

# End-User Computing Governance Framework

Development Standards for Microsoft Excel

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Quintant Partners  
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**Authors:** Guy Shepherd / Abbey Samyint

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# 1. Introduction

The section outlines the purpose of the development standards, the reasons behind their creation and the benefits of adopting them. It also describes how the development standards fit into a wide governance framework for end-user computing to minimise the risks but maximise the productivity associated with user-developed applications.

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## 1.1. Purpose

The purpose of this document is to set out a comprehensive set of standards for the development Excel-based end-user computing solutions.

### 1.1.1. Intended Audience

The document is aimed at all end-users involved in the design, development, and use / maintenance of Microsoft Excel-based solutions.

## 1.2. Background

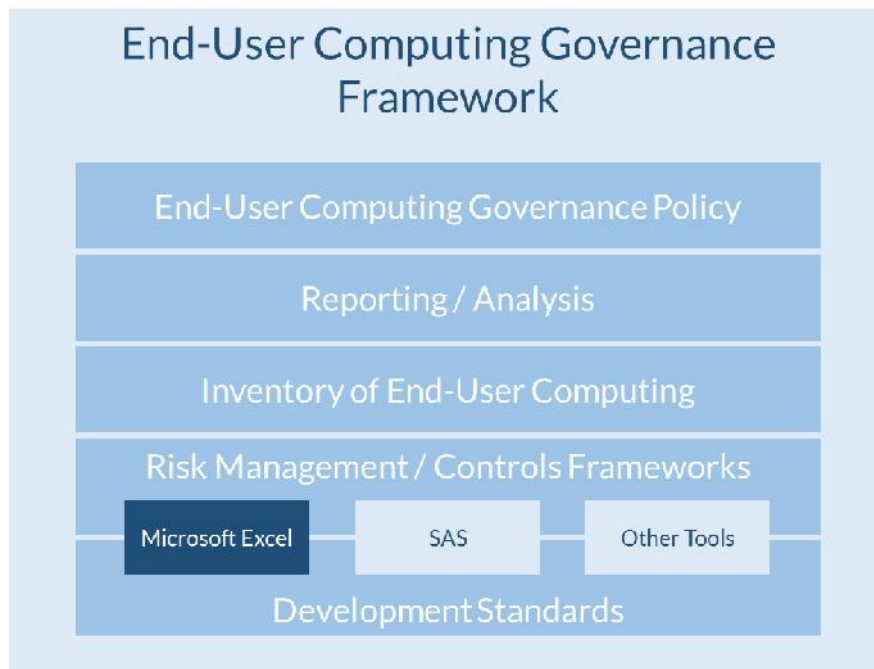
End-user computing (“EUC”) solutions continue to provide fundamental components in the production of management information and regulatory reporting. If anything, the use of such solutions is growing as the line between industrial strength platforms and end-user tooling becomes ever-more blurred. Of the end-user computing technologies available, spreadsheets, and in particular Microsoft Excel, account for the vast majority of user-developed applications (“UDA”) in use today.

While end-user computing clearly fills a number of functional voids between mainstream applications & systems, the problematic convenience of spreadsheet-based solutions in particular poses a significant risk which should not be underestimated. Indeed, the popular press is full of examples of corporate failures / misstatements which can directly or indirectly be attributable to spreadsheet failure. The reasons for these failures are well-documented, but can be summarised as follows:

- No formalised development process – akin to that used by IT functions
- Lack of specifications / documentation / operational parameters
- Little or no design
- Poor development skills / practice
- Little or no testing
- No controls / risk management of the end-user computing estate

## 1.3. End-User Computing Governance Framework

In order to mitigate and reduce the risks associated with end-user computing, Quintant Partners have developed a coherent, over-arching governance framework which is summarised in the figure below. This framework includes a number of components which are outlined below.



### 1.3.1. EUC Governance Policy

The End-User Computing Governance Policy provides the fundamental principles governing the design, development, use and operation of all end-user computing solutions used within a given enterprise.

### 1.3.2. Reporting / Analysis

The reporting and analysis component of the framework – often represented as a dashboard – provides the essential measures & metrics required to ensure that all business critical end-user computing solutions are visible and subject to an appropriate level of controls based on their role within the business.

### 1.3.3. Inventory

The end-user computing inventory provides a central repository of all UDA solutions in use along with the associated meta-data required to understand the usage and risks of any given application.

### 1.3.4. Controls Frameworks

Each distinct type of end-user computing platform should have an associated controls framework to ensure that the risks associated with any solution developed using that technology are understood and appropriately controlled.

### 1.3.5. Development Standards

Each end-user computing platform should have an appropriate set of development standards to ensure that any solution developed using the particular technology is done so in an appropriately controlled and robust manner.

## 1.4. Application of Standards

These development standards apply to all new Excel-based solutions, and retrospectively to all business critical spreadsheets, subject to available resources and prioritised according to an agreed remediation plan.

## 1.5. Benefits of Adopting Development Standards

The benefits of adopting a governance framework for end-user computing and in particular these development standards can be summarised as follows:

- More reliable user-developed applications
- Lower risk of end-user computing failures
- More sustainable solutions – less rework / re-factoring
- Better consistency of solutions thereby promoting portability of resource

## 1.6. Document Taxonomy

The figure below outlines the taxonomy used in this document. This is broadly aligned a simplified software development lifecycle (“SDLC”) appropriate for the creation, use and maintenance of applications developed by the end-user community.



## 1.7. Associated Documents and Resources

These development standards should be read in conjunction with the following associated documents:

Document	Purpose	Author	Publication Date
End-User Computing Governance Policy	Overarching purpose relating to the design, development, use and control of all end-user computing artefacts		
UDA Inventory			