills that will enable them to advance in their career? When employees feel that they have advancement opportunities, they are more inclined to stay with the organization.

Step 1: Identify future Knowledge, Skill, and Ability needs.

The Knowledge, Skill, and Ability requirements that were defined in Example 1 were used. In addition, the HR Manager printed out the Summary Report for Computer User Support Specialists. The Summary Report displays the most important variables within each available category for the occupation of interest.
Step 2: Identify current Knowledge, Skill, and Ability levels.

Selected employees completed O*NET Knowledge, Skill, and Ability questionnaires. These questionnaires were downloaded from the O*NET Resource Center website at https://www.onetcenter.org/questionnaires.html. An analysis of this information identified current knowledge, skill, and ability levels.

Step 3: Identify gaps and development opportunities.

The current Knowledge, Skills, and Abilities levels were compared to the future needs. Where gaps were identified, the employer took steps to supplement current training in preparation for future requirements.

Step 4: Communicate career opportunities and development requirements.

Reliant Bank communicated to its employees about its future requirements and the knowledge, skills, and abilities needed. Where employees identified gaps, they initiated efforts to acquire the necessary knowledge, skills, or abilities. This positioned them for future job opportunities within the organization.

As a result of these actions employee turnover was reduced.

Benefits to the Employer

The employer realized a number of benefits by using O*NET, including:

- Creating a concrete strategy for addressing its future employee needs.
- Reducing employee turnover in mission critical jobs.
- Developing consistent and thorough job descriptions.
- Saving time by leveraging O*NET technology and information.
- Incurring no additional expense and remaining within existing budgets.
- Adopting a framework for defining jobs and work and ensuring that the organization had a thorough and systematic means of defining jobs and worker requirements across the organization.
The O*NET® Content Model is the conceptual framework underlying the database. It identifies the structure and types of information contained in the O*NET Database. The O*NET Content Model provides data categories that allow you to review information from the standpoint of occupations (via job-oriented descriptors) and people (via worker-oriented descriptors).
## O*NET’s Content Model clusters information into six broad categories, called domains:

- **Worker Characteristics**: enduring characteristics such as abilities, interests, and work styles, that might influence both a worker's performance and the capacity to acquire knowledge and skills required for effective work performance.

- **Worker Requirements**: work-related attributes acquired and/or developed through experience and education related to the occupation. Knowledge refers to acquired facts and principles pertinent to a job. Skills are the application of knowledge in a work setting and may be divided into basic skills (such as reading, which facilitates the acquisition of new knowledge) and cross-functional skills (such as problem solving, which extends across several domains of activities).

- **Experience Requirements**: qualities related to previous activities and specific types of work activities. This category includes information about the typical experiential backgrounds of workers in an occupation or group of occupations, as well as certification, licensure, and training.

- **Occupational Requirements**: O*NET identifies generalized work activities and detailed work activities that may be performed within multiple occupations. Using this framework, a single set of descriptors can be used to describe many occupations. Work context descriptors (the physical, social, or structural context of work) that may impose specific demands on workers are also included in this category.

- **Occupation-Specific Information**: descriptors that apply to a single occupation or a narrowly defined job family. This information includes occupation-specific tasks and machines, tools and software—referred to as Technology Skills and Tools. This category is particularly important for specific human resource applications, such as training, developing job descriptions, or redefining jobs.

- **Workforce Characteristics**: general characteristics of occupations that may influence occupational requirements, including the occupation’s social and economic contexts. Labor market information defined by industry or occupation also falls within this category. O*NET provides this information through links from O*NET OnLine to statistical labor market information including compensation and wage data, employment outlook, and industry size information. Much of this information is collected outside of O*NET by organizations such as the U.S. Department of Labor’s Bureau of Labor Statistics, the Department of Commerce, the Department of Defense, and the Census Bureau. An interactive version of the O*NET Content Model is available from the O*NET Resource Center home page at https://www.onetcenter.org/.

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### A closer look at the Content Model.

Each information category (or domain) in the O*NET Content Model contains subcategories or subdomains, which further define each category. For example, the Worker Characteristics domain includes additional subdomains: Abilities, Interests, and Work Styles.