TOSA
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Tosa Skills Framework

Power BI

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Overview

Introduction to the Tosa skills framework

for Tosa assessment and certification

Tosa® (Test on Software Applications)

The Tosa assessments and certifications will determine and validate a candidate's proficiency and skill level in software applications used in a professional environment. The Tosa Assessments are designed to validate the professional software skills of individuals (students, trainees, employees or jobseekers) in supporting their employment, as well as their professional or academic objectives.

Tosa Assessments employ the Adaptive Testing methodology, which creates a personalized testing experience adapted to a candidate's skill level for a selected software application. The score is based on the Item Response Theory using a 3-parameter logistic model, similar to the GMAT scoring method. Adaptive-based testing selects questions that challenge candidates to the limit of their knowledge and abilities.

Tosa Skills Framework Objective

This Tosa framework provides an overview of the subject areas being assessed during the Tosa Assessment and Certification exams. Tosa validates candidate proficiency in the most popular professional software programs using a score on a scale from 1-1000 for the Certification Assessment, and a score divided into 5 levels from "Beginner" to "Expert" for the Diagnostic Assessment.

The objective of this document is to present an overview of the technical skills associated with each of the 4 main domains within each proficiency level. This information will also support educators and trainers in tailoring their training program to achieve desired proficiency levels.

Unique Tosa Scoring

The Tosa assessments and certifications are based on a unique score, divided into 5 levels.

- Ranging from 1 to 1000 for the certification
- Divided into five levels, from Beginner to Expert for assessment

Tosa® levels	Corresponding Tosa® score	Certification status & documents issued
Expert	876 - 1000	Certification earned - diploma & Credly digital badge issued
Advanced	726 – 875	Certification earned - diploma & Credly digital badge issued
Productive	551 – 725	Certification earned - diploma & Credly digital badge issued
Basic	351 – 550	Certification earned – diploma issued
Beginner	1 – 350	Certification failed - certificate of completion issued

Domains and subdomains

Environments, Tools, and Methods	■ Products and licenses in Power BI ■ Technologies and languages of the solution ■ Methodologies and terminology
Data Model	■ Data sources ■ Schemas and relationships ■ DAX and measures
Data Visualization	■ Report consumption ■ User experience features ■ Building report elements
Collaborative Tools	■ Managing a workspace and its content ■ Dashboards and apps ■ Working in the Service

About the Power BI certification

The Tosa Power BI Certification relies on a database of about 150 questions. It is composed of 35 questions and lasts for 1 hour. The algorithm adapts to each answer to adjust the difficulty level of the questions until it reaches the exact definition of a candidate's level by calculating the limit of their highest level skills.

Since the test is adaptive, the series of questions that each candidate gets is unique for each test. This uniqueness allows for a more accurate evaluation of the candidate's level. It also limits cheating and the memorization of questions from different passages.

Our platform allows individuals to take the certification in class, in an approved testing center, or remotely via our integrated asynchronous online proctoring solutions.

Our remote proctoring solutions provide added flexibility for both the administrator and the candidate, allowing the certification exam to be taken anywhere, at any time. The candidate only needs an internet connection and a computer equipped with a working webcam and microphone.

Candidates receive a numeric score out of 1000 points corresponding to a proficiency level on a five-level scale. Candidates who score between 1 and 350 points don't earn the certification. They will not receive a diploma but a certificate of completion. Candidates who score 351

points or above earn the certification. They will receive a diploma by email within five (5) business days. If candidates score 551 points or above, they will also be eligible to receive a Credly digital badge.

There is no requirement to be eligible to take the exam, but our recommendations to be well prepared on exam day are:

- Take at least one Tosa Power BI adaptive assessment to estimate your level and get familiar with the test format
- Use free practice tests on our website for training
- Follow e-learning or training courses (average duration per level is between 10 and 15 hours per certification, so around 150 hours total)

Tosa certification diplomas are valid for three years from the date of issue as skill levels evolve or decline over time, depending on the use of the software. New software and software versions are released every year, and skills must be updated. We cannot legitimately certify a digital skills level for more than three years. Limiting the certification validity reinforces the need for life-long learning and professional development.

Tosa certifications can be retaken when they expire. Earners willing to improve their score and level can also retake the exam at any time.

Tosa Sequence for Progressive Skills Development

Students and professionals can tailor their certification journey with Tosa through vertical progression, demonstrating increasing proficiency in Power BI. Starting at a basic level, users can advance to productive, advanced, and expert levels as their skills grow. This clear path encourages continuous improvement and validates each stage of their development. Tosa's structure makes it easy to track progress and showcase evolving expertise.

Level 1 – Beginner User

Between 1 and 350 points

The Beginner Proficiency is set for a score from 1 to 350, which is the lowest Tosa score category. Attaining the Beginner score defines little or limited knowledge of the application, including the application's basic functions and features, signifying the inability to use the application in a professional environment.

Overview

Domain	Skills Assessed
Environments, Tools, and Methods	**Products and licenses of the solution:** - Identify the free tools in the Power BI Solution - Identify the role of the Power BI Service - Recognize the Power BI Service interface - Recognize the Power BI Desktop interface - Recognize the Power Query interface - Access applications in the Power BI Service - Know the basic features of Power BI **Technologies and language of the solution:** - Identify the key buttons in the Power BI Desktop interface
Data Model	**Data sources:** - Understand the basic capabilities of data import - Trigger data retrieval from a PDF - Trigger data retrieval from a web page - Select columns in Power Query **Schemas and relationships:** - Create a relationship **DAX and measures:** - Write a DAX expression for a calculated column - Create a DAX measure using the SUM function

Data Visualization	**Report consumption:** - Navigate through a report published in the Power BI Service - Consume a report in the Power BI Service - Print a page from a published report - Reset filters in a report within the Power BI Service **User experience features:** - Identify the Slicer visualization - Identify the icon of the KPI Card visual - Know the Text box button - Identify slicers and their role **Building report elements:** - Sort a visual - Identify the area of the visual used for sorting - Know and use the Filters pane
Collaborative Tools	**Managing a workspace and its content:** - Access "My workspace" in the Power BI Service - Sort items in a workspace - Know how to search for an item in a workspace - Use the "Browse" area of the Power BI Service **Dashboards and apps:** - Use the "Get an app" button **Working in the Service:** - Identify the focus mode on a visual - Pin a visual to a dashboard

Level 2 – Basic User

Between 351 and 550 points

Prior to the acquisition of the skills of the Basic level, the candidate will have mastered the skills of the Beginner level.

Environment, Tools, and Methods

Managing the Power BI environment requires skills such as identifying Power BI licenses; distinguishing Power BI Desktop from the Power BI Service; describing the report creation cycle; and recognizing key components of an analytical data model such as relationships and key columns. At this level, the candidate is able to create and modify simple queries using Power Query.

Professional use case: In a professional context, these skills enable, for example, a sales person to understand the methods and terminology used in analytical projects and to choose the Power BI license that best fits their needs.

Data Model

At this level, the candidate is able to create a simple data model by establishing relationships between tables and identifying primary and foreign keys. They know how to use calculated columns and understand the implications of relationships in data analysis.

Professional use case: In a professional context, these skills enable, for example, a sales person to load and transform simple data to make it usable and to create basic data models for their reports.

Data Visualization

At this level, the candidate knows how to configure common visuals, apply data labels, and use themes to ensure consistent formatting. They can work with comparison and distribution visuals and export data from a visual.

Professional use case: In a professional context, these skills enable, for example, a sales person to use basic visualizations (charts, tables) to present data and apply filters and slicers to explore it.

Collaborative Tools

At this level, the candidate understands roles and permissions within a workspace. They can manage report subscriptions and interact with dashboards using comments and annotations.

Professional use case: In In a professional context, these skills enable, for example, a sales

person to publish dashboards to the Power BI Service, share them with colleagues, and define permissions and access rights for reports.

Overview

Domain	Skills Assessed
Environments, Tools, and Methods	**Products and licenses of the solution:** - Understand the role of the "My workspace" area - Know how to display the user's account license information - Access workspaces in the Power BI Service **Technologies and language of the solution:** - Identify a fact table in a data model - Describe the role of a report template file - Describe the role of a key column in the data model - Identify a relationship **Methodologies and terminology:** - Access Power Query to modify a query
Data Model	**Data sources:** - Trigger manual table creation in Power BI Desktop - Identify actions to be performed in a query - Apply a basic filter in Power Query - Apply a "contains" filter in Power Query - Determine when to use the Split Columns command - Determine when to use the Use First Row as Headers command **Schemas and relationships:** - Use the Detect Relationships command - Describe the properties of relationships in a data model **DAX and measures:** - Identify columns with a summary mode - Trigger the creation of a calculated column using DAX - Create a DAX measure using the AVERAGE function
Data Visualization	**Report consumption:** - Export source data from a visual **User experience features:** - Recognize the use of a theme - Know the features of themes - Know the functionalities of buttons - Manage interactions between visuals

	Building report elements: - Perform basic formatting operations on a visual - Apply data labels - Identify comparison and distribution visuals - Configure a map-type visual
Collaborative Tools	**Managing a workspace and its content:** - Define the role of workspaces - Identify the roles within a workspace **Dashboards and apps:** - Describe the purpose of subscribing to a report - Add a comment to a dashboard **Working in the Service:** - Subscribe to a report - Know the features of subscriptions

Level 3 – Productive User

Between 551 and 725 points

Prior to the acquisition of the skills of the Productive level, the candidate will have mastered the skills of the Basic level.

Environment, Tools, and Methods

The candidate can leverage advanced Power Query features to transform data and optimize its modeling. They know how to manage relationships between tables and structure an efficient data model. They are also capable of applying advanced transformations and using parameters to customize data import.

Professional use case: In a professional context, these skills enable, for example, a business developer to apply the methods and terminology of analytical projects, administer Power BI licenses, and manage users.

Data Model

The candidate knows how to optimize a data model by applying advanced relationships and using DAX measures to enhance analysis. They can structure fact and dimension tables to improve report performance.

Professional use case: In a professional context, these skills enable, for example, a business developer to define relationships between tables and columns and optimize data model performance while ensuring data security and quality.

Data Visualization

The candidate can manage interactions between visuals, using advanced filters, and synchronizing slicers. They know how to edit the report canvas, add custom visuals, and optimize dashboard readability with conditional formatting and customization rules.

Professional use case: In a professional context, these skills enable, for example, a business developer to create interactive and dynamic visualizations and develop custom extensions.

Collaborative Tools

The candidate knows how to manage access and assign roles within a Power BI workspace. They can pin a visual to a dashboard, configure app audiences, and optimize collaborative workspace management.

Professional use case: In a professional context, these skills enable, for example, a

business developer to define permissions and access rights for workgroups and to publish reports and dashboards on the Power BI Service.

Overview

Domain	Skills Assessed
Environments, Tools, and Methods	**Products and licenses of the solution:** - Understand the basic features of the different licenses - Know that signing in is required to publish content **Technologies and language of the solution:** - Describe the role of a dimension in a data model - Describe the role of a fact table in a data model - Describe the role of a relationship in a data model - Name the language used in Power Query - Identify cardinality **Methodologies and terminology:** - Know the steps of the report creation cycle
Data Model	**Data sources:** - Understand how Power Query behaves when selecting multiple sources - Identify the actions to perform on a sample dataset in a query - Use the Replace Values command - Use the Remove Rows command - Identify when the Column Quality view option is enabled - Identify when the Column Profile view option is enabled - Describe the role of the Data Source Settings command **Schemas and relationships:** - Describe the cross-filter direction of a relationship **DAX and measures:** - Describe the role of quick measures - Create a DAX measure using the COUNTROWS function - Use the DIVIDE function
Data Visualization	**Report consumption:** - Identify the name of a visual based on its icon **User experience features:** - Manage slicer synchronization - Use filter interactions between visuals - Add a custom visual **Building report elements:** - Change the canvas size

	- Add a background image - Apply a report-level filter - Apply a Top N filter
Collaborative Tools	**Managing a workspace and its content:** - Display the panel for managing access - Prioritize roles within a workspace - Know the permissions associated with workspace roles **Dashboards and apps:** - Identify the tool used to create a dashboard - Describe the role of an app within a workspace **Working in the Service:** - Know the features of entities in the Power BI Service

Level 4 - Advanced User

Between 726 and 875 points

Prior to the acquisition of the skills of the Advanced level, the candidate will have mastered the skills of the Productive level.

Environment, Tools, and Methods

This level demonstrates the ability to optimize data models by managing performance and structuring complex analytical models. The candidate knows how to work with DAX measures and calculated columns, use complex relationships, and integrate advanced functions in Power Query to automate data processing.

Professional use case: In a professional context, these skills enable, for example, a data analyst to develop advanced DAX scripts with DAX Studio, and to clean and transform complex data.

Data Model

The advanced user knows how to manage model performance by optimizing relationships and reducing dataset size. They are proficient in advanced DAX functions, hierarchy management, and the integration of dynamic security roles within the model.

Professional use case: In a professional context, these skills enable, for example, a data analyst to optimize model performance, improve data quality, and create flexible and scalable date tables.

Data Visualization

The advanced user knows how to manage interactive and complex visualizations using features like Explorer mode, Sparkline charts, and bookmarks. They can enhance the user experience with advanced features such as tab order, custom tooltips, and reference lines.

Professional use case: In a professional context, these skills enable, for example, a data analyst to identify trends and anomalies in the data and improve the readability of visuals.

Collaborative Tools

At this level, the user knows how to edit and download a published report, manage dataset refreshes, and identify monitoring and audit tools in Power BI.

Professional use case: In a professional context, these skills enable, for example, a data analyst to optimize model performance, improve data quality, and create flexible and scalable date tables.

Overview

Domain	Skills Assessed
Environments, Tools, and Methods	**Products and licenses of the solution:** - Understand the advanced features of the different licenses **Technologies and language of the solution:** - Describe the role of Power Query - Display the settings of an applied step - Display the data source settings - Identify the role of column icons - Understand the role of cross-filter direction - Describe the role of RLS (Row-Level Security) **Methodologies and terminology:** - Identify best practices when using Power Query
Data Model	**Data sources:** - Create a query based on the contents of a folder - Identify the Advanced Editor window - Identify when a query merge is needed - Disable query load - Add comments to applied steps - Understand the conditions for performing an append operation in Power Query **Schemas and relationships:** - Apply logical sorting using the "Sort by Column" command - Convert data types using locale settings **DAX and measures:** - Create a measure that calculates a ratio - Format a column as currency in the data model - Use the CALENDAR and DATE functions
Data Visualization	**Storytelling techniques:** - Export data from a visual to Excel **User experience features:** - Understand the features of the Q&A visual - Identify a visual in Explorer mode - Identify when to use Explorer mode - Identify the role of a dashboard alert

	Building report elements: - Create a bookmark - Manage bookmark functionalities - Create a custom tooltip
Collaborative Tools	**Managing a workspace and its content:** - Identify the audit or activity tracking mode **Dashboards and apps:** - Understand the features of app audiences - Understand the features of apps **Working in the Service:** - Edit a published report in the Service - Download the PBIX file of a published report

Level 5 – Expert User

Between 876 and 1000 points

Prior to the acquisition of the skills of the Expert level, the candidate will have mastered the skills of the Advanced level.

Environment, Tools, and Methods

The candidate's expertise is demonstrated by full mastery of the Power BI environments and data integration processes. They can optimize query performance, implementing complex modeling solutions, and securing data through dynamic roles and filters.

Professional use case: In a professional context, these skills enable, for example, a data scientist to update report data incrementally to reduce load times.

Data Model

The candidate can design and optimize a complex data model by integrating advanced modeling techniques. They know how to manage complex scenarios such as multi-level relationships, data history management, and performance optimization through best practices in DAX and Power Query.

Professional use case: In a professional context, these skills enable, for example, a data scientist to facilitate report maintenance, data exploration, and improve the accuracy and reliability of analyses.

Data Visualization

The candidate masters the creation and advanced management of visuals, including integrating dynamic dashboards and complex visuals. They know how to configure specific visuals such as Q&A mode and dashboard alerts, thereby ensuring deep and interactive data analysis.

Professional use case: In a professional context, these skills enable, for example, a data engineer to perform predictions and estimations, enhance decision-making, and enrich reports with additional features.

Collaborative Tools

The candidate is capable of independently managing workspaces, optimizing rights and permissions, and leveraging reports on usage metrics. They master Power BI app administration and know how to secure data and access according to collaborative best practices.

Professional use case: In a professional context, these skills enable, for example, a data engineer to validate the quality and security of an application.

Overview

Domain	Skills Assessed
Environments, Tools, and Methods	**Products and licenses of the solution:** - Manage the data model - Understand the role and features of gateways **Technologies and language of the solution:** - Understand the role of the Advanced Editor button in Power Query - Identify the panes in the Power BI Desktop interface **Methodologies and terminology:** - Know the steps of the report creation cycle - Identify the role of column icons
Data Model	**Data sources:** - Understand the capabilities of data import **Schemas and relationships:** - Describe the advanced properties of relationships in a data model **DAX and measures:** - Create a date table using the CALENDARAUTO function - Use the CALCULATE function - Use the ADDCOLUMNS function - Use CALCULATE with the ALL function
Data Visualization	**User experience features:** - Configure conditional formatting - Create a conditional formatting rule - Identify Sparkline charts - Manage tab order in Power BI Desktop - Configure reference lines in a visual
Collaborative Tools	**Managing a workspace and its content:** - Manage dataset refresh features in the Service **Dashboards and apps:** - Generate a usage metrics report

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