BACKGROUND INFO

1) STANDARD DESCRIPTION OF MAIN JOBS (source O*NET)

Credit Analysts

Role: Analyze credit data and financial statements of individuals or firms to determine the degree of risk involved in extending credit or lending money. Prepare reports with credit information for use in decisionmaking.

Sample of reported job titles: Credit Administrator, Credit Analyst, Credit and Collections Analyst, Credit Officer, Credit Representative, Credit Risk Analyst, Municipal Fixed Income Analyst

Tasks of credit analysts:

- Analyze credit data and financial statements to determine the degree of risk involved in extending credit or lending money. (Relevance: 100/100; Importance: 98/100; Task Type: Core)
- Complete loan applications, including credit analyses and summaries of loan requests, and submit to loan committees for approval. (Relevance: 85/100; Importance: 94/100; Task Type: Core)
- Generate financial ratios, using computer programs, to evaluate customers' financial status. (Relevance: 100/100; Importance: 89/100; Task Type: Core)
- Prepare reports that include the degree of risk involved in extending credit or lending money. (Relevance: 100/100; Importance: 89/100; Task Type: Core)
- Analyze financial data, such as income growth, quality of management, and market share to determine expected profitability of loans. (Relevance: 95/100; Importance: 88/100; Task Type: Core)
- Compare liquidity, profitability, and credit histories of establishments being evaluated with those of similar establishments in the same industries and geographic locations. (Relevance: 100/100; Importance: 81/100; Task Type: Core)
- Consult with customers to resolve complaints and verify financial and credit transactions. (Relevance: 80/100; Importance: 52/100; Task Type: Core)
- Contact customers to collect payments on delinquent accounts. (Relevance: 35/100; Importance: 75/100; Task Type: Supplemental)
- Evaluate customer records and recommend payment plans, based on earnings, savings data, payment history, and purchase activity. (Relevance: 65/100; Importance: 67/100; Task Type: Supplemental)
- Review individual or commercial customer files to identify and select delinquent accounts for collection. (Relevance: 65/100; Importance: 58/100; Task Type: Supplemental)
- Confer with credit association and other business representatives to exchange credit information. (Relevance: 60/100; Importance: 52/100; Task Type: Supplemental)

Financial and Investment Analysts

Role: Conduct quantitative analyses of information involving investment programs or financial data of public or private institutions, including valuation of businesses.

Sample of reported job titles: Analyst, Credit Products Officer, Equity Research Analyst, Financial Analyst, Investment Analyst, Planning Analyst, Portfolio Manager, Real Estate Analyst, Securities Analyst, Trust Officer

Tasks of Financial and Investment Analysts:

- Analyze financial or operational performance of companies facing financial difficulties to identify or recommend remedies.
- Assess companies as investments for clients by examining company facilities.
- Collaborate on projects with other professionals, such as lawyers, accountants, or public relations experts.
- Collaborate with investment bankers to attract new corporate clients.
- Conduct financial analyses related to investments in green construction or green retrofitting projects.
- Confer with clients to restructure debt, refinance debt, or raise new debt.
- Create client presentations of plan details.
- Determine the prices at which securities should be syndicated and offered to the public.
- Develop and maintain client relationships.
- Draw charts and graphs, using computer spreadsheets, to illustrate technical reports.
- Employ financial models to develop solutions to financial problems or to assess the financial or capital impact of transactions.
- Evaluate and compare the relative quality of various securities in a given industry.
- Evaluate capital needs of clients and assess market conditions to inform structuring of financial packages.
- Inform investment decisions by analyzing financial information to forecast business, industry, or economic conditions.
- Interpret data on price, yield, stability, future investment-risk trends, economic influences, and other factors affecting investment programs.
- Monitor developments in the fields of industrial technology, business, finance, and economic theory.
- Monitor fundamental economic, industrial, and corporate developments by analyzing information from financial publications and services, investment banking firms, government agencies, trade publications, company sources, or personal interviews.
- Perform securities valuation or pricing.
- Prepare all materials for transactions or execution of deals.
- Prepare plans of action for investment, using financial analyses.
- Present oral or written reports on general economic trends, individual corporations, and entire industries.
- Purchase investments for companies in accordance with company policy.
- Recommend investments and investment timing to companies, investment firm staff, or the public.
- Specialize in green financial instruments, such as socially responsible mutual funds or exchange-traded funds (ETF) that are comprised of green companies.
- Supervise, train, or mentor junior team members.

Financial Quantitative Analysts

Role: Develop quantitative techniques to inform securities investing, equities investing, pricing, or valuation of financial instruments. Develop mathematical or statistical models for risk management, asset optimization, pricing, or relative value analysis.

Sample of reported job titles: Investment Portfolio Control Consultant, Investment Strategist, Portfolio Manager, Quantitative Analyst, Quantitative Equity Analyst, Quantitative Research Analyst, Quantitative Strategy Analyst, Research Analyst.

Tasks of Financial Quantitative Analysts:

- Apply mathematical or statistical techniques to address practical issues in finance, such as derivative valuation, securities trading, risk management, or financial market regulation. (Relevance: 100/100; Importance: 85/100; Task Type: Core)
- Research or develop analytical tools to address issues such as portfolio construction or optimization, performance measurement, attribution, profit and loss measurement, or pricing models. (Relevance: 100/100; Importance: 79/100; Task Type: Core)
- Interpret results of financial analysis procedures. (Relevance: 100/100; Importance: 78/100; Task Type: Core)
- Develop core analytical capabilities or model libraries, using advanced statistical, quantitative, or econometric techniques. (Relevance: 90/100; Importance: 75/100; Task Type: Core)
- Define or recommend model specifications or data collection methods. (Relevance: 100/100; Importance: 71/100; Task Type: Core)
- Produce written summary reports of financial research results. (Relevance: 100/100; Importance: 66/100; Task Type: Core)
- Maintain or modify all financial analytic models in use. (Relevance: 100/100; Importance: 66/100; Task Type: Core)
- Provide application or analytical support to researchers or traders on issues such as valuations or data. (Relevance: 95/100; Importance: 65/100; Task Type: Core)
- Devise or apply independent models or tools to help verify results of analytical systems. (Relevance: 100/100; Importance: 64/100; Task Type: Core)
- Collaborate in the development or testing of new analytical software to ensure compliance with user requirements, specifications, or scope. (Relevance: 90/100; Importance: 61/100; Task Type: Core)
- Confer with other financial engineers or analysts on trading strategies, market dynamics, or trading system performance to inform development of quantitative techniques. (Relevance: 95/100; Importance: 61/100; Task Type: Core)
- Consult traders or other financial industry personnel to determine the need for new or improved analytical applications. (Relevance: 95/100; Importance: 59/100; Task Type: Core)
- Research new financial products or analytics to determine their usefulness. (Relevance: 100/100; Importance: 58/100; Task Type: Core)
- Identify, track, or maintain metrics for trading system operations. (Relevance: 80/100; Importance: 47/100; Task Type: Supplemental)
- Develop methods of assessing or measuring corporate performance in terms of environmental, social, and governance (ESG) issues. (Relevance: 95/100; Importance: 46/100; Task Type: Supplemental)
- Collaborate with product development teams to research, model, validate, or implement quantitative structured solutions for new or expanded markets. (Relevance: 90/100; Importance: 46/100; Task Type: Supplemental)
- Prepare requirements documentation for use by software developers. (Relevance: 90/100; Importance: 46/100; Task Type: Supplemental)
- Develop solutions to help clients hedge carbon exposure or risk. (Relevance: 50/100; Importance: 38/100; Task Type: Supplemental)
- Develop tools to assess green technologies or green financial products, such as green hedge funds or social responsibility investment funds. (Relevance: 80/100; Importance: 36/100; Task Type: Supplemental)
- Assess the potential impact of climate change on business financial issues, such as damage repairs, insurance costs, or potential disruptions of daily activities. (Relevance: 60/100; Importance: 33/100; Task Type: Supplemental)
- Analyze pricing or risks of carbon trading products. (Relevance: 55/100; Importance: 27/100; Task Type: Supplemental)

Financial Risk Specialists

Role: Analyze and measure exposure to credit and market risk threatening the assets, earning capacity, or economic state of an organization. May make recommendations to limit risk.

Sample of reported job titles: Analyst, Equity Research Analyst, Risk Analyst, Risk Manager, Risk Specialist, Securities Analyst

Tasks of Financial Risk Specialists:

- Analyze areas of potential risk to the assets, earning capacity, or success of organizations.
- Analyze new legislation to determine impact on risk exposure.
- Conduct statistical analyses to quantify risk, using statistical analysis software or econometric models.
- Confer with traders to identify and communicate risks associated with specific trading strategies or positions.
- Consult financial literature to ensure use of the latest models or statistical techniques.
- Contribute to development of risk management systems.
- Determine potential environmental impacts of new products or processes on long-term growth and profitability.
- Develop contingency plans to deal with emergencies.
- Develop or implement risk-assessment models or methodologies.
- Devise scenario analyses reflecting possible severe market events.
- Devise systems or processes to monitor validity of risk assessments.
- Document, and ensure communication of, key risks.
- Draw charts and graphs, using computer spreadsheets, to illustrate technical reports.
- Evaluate and compare the relative quality of various securities in a given industry.
- Evaluate the risks and benefits involved in implementing green building technologies.
- Evaluate the risks related to green investments, such as renewable energy company stocks.
- Gather risk-related data from internal or external resources.
- Identify key risks and mitigating factors of potential investments, such as asset types and values, legal and ownership structures, professional reputations, customer bases, or industry segments.
- Inform financial decisions by analyzing financial information to forecast business, industry, or economic conditions.
- Interpret data on price, yield, stability, future investment-risk trends, economic influences, and other factors affecting investment programs.
- Maintain input or data quality of risk management systems.
- Meet with clients to answer queries on subjects such as risk exposure, market scenarios, or values-at-risk calculations.
- Monitor developments in the fields of industrial technology, business, finance, and economic theory.
- Prepare plans of action for investment, using financial analyses.
- Produce reports or presentations that outline findings, explain risk positions, or recommend changes.
- Provide statistical modeling advice to other departments.
- Recommend investments and investment timing to companies, investment firm staff, or the public.
- Recommend ways to control or reduce risk.
- Review or draft risk disclosures for offer documents.
- Track, measure, or report on aspects of market risk for traded issues.

B) Examples of human abilities necessary to perform financial analysis related tasks.

- Mathematical Reasoning: The ability to choose the right mathematical methods or formulas to solve a problem., [importance score: 85/100]
- Written Comprehension: The ability to read and understand information and ideas presented in writing., [importance score: 75/100]
- Oral Comprehension: The ability to listen to and understand information and ideas presented through spoken words and sentences., [importance score: 72/100]
- Written Expression: The ability to communicate information and ideas in writing so others will understand., [importance score: 72/100]
- Deductive Reasoning: The ability to apply general rules to specific problems to produce answers that make sense., [importance score: 72/100]
- Number Facility: The ability to add, subtract, multiply, or divide quickly and correctly., [importance score: 72/100]
- Oral Expression: The ability to communicate information and ideas in speaking so others will understand., [importance score: 69/100]
- Problem Sensitivity: The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing that there is a problem., [importance score: 69/100]
- Inductive Reasoning: The ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events)., [importance score: 69/100]
- Information Ordering: The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations)., [importance score: 69/100]
- Fluency of Ideas: The ability to come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity)., [importance score: 66/100]
- Speech Recognition: The ability to identify and understand the speech of another person., [importance score: 63/100]
- Speech Clarity: The ability to speak clearly so others can understand you., [importance score: 63/100]
- Near Vision: The ability to see details at close range (within a few feet of the observer). [importance score: 60/100]
- Category Flexibility: The ability to generate or use different sets of rules for combining or grouping things in different ways., [importance score: 56/100]
- Originality: The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem., [importance score: 53/100]
- Selective Attention: The ability to concentrate on a task over a period of time without being distracted., [importance score: 53/100]
- Flexibility of Closure: The ability to identify or detect a known pattern (a figure, object, word, or sound) that is hidden in other distracting material., [importance score: 47/100]
- Speed of Closure: The ability to quickly make sense of, combine, and organize information into meaningful patterns., [importance score: 41/100]
- Perceptual Speed: The ability to quickly and accurately compare similarities and differences among sets of letters, numbers, objects, pictures, or patterns. The things to

be compared may be presented at the same time or one after the other. This ability also includes comparing a presented object with a remembered object., [importance score: 38/100]

- Memorization: The ability to remember information such as words, numbers, pictures, and procedures., [importance score: 35/100]
- Far Vision: The ability to see details at a distance., [importance score: 31/100]
- Time Sharing: The ability to shift back and forth between two or more activities or sources of information (such as speech, sounds, touch, or other sources)., [importance score: 28/100]
- Visualization: The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged., [importance score: 25/100]
- Trunk Strength: The ability to use your abdominal and lower back muscles to support part of the body repeatedly or continuously over time without "giving out" or fatiguing., [importance score: 25/100]
- Visual Color Discrimination: The ability to match or detect differences between colors, including shades of color and brightness., [importance score: 25/100]
- Hearing Sensitivity: The ability to detect or tell the differences between sounds that vary in pitch and loudness., [importance score: 25/100]
- Auditory Attention: The ability to focus on a single source of sound in the presence of other distracting sounds., [importance score: 25/100]
- Wrist-Finger Speed: The ability to make fast, simple, repeated movements of the fingers, hands, and wrists., [importance score: 22/100]
- Finger Dexterity: The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects., [importance score: 16/100]
- Control Precision: The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions., [importance score: 16/100]
- Depth Perception: The ability to judge which of several objects is closer or farther away from you, or to judge the distance between you and an object., [importance score: 16/100]
- Arm-Hand Steadiness: The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position., [importance score: 13/100]
- Manual Dexterity: The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects., [importance score: 13/100]

C) Examples of human <u>skills</u> required to perform certain financial analysis related tasks:

- Critical Thinking: Using logic and reasoning to identify the strengths and weaknesses of alternative solutions: conclusions: or approaches to problems..
- Reading Comprehension: Understanding written sentences and paragraphs in work-related documents..
- Speaking: Talking to others to convey information effectively..
- Active Learning: Understanding the implications of new information for both current and future problem-solving and decision-making..

- Active Listening: Giving full attention to what other people are saying: taking time to understand the points being made: asking questions as appropriate: and not interrupting at inappropriate times..
- Mathematics: Using mathematics to solve problems...
- Writing: Communicating effectively in writing as appropriate for the needs of the audience..
- Judgment and Decision Making: Considering the relative costs and benefits of potential actions to choose the most appropriate one..
- Monitoring: Monitoring/Assessing performance of yourself: other individuals: or organizations to make improvements or take corrective action..
- Social Perceptiveness: Being aware of others' reactions and understanding why they react as they do..
- Service Orientation: Actively looking for ways to help people..
- Complex Problem Solving: Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions..
- Time Management: Managing one's own time and the time of others..
- Systems Analysis: Determining how a system should work and how changes in conditions: operations: and the environment will affect outcomes..
- Systems Evaluation: Identifying measures or indicators of system performance and the actions needed to improve or correct performance: relative to the goals of the system..
- Coordination: Adjusting actions in relation to others' actions..
- Operations Analysis: Analyzing needs and product requirements to create a design..
- Learning Strategies: Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things..
- Persuasion: Persuading others to change their minds or behavior..
- Negotiation: Bringing others together and trying to reconcile differences..
- Instructing: Teaching others how to do something..
- Management of Financial Resources: Determining how money will be spent to get the work done: and accounting for these expenditures..
- Management of Personnel Resources: Motivating: developing: and directing people as they work: identifying the best people for the job..
- Operations Monitoring: Watching gauges: dials: or other indicators to make sure a machine is working properly..
- Management of Material Resources: Obtaining and seeing to the appropriate use of equipment: facilities: and materials needed to do certain work..
- Programming: Writing computer programs for various purposes..
- Quality Control Analysis: Conducting tests and inspections of products: services: or processes to evaluate quality or performance..
- Science: Using scientific rules and methods to solve problems..
- Technology Design: Generating or adapting equipment and technology to serve user needs.

D) Examples of human knowledge required to perform certain financial analysis related tasks:

- Mathematics: Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
- Economics and Accounting: Knowledge of economic and accounting principles and practices, the financial markets, banking, and the analysis and reporting of financial data.
- Computers and Electronics: Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
- English Language: Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
- Engineering and Technology: Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
- Administration and Management: Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
- Design: Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.
- Customer and Personal Service: Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
- Psychology: Knowledge of human behavior and performance; individual differences in ability, personality, and interests; learning and motivation; psychological research methods; and the assessment and treatment of behavioral and affective disorders.
- Education and Training: Knowledge of principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.
- Personnel and Human Resources: Knowledge of principles and procedures for personnel recruitment, selection, training, compensation and benefits, labor relations and negotiation, and personnel information systems.
- Communications and Media: Knowledge of media production, communication, and dissemination techniques and methods. This includes alternative ways to inform and entertain via written, oral, and visual media.
- Law and Government: Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process.
- Sales and Marketing: Knowledge of principles and methods for showing, promoting, and selling products or services. This includes marketing strategy and tactics, product demonstration, sales techniques, and sales control systems.
- Production and Processing: Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.
- Sociology and Anthropology: Knowledge of group behavior and dynamics, societal trends and influences, human migrations, ethnicity, cultures, and their history and origins.
- Administrative: Knowledge of administrative and office procedures and systems such as word processing, managing files and records, stenography and transcription, designing forms, and workplace terminology.

- Geography: Knowledge of principles and methods for describing the features of land, sea, and air masses, including their physical characteristics, locations, interrelationships, and distribution of plant, animal, and human life.
- Telecommunications: Knowledge of transmission, broadcasting, switching, control, and operation of telecommunications systems.
- Physics: Knowledge and prediction of physical principles, laws, their interrelationships, and applications to understanding fluid, material, and atmospheric dynamics, and mechanical, electrical, atomic and sub-atomic structures and processes.
- History and Archeology: Knowledge of historical events and their causes, indicators, and effects on civilizations and cultures.
- Transportation: Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including the relative costs and benefits.
- Building and Construction: Knowledge of materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.
- Foreign Language: Knowledge of the structure and content of a foreign (non-English) language including the meaning and spelling of words, rules of composition and grammar, and pronunciation.
- Mechanical: Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
- Chemistry: Knowledge of the chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.
- Biology: Knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.
- Medicine and Dentistry: Knowledge of the information and techniques needed to diagnose and treat human injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.
- Therapy and Counseling: Knowledge of principles, methods, and procedures for diagnosis, treatment, and rehabilitation of physical and mental dysfunctions, and for career counseling and guidance.
- Fine Arts: Knowledge of the theory and techniques required to compose, produce, and perform works of music, dance, visual arts, drama, and sculpture.
- Philosophy and Theology: Knowledge of different philosophical systems and religions. This includes their basic principles, values, ethics, ways of thinking, customs, practices, and their impact on human culture.
- Public Safety and Security: Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.
- Food Production: Knowledge of techniques and equipment for planting, growing, and harvesting food products (both plant and animal) for consumption, including storage/handling techniques.

E) Examples of <u>technology skills</u> (ability to use the following tools) necessary to perform certain financial analysis related tasks.

- Accounting software: Examples: Fund accounting software, Intuit QuickBooks, Sage 50 Accounting, Tax software.
- Analytical or scientific software: Examples: IBM SPSS Statistics, SAS, StataCorp Stata, The MathWorks MATLAB, Insightful S-PLUS.
- Business intelligence and data analysis software: Examples: Alteryx software, MicroStrategy, Olik Tech OlikView, Tableau.
- Charting software: Examples: Montgomery Investment Technology Utility XL, TickQuest NeoTicker.
- Cloud-based data access and sharing software: Examples: Microsoft SharePoint.
- Configuration management software: Examples: Perforce Helix software.
- Customer relationship management CRM software: Examples: Salesforce software.
- Data base management system software: Examples: Apache Hive, Apache Pig, Teradata Database.
- Data base reporting software: Examples: Microsoft SQL Server Reporting Services SSRS, Reporting software, SAP Crystal Reports.
- Data base user interface and query software: Examples: Microsoft SQL Server, Oracle Database, Structured query language SQL, Yardi software, Microsoft Access.
- Development environment software: Examples: Microsoft Visual Basic, Microsoft Visual Basic for Applications VBA, Microsoft Visual Studio.
- Document management software: Examples: Microsoft Office SharePoint Server MOSS.
- Electronic mail software: Examples: Email software, IBM Notes, Microsoft Exchange, Microsoft Outlook.
- Enterprise resource planning ERP software: Examples: Microsoft Dynamics, Oracle PeopleSoft, SAP software, SSA Global Infinium Financial Management, MicroStrategy Desktop, Oracle JD Edwards EnterpriseOne.
- Enterprise system management software: Examples: IBM Power Systems software.
- Expert system software: Examples: Ivorix Neurostrategy Finance, Matheny Pattern Forecaster Plus, NeuroSolutions for MatLab.
- Financial analysis software: Examples: Delphi Technology, Moody's RiskCalc, Oracle E-Business Suite Financials, Oracle Hyperion Financial Management, Bloomberg Professional, Datarails, Cube, Causal, Jirav, Clockwork, Budgyt, Limelight, NetSuite Reporting, MODLR, DriveTrain, Pigment, FinAlyzer, Anaplan.
- Human resources software: Examples: ADP Workforce Now, Human resource management software HRMS.
- Information retrieval or search software: Examples: dailyVest Investment Personalization Platform, LexisNexis, TradeTools Monthly U.S. Economic Database, Ward Systems Group NeuroShell Trader.
- Internet browser software: Examples: Web browser software.
- Object or component oriented development software: Examples: R, C#, C++, Oracle Java, Perl, Python.
- Office suite software: Examples: Microsoft Office software.
- Operating system software: Examples: Linux, UNIX.
- Presentation software: Examples: Apple Keynote, DealMaven PresLink for PowerPoint and Word, Google Slides, Microsoft PowerPoint.
- Process mapping and design software: Examples: Microsoft Visio.
- Project management software: Examples: Microsoft Project, Oracle Primavera Enterprise Project Portfolio Management.
- Sales and marketing software: Examples: Marketo Marketing Automation.
- Spreadsheet software: Examples: Apple AppleWorks, Corel QuattroPro, IBM Lotus 1-2-3, Microsoft Excel.

- Word processing software: Examples: Google Docs, Microsoft OneNote, Microsoft Word, Report generation software.
- Data mining software: Examples: IBM Cognos Business Intelligence.
- Web platform development software: Examples: JavaScript.

2) TEMPLATES

DEFINITION OF A WORKFLOW

A workflow is a defined sequence of tasks organized to accomplish a specific goal or process. It describes how tasks are structured and articulated, who performs them, in what order, and using what tools or resources. The description of a workflow list the abilities, skills, knowledge and tools mobilized, which helps understand how the workflow can be augmented or replaced by AI systems.

EXAMPLES OF SHORT DESCRIPTION OF A WORKFLOW

1. Credit Risk Analysis Workflow:

- o **Tasks**: Analyze credit data and financial statements to assess risk in lending; complete loan applications, including credit analyses; generate financial ratios; prepare risk reports.
- Abilities and Skills: Critical thinking, mathematical reasoning, reading comprehension, written and oral comprehension and expression, deductive and inductive reasoning.
- **Knowledge**: Economics and accounting, mathematics, business and management principles.
- Tools: Financial analysis software (e.g., Moody's RiskCalc, Oracle E-Business Suite Financials), spreadsheet software (e.g., Microsoft Excel), database management systems.

2. Loan Approval Workflow:

- Tasks: Submit loan applications with credit analyses to loan committees for approval; consult with customers for complaints resolution; contact customers for delinquent accounts.
- o **Abilities and Skills**: Judgment and decision-making, problem sensitivity, service orientation, negotiation, active listening.
- **Knowledge**: Customer and personal service, administration and management, law and government.
- o **Tools**: CRM software (e.g., Salesforce), electronic mail software (e.g., Microsoft Outlook), office suite software (e.g., Microsoft Office).