



BOK FINANCIAL CORPORATION

JOB DESCRIPTION

FUNCTIONAL TITLE INTERNAL AUDIT DATA ANALYST	FLSA: EXEMPT	EFFECTIVE DATE: Feb 2018
REPORTS TO: DIRECTOR, AUDIT ANALYTICS	DIVISION: FINANCE/ADMINISTRATION	
GROUP: INTERNAL AUDIT	DEPARTMENT: INTERNAL AUDIT	

SUMMARY STATEMENT:	General purpose for this job (what is done and why)
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The **Internal Audit Data Analyst** is responsible for extracting and aggregating the critical data and data insights (i.e., trends, patterns, outliers) to support BOKF’s internal audit teams in the identification of business process risks and control weaknesses. In executing the responsibilities of this position, the incumbent collaborates with Director, IA Data Analytics and assigned audit team to identify the audit objective of the analytic; determine the approach; identify the data elements required. In partnership with IT and line of business personnel, the incumbent identifies systems, data format and file requirements; and utilizes computer-assisted audit techniques (CAATs) to access and aggregate data in addition to providing technical expertise on data validation, data cleansing and analysis.

PRINCIPAL DUTIES AND RESPONSIBILITIES	Majority of duties performed, but not meant to be all-inclusive nor prevent other duties from being assigned as necessary. Non-essential functions identified with an asterisk *
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1.	<ul style="list-style-type: none"> • Supports BOKF’s Audit team in all phases of the audit process: <ul style="list-style-type: none"> - Planning – In collaboration with the assigned audit team, identifies the audit objective of the analytic. Determines the approach to achieve the objective. Identifies the data elements required. Discusses approach with IT and line of business personnel and identifies systems; data owners; data format and file requirements. - Obtain & Validate Data – Develops and modifies existing scripts and queries in ACL, or similar software, to access data as required by audit plan. Retrieves and aggregates data into data sets on which statistical/data analyses can be performed. Verifies completeness and accuracy of data. Identifies any gaps in required data. Identifies opportunities to make testing more efficient and effective using CAATs. - Documentation – Develops and maintains documentation of data sources, scripts and queries. - Post Audit Follow-up – Develops recommendations for changes to data-related processes and systems that will mitigate risk, improve performance and ensure the organization complies with all relevant regulations. • Works independently with moderate guidance from Director, IA Data Analytics on audits which vary in degree of complexity and require a high order of analytical, interpretative, and/or constructive thinking in varied situations. 	60%
2.	Develops, executes and maintains data analytics framework as part of the automated continuous audit program targeting fraud, errors, and other risks. Conducts continuous audit protocols to assess the need for audit teams to perform further testing, as required.	20%
3.	In collaboration with assigned audit team(s), performs comprehensive analyses and testing to identify errors and irregularities on a targeted basis as a result of an audit finding, special project, or review. Provides technical expertise on data validation, data cleansing and analysis.	10%
4.	Performs special projects as directed by management and researches CAATs methodology to build upon knowledge base in order to enhance capabilities for identifying trends and creating data analytics efficiencies.	10%

INTERNAL AUDIT DATA ANALYST

KNOWLEDGE, SKILLS and ABILITIES:	Minimum education, experience, technical and communication skill levels and licenses/certificates normally required to perform the duties of this position
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Required

- Programming/scripting experience with strong background in retrieving and analyzing data using data analytical tools, specifically SQL/Oracle, ACL, and/or Excel;
- Fundamental understanding of relational databases, programming concepts, and script structure;
- Ability to understand business risks and how to leverage data to identify and mitigate these risks;
- Proven and determined problem solver with a high degree of analytical and technical data skills;
- Strong ability to effectively communicate (verbally and in writing) technical information to a variety of audiences with varying degree of technical understanding;
- Ability to effectively plan time, method, manner and sequence of own work assignments.

Preferred

- CISA, CPA, CIA, ACDA, or working toward certification;
- Experience in the financial industry or similarly regulated environment, especially within an internal audit group;
- Advanced Excel skills (emphasis on formulas, pivot tables, macros, nested-if statements, ad hoc reporting capabilities, and proven experience with manipulating data.);
- Advanced scripting skills (such as Python, SQL, Oracle, VBA, ACL, R);
- Experience working with IT and IS management partners, and exposure to corporate technology environments.

This level of knowledge is normally acquired through a Bachelor's degree in a related field of study (such as MIS/AIS, Data Analytics, Accounting, Auditing, or Computer Science) and 2 to 4 years' experience performing analytics or continuous auditing, risk/business analysis, or other investigations.

WORKING CONDITIONS	Typical working conditions associated with this type of work and environmental hazards, if any, that may be encountered in performing the duties of this position.
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Work is normally performed in a climate-controlled environment, where exposure to conditions of extreme heat/cold, poor ventilation, fumes, and gases is very limited. Noise level is moderate and includes sounds of a normal office environment. No environmental hazards are encountered in the performance of normal job duties. Travel may be required occasionally to locations throughout the BOKF footprint.

PHYSICAL DEMANDS	The physical effort generally associated with this position.
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Work requires finger dexterity and eye-hand coordination to operate computer keyboard at moderate skill level. Work may require occasional pushing, pulling, or carrying 20-pound objects such as files, documents, and computer printouts. Work involves sitting most of the time, but may involve standing and walking for brief periods of time

WORKING RELATIONSHIPS/CONTACTS	Positions, other than supervisor and immediate co-workers, with which incumbent have frequent contact and the reason for contact.
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Internal – Extensive contact with all levels of bank personnel from nonexempt to management.

External – Limited contact with external auditors and bank regulatory examiners.

Supervision of Others – None

FINANCIAL ACCOUNTABILITY	Budget/asset amount managed, revenues/profits produced, and/or other financial resources incumbent is accountable for. Also indicates judgment/decision-making level.
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The Audit Data Analyst is responsible for performing or assisting with the performance of tests to ensure controls are in place to safeguard assets. Audit fees may be reduced to the extent external auditors may rely on the work performed by the Audit Data Analyst.