Figure \_. Extent of Compliance in Terms of Functional

Suitability

|  |  |  |
| --- | --- | --- |
| **FUNCTIONAL SUITABILITY** | | |
| **ISO/IEC 25010 Criteria** | **Mean** | **Descriptive**  **Rating** |
| 1. Functional completeness. The system’s set of functions covers all the specified tasks and user objectives. | 4.6 | Very Great Extent |
| 1. Functional Correctness. The system provides the correct results with the needed degree of precision. | 4.8 | Very Great Extent |
| 1. Functional Appropriateness. The system functions facilitate the accomplishment of specified tasks and objectives. | 4.2 | Very Great Extent |
| Category Mean | 4.63 | Very Great Extent |

Figure \_\_ presents the system’s extent of compliance concerning functional suitability.

This characteristic represents the degree to which a product or system provides functions that meet stated and implied needs when used under specified conditions (ISO 25000 Portal, n.d.).

The assessment of IT experts on the system’s functional stability is generally assessed with *very great extent.* This implies that the system’s functions very greatly suit the objectives and tasks. The functions are complete, correct, and appropriate.

Figure *\_\_. Extent of Compliance in Terms of Performance Efficiency*

|  |  |  |
| --- | --- | --- |
| **PERFORMANCE EFFICIENCY** | | |
| **ISO/IEC 25010 Criteria** | **Mean** | **Descriptive**  **Rating** |
| 1. Time Behavior. The system meets its requirements in terms of responses, processing times, and throughput rates when performing its functions. | 4.4 | Very Great Extent |
| 2.Resource Utilization. The system maximizes the utilization of available resources. (i.e., people, data, machine, and material) efficiently. | 4.7 | Very Great Extent |
| 3.Capacity. The system meets its requirements up to its maximum limits. | 4.3 | Very Great Extent |
| Category Mean | 4.67 | Very Great Extent |

Figure \_\_\_ reveals the system’s extent of compliance in terms of performance efficiency.

This characteristic represents the performance relative to the amount of resources used under stated conditions. (ISO 25000 Portal, n.d.).

The assessment of IT experts on the system’s performance efficiency is generally assessed with *very great extent.* This implies that the system’s performance is very greatly efficient under the specified requirements. The behavior is timed. Resources are utilized. And, the capacity is maximized.

Figure *\_\_\_. Extent of Compliance in Terms of Compatibility*

|  |  |  |
| --- | --- | --- |
| **COMPATIBILITY** | | |
| **ISO/IEC 25010 Criteria** | **Mean** | **Descriptive**  **Rating** |
| 1. Co-existence. The system can function while sharing the same hardware or software environment. | 5 | Very Great Extent |
| 1. Interoperability. The system can exchange information and can easily operate with other software. | 4 | Great Extent |
| Category Mean | 4.5 | Very Great Extent |

Figure \_\_ presents the system’s extent of compliance concerning to compatibility.

Degree to which a product, system or component can exchange information with other products, systems or components, and/or perform its required functions while sharing the same hardware or software environment. (ISO 25000 Portal, n.d.).

The assessment of IT experts on the system’s compatibility is generally assessed with *very great extent.* This implies that the system is very greatly compatible. It can co-exist with other applications with the environment and requirements specified and can communicate with other software.

Figure *\_\_. Extent of Compliance in Terms of Usability*

|  |  |  |
| --- | --- | --- |
| **USABILITY** | | |
| **ISO/IEC 25010 Criteria** | **Mean** | **Descriptive**  **Rating** |
| 1. Appropriate Recognizability. The system considers the particularities of every user. | 4.7 | Very Great Extent |
| 1. Learnability. The system is easy to use and understand. | 5 | Very Great Extent |
| 1. Operability. The system is easy to operate, control, and appropriate to use. | 4.8 | Very Great Extent |
| 1. User Error Protection. The information generated by the system protects users against making errors. | 4.7 | Very Great Extent |
| 1. User Interaction Aesthetics. The system provides a user interface that enables pleasing and satisfying interaction in a straightforward manner for the user. | 4.8 | Very Great Extent |
| 1. Accessibility. The documentation is very informative which allows people to achieve a specified goal in a specified context of use. | 4.3 | Very Great Extent |
| Category Mean | 4.72 | Very Great Extent |

Figure \_\_ presents the system’s extent of compliance concerning to usability.

Degree to which a product or system can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use (ISO 25000 Portal, n.d.).

The assessment of IT experts on the system’s usability is generally assessed with *very great extent.* This implies that the system is very greatly usable. Appropriate processes are recognized. Processes are simple to grasp. Operations are controllable. User interface is aesthetically pleasing. And, specific tasks are accessible.

Figure *\_\_. Extent of Compliance in Terms of Reliability*

|  |  |  |
| --- | --- | --- |
| **RELIABILITY** | | |
| **ISO/IEC 25010 Criteria** | **Mean** | **Descriptive**  **Rating** |
| 1. Maturity. The system is reliable in its operation. | 4 | Great Extent |
| 1. Availability. The system is operational and accessible when required for use. | 4.1 | Great Extent |
| 1. Fault Tolerance. The system can maintain its performance despite the presence of errors during operation. | 4 | Great Extent |
| 1. Recoverability. The system provides restore operation of lost data after failure. | 4.5 | Very Great Extent |
| Category Mean | 4.15 | Great Extent |

Figure \_\_ indicates the system’s extent of compliance along reliability.

Degree to which a system, product or component performs specified functions under specified conditions for a specified period of time (ISO 25000 Portal, n.d.).

The assessment of IT experts on the system’s reliability is generally assessed with *great extent.* This implies that the system is greatly reliable. The system's functions are dependable. The system is functioning and accessible when required. The system can maintain its performance regardless of the existence of mistakes. And, the solution allows for data restoration.

Figure *­­­­\_\_\_. Extent of Compliance in Terms of Security*

|  |  |  |
| --- | --- | --- |
| **SECURITY** | | |
| **ISO/IEC 25010 Criteria** | **Mean** | **Descriptive**  **Rating** |
| 1. The system ensures that data are accessible only to those authorized to have access. | 4.9 | Very Great Extent |
| 1. The system has security level access with predetermined action and prevents unauthorized access to, or modification of, computer programs or data. | 4.7 | Very Great Extent |
| 1. The system has security logs where actions or events can be proven to have taken place, so that the events or actions cannot be repudiated later. | 4.9 | Very Great Extent |
| 1. The system provides security levels in which actions of an entity can be traced uniquely to the entity. | 4.5 | Very Great Extent |
| 1. The data is secured wherein identity of a subject or resource can be proved to be the one claimed as well as its associated records. | 4.4 | Very Great Extent |
| Category Mean | 4.68 | Very Great Extent |

Figure \_\_ indicates the system’s extent of compliance along security.

Degree to which a product or system protects information and data so that persons or other products or systems have the degree of data access appropriate to their types and levels of authorization (ISO 25000 Portal, n.d.).

The assessment of IT experts on the system’s security is generally assessed with very *great extent.* This implies that the system is very greatly secure. The software grants least privileged access. It has varying levels of access. It keeps a precise record of logs. Possible actions are present for tracing. And, critical assets require authentication and authorization.

Figure *\_\_. Extent of Compliance in Terms of Maintainability*

|  |  |  |
| --- | --- | --- |
| **MAINTAINABILITY** | | |
| **ISO/IEC 25010 Criteria** | **Mean** | **Descriptive**  **Rating** |
| 1. Modularity. The system continues to function even if changes are made to other discrete components of the system. | 5 | Very Great Extent |
| 1. Reusability. The system has discrete assets components that can be used in more than one system, or in building other assets. | 4.4 | Very Great Extent |
| 1. Analyzability. The system has the capability to assess and analyze the impact on a product. | 5 | Very Great Extent |
| 1. Modifiability. The system can be easily customized and modified. | 5 | Very Great Extent |
| 1. Testability. The system can easily be tested. | 5 | Very Great Extent |
| Category Mean | 4.88 | Very Great Extent |

Figure \_\_ indicates the system’s extent of compliance along maintainability.

This characteristic represents the degree of effectiveness and efficiency with which a product or system can be modified to improve it, correct it, or adapt it to changes in environment, and in requirements (ISO 25000 Portal, n.d.).

The assessment of IT experts on the system’s maintainability is generally assessed with very *great extent.* This implies that the system is very greatly maintainable. The system continues to function with discretion form other components. It has modular asset components that can be used in multiple systems. It can evaluate and analyzing the impact on a product. It allows revision. And, it can undergo experiments.

Figure *16. Extent of Compliance in Terms of Portability*

|  |  |  |
| --- | --- | --- |
| **PORTABILITY** | | |
| **ISO/IEC 25010 Criteria** | **Mean** | **Descriptive**  **Rating** |
| 1. Adaptability. The system can easily adapt to different or evolving hardware, software, or other operational or usage environments. | 3.9 | Great Extent |
| 1. Install ability. The system performs its function efficiently even if it is installed and/or uninstalled in a specified environment. | 4.5 | Very Great Extent |
| 1. Replaceability. The system can replace another specified software product for the same purpose in the same environment. | 4.2 | Very Great Extent |
| Category Mean | 4.3 | Very Great Extent |

Figure \_\_ indicates the system’s extent of compliance along maintainability.

Degree of effectiveness and efficiency with which a system, product or component can be transferred from one hardware, software or other operational or usage environment to another (ISO 25000 Portal, n.d.).

The assessment of IT experts on the system’s portability is generally assessed with very *great extent.* This implies that the system is very greatly portable. The software can quickly adjust to updates. It can be successfully installed and/or removed. And, it can substitute alternative designated software.

Figure *\_\_. Summary of Evaluation of the System’s Compliance with the ISO/IEC 25010 Criteria*

|  |  |  |
| --- | --- | --- |
| ISO/IEC 25010 Characteristics Criteria | Criteria Mean | Descriptive  Rating |
| A. Functional Suitability | 4.63 | Very Great Extent |
| B. Performance Efficiency | 4.67 | Very Great Extent |
| C. Compatibility | 4.5 | Very Great Extent |
| D. Usability | 4.72 | Very Great Extent |
| E. Reliability | 4.15 | Great Extent |
| F. Security | 4.68 | Very Great Extent |
| G. Maintainability | 4.88 | Very Great Extent |
| H. Portability | 4.3 | Very Great Extent |
| Overall Mean | 4.57 | Very Great Extent |

Figure \_\_ above presents the summary of the evaluation of the developed system as regards its compliance with the ISO 25010Software Quality Standards**.**

The overall assessment of IT experts on the system’s portability is generally assessed with very *great extent.* This implies that the system is very greatly portable. The software proves to withstand and excel in the ISO standards 250/10 in terms of functional suitability, performance efficiency, compatibility, usability, reliability, security, maintainability, and portability.