**Ain Shams University Faculty of Commerce Business Administration Dept.** 



## A Proposed Framework for Application of **Balanced Scorecard to Increase** the Effectiveness of Common Assessment Framework (CAF)

"An Applied Study on the Egyptian Tax Authority (ETA)"

A Thesis Submitted in Fulfilment of the Requirements for Doctor's Degree in Business Administration

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# بِسْمِ اللهِ الرَّحْمَنِ الرَّحِيمِ

قَالَ رَبِّ اشْرَحْ لِي صَدْرِي ﴿٢٥﴾ وَيَسِّرْ لِي أَمْرِي ﴿٢٦﴾ وَاحْلُلْ عُقْدَةً مِنْ لِي أَمْرِي ﴿٢٦﴾ لِسَانِي ﴿٢٧﴾ يَفْقَهُوا قَوْلِي ﴿٢٨﴾

سورة طه : الآيات من ٢٥ إلى ٢٨

In the name of Allah, the Entirely Merciful, the Especially Merciful

[Moses] said, "My Lord, expand for me my breast [with assurance] \$\&25\$ \$\\
And ease for me my task \$\&26\$ \$\\
And untie the knot from my tongue\$\&27\$ \$\\
That they may understand my speech \$\&28\$ \$\\
\end{array}

Taa Haa Sura, Verses 25:28

## Keywords

Common Assessment Framework (CAF), Balanced Scorecard (BSC),

The 3<sup>rd</sup> Generation Balanced Scorecard, Performance Assessment,

Self-assessment Model, Organisational Performance Management,

Organisational Excellence, Performance Management System,

Partial Least Square (SEM-PLS).

#### **Abstract**

By launching *Egypt Vision 2030*, the Egyptian Government is interested in improving the organisational performance of Egyptian Tax Authority (ETA). This is due to the raising of contribution ratio at the public treasury in Egypt. In this context, ETA applied CAF to improve its organisational performance. Otherwise, implementing CAF revealed some weakness when it is applied at ETA.

Therefore, this study examines the relationship between using the third generation BSC and effectiveness of CAF to gain a more comprehensive understanding of developing a new model in organisational performance assessment for achieving organisational excellence to ETA.

The existence of CAF and BSC is widely recognised, as there is an importance of understanding the strengths and weaknesses of each one. Nevertheless, whilst many implementation models and frameworks have been designed and proposed, very few studies have been located in the literature that has systematically investigated the impact of BSC on increasing the effectiveness of CAF. This theoretical lapse in the organisational performance assessment literature necessitates an investigation of the direction and significance of the relationship which can help in devising more informed performance assessment implementation models.

The variables of this model were determined based on literature review. Afterwards, Hypotheses were formulated and research model was developed than the two questionnaires were prepared based on current literature review and by making some adjustments to fit the field. Subsequently, the questionnaires were revised and approved by Central Agency for Public Mobilization and Statistics. Then they were distributed to Managers and Employees at large Taxpayers (LTC).

In this context, the quantitative research methodology was adopted to examine the relationship between using the 3<sup>rd</sup> generation BSC and effectiveness of CAF in ETA. Accordingly, this study uses one independent variable, the 3<sup>rd</sup> generation BSC, and nine sub-dependent variables of CAF criteria (Leadership, Strategy and Planning, People, *Partnership & Resources*, Processes, People Results, Citizen-Oriented Results, Social Responsibility Results, and Key Performance Results). A set of Hypotheses was developed describing the

expected relationships between these two sets of variables. The study adopted a positivist Philosophy using handed and electronic questionnaires to obtain quantitative data for hypothesis testing.

The data for this study was obtained from Large Taxpayer Center (LTC) at ETA which collects approximately EGP 102.5 billion that represents about 59.08% of total ETA tax collection. For this influence, it was chosen as a study population, which consists of 576 labour force, that divided into 114 managers, and 462 employees. The sample consisted of 87 usable responses, from both managers and employees.

The Partial Least Squares Modelling (PLS-SEM) was employed to validate both *Measurement and Structural Model*. SPSS V.23 has used to conduct all preanalysis procedures for the dataset. The output of SPSS revealed that data is non-normal and there are not any outliers or missing and *Errors* in it. Accordingly, SmartPLS V.3.2.6 can handle this non-normal data. SmartPLS was used to test the *Measurement Model* and the *Structural Model*. The initial model was modified in an iteration manner to increase the explanatory power of model and find the interdependent relationships among various study variables. Finally, both models showed a very good fit to the data, with good variable *Reliability and Validity*. Therefore, the main and Sub-Hypotheses of this study are accepted.

The findings of this study confirm the significant impact of using the 3<sup>rd</sup> generation BSC in increasing the effectiveness of CAF. This result will overcome the weakness of CAF, and improve the overall strategic management system at ETA.

This study makes several contributions in both academic and practical terms. Theoretically, using the 3<sup>rd</sup> generation BSC with its developed tools overcome the weakness of CAF. In addition, this study develops a new model by combining both of them to assess the organisational performance. Likewise, this study uses PLS-SEM for analysing the relations between CAF and the 3<sup>rd</sup> generation BSC and tests the presented model. Practically, this study presents a developed model for assessing and improving its organisational performance efficiently in ETA. Besides, it will benefit Egyptian POs by presenting a new tool for them to accurately achieve their goals in the framework of *Egypt vision 2030*.

#### **Dedication**

It is my genuine gratefulness and warmest regard that I dedicate this work to my homeland, Egypt, hoping to improve the Performance Management System in the public sector. I also dedicate it to my Spiritual Professor, Prof. Dr Aly Abd El-Wahab, May Allah have mercy on him, whose has a favours to me, I shall never forget my great parents, who have always loved me unconditionally and were always encourage me to work hard for the things that I aspire to achieve, my beloved wife and my lovely children Adham and Hana, without whom this thesis would have been completed two years earlier, my dear brother, who stands by me when things look bleak. And finally, my friends who encourage and support me.

All praises are due to Allah, the lord of the worlds

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#### **Declaration**

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work. During the preparation of this thesis, some papers were prepared as listed below.

#### **Research Publications:**

- El-deeb, Wael. (2017). The Impact of Using 3<sup>rd</sup> Generation Balanced Scorecard on the Effectiveness of Strategic Management System "An Applied Study on the Egyptian Tax Authority (ETA)". Master and PhD. student's researches, Commerce Faculty Ain Shams University.
- El-deeb, Wael. (2017). The Third Generation Balanced Scorecard: Evolution, Components and Advantages for Public Sector. Master and PhD. student's researches, Commerce Faculty Ain Shams University.

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