Structural standards for designing smart government applications in Egypt

Prof. Abeer Hassan Abdo

Professor at Advertising Department, Faculty of Applied Arts, Helwan University, Egypt.

profabeer@yahoo.com

Dr. Nevine Ezzat Gamal

Lecturer at Advertising Department, Faculty of Applied Arts, Helwan University, Egypt.

Researcher. Ranya Hassan Soliman Abdel Aziz Hawas
PHD Researcher at Advertising Department, Faculty of Applied Arts, Helwan
University, Egypt.

ranya_hawas@yahoo.com

Introduction:

As the Egyptian e-government portal seeks to change and transform relations between institutions and citizens through ICT - through web applications and portals - with the aim of providing the best for citizens and facilitating access to their needs, and enabling them to access Information, which provides more efficiency, effectiveness and transparency to support all government procedural systems and eliminate corruption, smart government comes to complete what was built and invest in it by approaching more than the citizen on the one hand, and direct simultaneous interaction with information spread in the society and its economic, social and security components on the other hand through these applications on smart devices.

So, with the huge numbers of smartphone apps to choose from, we often find that the difference factor that convinces users to download the app, and their desire to continue using the application is a strong and attractive design, it's not just about designing an app with an aesthetic shape, but there are many things to consider by designer, which are essential for success related to the structural and functional standards of application design, and must be harmonized in order to achieve an easy-to-use, innovative application design, efficiency and effectiveness.

Therefore, there was a need to develop building criteria for the design of visual elements of smart government applications in Egypt.

Research Problem: The research problem is to set standards for building and designing smart government applications that work to raise the level of government services and facilitate access to them. The research problem can be shorted into the following question:

What are the structural standards that must be taken into account when designing government applications on smart communication devices?

Does following the construction standards when designing smart government applications help in creating a highly attractive user interface?

Research Objective: The research aims to:

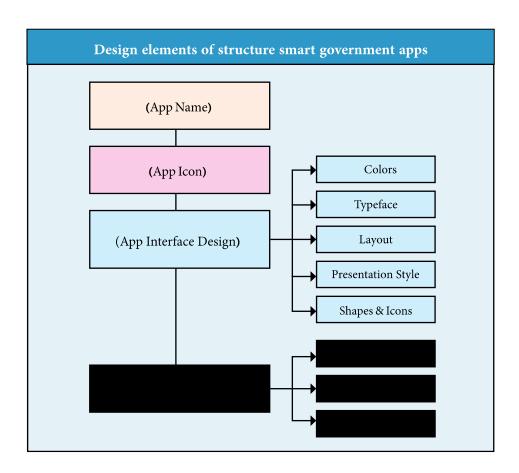
- Setting structural standards that must be followed when designing government applications on smart communication devices.
- Establishing appropriate structural standards for designing smart government applications to achieve the visual identity of government institutions.

DOI: 10.21608/mjaf.2020.26106.1543

• Benefit from applying constructive standards to smart government applications in creating an attractive and effective communication user interface.

Design elements of structure smart government apps

Due to the increasing use of smartphones and the large number of digital applications on smartphones provided by various institutions and bodies; The study of how to successfully design a smartphone environment is also increasing in its importance, given the importance of design in being the primary factor in helping users to distinguish between these applications, and how good design elements can help users navigate and browse the application with ease and accomplish their mission quickly and effectively. Below we will address the elements of building smart phone applications and how they can be used in designing smart government applications in Egypt.



Research Results:

- 1- Choosing the appropriate name for the application contributes to the identification, and helps the application to be attached to the mind of users.
- 2- The more the name of the application is closely related to its job and introduces the application the more successful and influential it is.
- 3- Linking the application icon to some distinctive features of the government agency in an innovative and attractive way that helps in building the identity of the application.
- 4- An icon that focuses on one element or concept is better than trying to stack all the features in a very small icon.

- 5- The icon should not include long and hard words to read.
- 6- Optimal use of colors, images, fonts, types, and design in the overall presentation of the application pages, it affects the user's feeling of enjoyment and excitement, and also creates impressions between the organization.
- 7 The use of appropriate colors for the application in the colors of texts, backgrounds, images and menus contributes to creating the desired mental image for the institution in the minds of users as it contributes to building the application personality and distinguishes it from other applications.
- 8- Using the same types of fonts and their consistency throughout all application interfaces helps to achieve unity and harmony in the application's identity as well as the visual appeal of the application.
- 9- It is necessary to take into account the distances between one word and among words and between lines in order to easily see and read texts.
- 10 Texts and written words must include the message that the government agency wants to deliver and provide textual information that carries a sense of the institution's value.
- 11- Pictures and graphics must be employed in a way that creates an engaging and enjoyable interactive experience that enables the images to achieve certain career goals rather than just an aesthetic.
- 12 The economy in the use of images and graphic details to prevent congestion so that more meaning is communicated with minimal visual detail.

References:

- 1. Magrath, Victoria, and Helen McCormick. "Branding design elements of mobile fashion retail apps." Journal of Fashion Marketing and Management: An International Journal 17, no. 1 (2013).
- 2. Priya Viswanathan, "Mobile App Branding Developing a Strong App Brand", from: http://mobiledevices.about.com/od/appbranding/a/mobile-app-branding-developing-strong-app-branding.htm, (10/11/2017).
- 3. Dan Rose, 2014, "**Tips for naming your app**", from: http://www.creativebloq.com/tips-naming-app-9112818, (20/11/2017).
- 4. Diana Urban, (2015), **"Designing the perfect mobile app icon"**, from: http://info.localytics.com/blog/tips-for-designing-the-perfect-mobile-app-icon, (20/11/2017).
- 5. René Sieber, "Graphical User Interface Layout and Design", e-book, p. 9. from: http://www.e-cartouche.ch Version from: 26.1.2012
- 6. The Editors of American Heritage Dictionaries, "High Definition: A-Z Guide to Personal Technology", Houghton Mifflin, 2006, eBook, p.324.
- 7. Bang Wong, (2011), "Points of view: Layout", Nature Methods, Nature Publishing Group, Vol.8, Iss.10, p.783.
- 8. http://www.google.com/design/spec/style/imagery.html.
- 9. Ben Hnt, (2007), "General guidelines for Imagery / Graphics in web design", from: http://webdesignfromscratch.com/web-design/imagery", (1/12/2017).