

# Building an Excellence Capabilities Portfolio in Higher Education

## *A Case Study of Higher Colleges of Technology, UAE*

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### Abstract

The Higher Colleges of Technology (HCT) has developed and deployed a set of distinctive and dynamic capabilities in alignment with the UAE national agenda. These capabilities drive an ambitious strategy that anticipates and ensures future readiness; creates student-centric value; enables and empowers human capital; exploits the full potential of digital enablement; leverages through smart partnerships and resource optimization; builds capacity for knowledge exchange; and synergizes through collaboration, co-creation, and stakeholder orientation. This study presents HCT's methodology as a case study to develop its capabilities portfolio, structure, main connectors (internal and external forces), and business operational model and capabilities dynamics that support HCT's continuous transformation and leading position. The study proposes a model and practices to develop and unify standards for higher education institutions (HEIs) in their journey towards building distinctive and dynamic capabilities and achieving excellence maturity.

**Keywords:** higher education excellence model, capabilities portfolio, sustainability, business continuity, dynamic capabilities

### 1. Introduction

Higher educational institutions (HEIs) aim to achieve excellence, a goal that has raised the demand to explore areas of strength and improvement. These areas must be mapped and assessed against the excellence fundamentals and principles to identify the maturity level of each capability.

The institutional and departmental capabilities portfolio will be used as a baseline for the excellence journey, and these capabilities will be considered effective tools for the continuous improvement and strategic planning necessary to enhance areas of strength and address gaps. The capabilities portfolio will also enable the departments to measure their performance and prepare their action plans accordingly as integrated parts of a comprehensive institutional strategic plan.

Many governments are measuring the success of HEIs through the assessment of excellence in performance and link the funding with this performance (Asif & Searcy, 2014). The United Arab Emirates (UAE) government has empowered its entities in general and the federal HEIs in particular with its highly advanced *Government Excellence Model Manual* (GEM 2.0; Sheikh Khalifa Government Excellence Program, 2019) to support their journey towards excellence and distinguish performance locally and internationally. GEM 2.0 has assisted UAE federal entities, including the Higher Colleges of Technology (HCT), in measuring their performance against well-defined fundamentals, principles, and criteria.

The model supports the purpose-driven entities that develop and deploy a set of distinctive and dynamic capabilities to ensure future readiness, empower human capital, utilize digital enablement, and enhance seamless customer experience (Sheikh Khalifa Government Excellence Program, 2019).

HCT has used the GEM 2.0 framework as a baseline to start its capabilities development journey from the initiation of distinctive capabilities for value creation to the achievement of sustainable, superior performance outcomes and impact.

This paper argues that building excellence capabilities portfolios in HEIs will advance future orientation, innovation, and disruptive thinking and deliver excellent and sustainable value to the institutions and their units. Capabilities portfolios drive excellence and support HEIs in designing the major developmental leaps required to deliver benefits to the nation, achieve leading positions in global competitiveness, and ensure efficiency.

HCT has developed its excellence capability building model (ECBM) to enhance the excellence maturity levels across all institutional departments and units. The ECBM was developed based on HCT's accumulated experiences in applying the excellence concepts and approaches through the last three cycles of the UAE Government Excellence Awards.

## **2. Method**

### *2.1 Literature Review*

#### 2.1.1 Excellence in Higher Education

Studies have recently explored the concept of excellence in higher education and the applicability of using excellence models, such as the European Foundation for Quality Management (EFQM), in HEIs. Global higher education rankings have stimulated the excellence concept as a main driver for enhancement (Brusoni et al., 2014). As Ghinea, Dima, and Hadad (2017) argued, the concept of excellence is perceived in different ways by HEIs in relation to their organizational culture and socioeconomic and political conditions. Although most HEIs' strategic plans state that they are striving to achieve excellence in research and teaching, there are few HEIs that believe that excellence can be extended to all core and supporting functions to be able to achieve a leadership position and high ranking.

Excellence is achieved as a result of the intelligent use of organizational resources and capabilities and does not happen by accident (Asif & Searcy, 2014). Musli, Mann, Grigg, and Wagner (2011) defined the excellence model as a self-assessment tool used to validate the entities' strategies, business practices, and stakeholder-related performance results.

Excellence in higher education focuses on integrating the knowledge, experience, and strategy to maintain efficiency and effectiveness through all the processes and procedures in alignment with higher education strategic objectives (Al Shobaki & Naser, 2016). HEIs that own relatively the same resources and work in a similar environment are performing differently; hence, they have different levels of excellence performance, which varies from one setting to another and is based on objectives and priorities (Asif & Searcy, 2014).

Hides, Davis, and Jackson (2004) have identified excellence in higher education as a sum of several achievements, among which are attaining the mission and vision of the organization, becoming a role model for other HEIs, reaching and exceeding internal targets, achieving stakeholder satisfaction, and gaining well-being by using all resources optimally.

Several HEIs have begun to use quality management models, including the excellence model developed by the EFQM (Sadeh & Garkaz, 2015). The EFQM can be used as a tool for self-assessment. Its nine criteria can be applied in HEIs and operationalized to fit the higher education context, which can ultimately support continuous improvement, leading to the creation of distinctive capabilities and achieving excellence in HEIs (Dima, Cloditchi, Istudor, & Luchian, 2019).

The UAE government has designed its own excellence model (GEM 2.0) to inspire government entities on their journey towards excellence and to keep the momentum of excellence going. The model is based on pioneering thinking and advanced approaches that pave the way for defining and steering future governments, including federal HEIs (Sheikh Khalifa Government Excellence Program, 2019).

The authors have urged that excellence can be better achieved when the HEI is viewed as an open and dynamic ecosystem with interrelated activities supported by the intelligent use of technologies and partnerships. This ecosystem perspective encourages HEIs to think beyond their boundaries and achieve a balance between innovation and academic rigors, through collaboration and leveraging potential capabilities in their quest to enhance value creation and establish leading positions.

Excellence in higher education requires constant innovation, disruptive thinking, and transformation across the entire ecosystem to generate positive, sustainable performance outcomes. Excellence in higher education will be achieved when proactive and resilient mindset attributes are instilled institutionally and in all functions, which anticipate emerging trends, and generate new capabilities to chart the future and enhance the competitive edge.

### 2.1.2 Performance Evaluation Models Applied in HEIs

Performance Evaluation Models Applied to HEIs are aiming to maintain and improve the HEIs excellence capabilities and academic quality by guiding and assessing their compliance and maturity against their set of standards. The higher education commissions in each country are developing policies and standards in alignment with international practices to be able to assess the HEIs performance and excellence maturity and guide their efforts towards the continuous improvements of the quality system and institutional effectiveness (Batool, Qureshi, & Abdul Raouf, 2010).

Local higher education commissions are also supporting HEIs to meet international performance evaluation standards of regional and international rankings and excellence frameworks applied in HE.

HEIs have to perform a self-assessment activity at department/programme and institutional levels to be able to measure the excellence performance and ensure the academic quality provision, in order to meet the standards of the performance evaluation models targeted. There are a lot of self-assessment practices are currently applied at HEIs such as Balanced Scorecard, total quality management and performance multi-ranking system which will be reviewed in the following section as follows:

Total quality management (TQM) plays a vital role in the excellence journey at HEIs where the quality improvement is the integral part build involvement of every aspect by everybody within the institution and lead for continuous improvement and excellence maturity (Aziz, S., Mahmood, M., & Bano, S, 2018).

As a comprehensive performance evaluation system, TQM at HEIs covers inputs, processes and outputs, sets a performance evaluation tool including academic and non-academic functions and services and assesses its results such as employment, student satisfaction, community services and research outputs, in order to enhance the excellence capabilities and quality provision.

The balance scorecards (BSC) use quantitative indicators methodology to measure the performance of HEIs in different dimensions, assess the institutional capabilities in relation to the strategic goals and objectives and consider the international best practices and performance evaluation models standards as a baseline for setting the targeted indicators (Al-Hosaini & Sofian, 2015)

The BSC methodology depend on a target and actual accomplishment relationship, the interdependent processes, short and long-term plans and accumulative achievements success. The BSCs enable HEIs to monitor the continuous improvements in all excellence and institutional effectiveness parameters used in assessment of the institutional performance and help HEIs to focus on their strategic goals and objectives (Ali, 2007; Kaplan and Norton, 1993).

The quest for global performance evaluation system to assess the excellence performance and capabilities in higher education has become a necessity to enhance HEIs' opportunities and competitive advantages globally and to meet the expectations of stakeholders. The multi-ranking systems have inaugurated to support the HEIs' performance toward qualitative excellence and increased efficiency in a global perspective. The global ranking bodies have developed a comprehensive system and criteria to assess the performance of the HEIs and rank them on certain critical performance parameters, providing a baseline for decision-making by various stakeholders such as government quality commissions, students, parents, faculty, industry and others. (Kumar A. & Thakur R., 2018).

This paper has explored the different performance evaluation models, excellence frameworks and raking system to build a new model for building excellence capabilities portfolio to facilitate the self-assessment practices and support the excellence journey at HEIS. The Excellence capabilities portfolio captures the institutional and departmental cross-functional capabilities in dynamic processes, thus providing input-output efficiency and effectiveness as described below in the next section identifies the methodologies used to build the targeted portfolio.

### 2.1.3 Excellence Capabilities in Higher Education

Recently, HEIs have faced challenges in meeting the needs of their students, industry partners, and other stakeholders. Consequently, HEIs have done their best to add value and achieve excellence by creating distinctive capabilities and enhancing their competitive advantages in higher education.

The capabilities represent strength areas with at least a full cycle of implementation, which has led to distinguished results and high impact. These capabilities and competitive advantages can be presented and recognized by ranking, an assessment of different models of excellence, or any other assessment technique (Elayan & Sleimi, 2020).

Capabilities and competitive advantages will target the enhancement of the core business (academic and research capabilities), organizational performance, and stakeholders' well-being (supporting services capabilities). In addition, they will offer more innovative features and greater quality to students.

Higher education capabilities can be classified into operational and dynamic capabilities. Operational capabilities are about execution of the day-to-day activities, such as teaching, assessment, professional development, and research (Winter, 2003), whereas dynamic capabilities are the key component of the transformational process and the foundation for innovation and value creation (Demil & Lecocq, 2010).

Teece et al. (1997, p. 516) defined dynamic capabilities as the institution's ability to integrate, form, and reconfigure strength areas to address rapidly changing environments. Dynamic capabilities can be categorized into three types: identify opportunities; compile opportunities; and transform and reconfigure resources to enable HEIs to thrive in uncertain operating environments, rapidly adjust while maintaining desired outcomes, and achieve excellence (Naldi, Wikström, & Bjørn Von Rimscha, 2014).

Leading HEIs disrupt the ecosystem with innovative and dynamic capabilities that transform services, generate exceptional outcomes, support HEIs' decision-making to be more future oriented, and enhance stakeholders' well-being. This creates a paradigm shift and enables leading HEIs to be role models for other HEIs (Sheikh Khalifa Government Excellence Program, 2019).

The quest for a systematic mechanism to understand the portfolio of an HEI's distinguished capabilities has been mapped out. Hence, this study will explore HCT's methodology for building capabilities portfolios and present how HCT has developed the model and classified the capabilities into multiple dynamic levels to enable meeting long- and short-term priorities and discuss how HCT utilizes its capabilities portfolio to plan and achieve strategic goals and objectives that are focused on stakeholders' well-being and driven by performance excellence.

This study also proposes a framework for identifying key capabilities and building capabilities portfolios in HEIs.

### **3. Research Goal**

It is evident from the lack of scholarly articles on the applications of excellence in higher education that its best practices must be explored to promote more opportunities to support all aspects of excellence in HEIs. In this study, identifying excellence capabilities in different levels (the key component or building block of the business model) and structuring institutional capabilities portfolios will be discussed to clarify how building capabilities can be the foundation for performing excellence; leading future planning for sustainable competitive advantages; and enhancing local, regional, and global leadership positions.

This study aims to discuss the importance of dynamic capabilities in higher education and the relationship between capabilities portfolios and innovative performance. These two items will enhance and maintain the business models and processes and draw more attention to how innovative capabilities affect the maturity level of excellence.

To accomplish outstanding results with a high effectiveness, HEIs need to develop capabilities portfolios as a baseline for analysing and assessing the excellence of performance and fostering the innovation of these capabilities.

In summary, this study aims to answer the following research questions:

1. How do HEIs identify their excellence capabilities and develop their own capabilities portfolios?
2. How can HEIs classify their capabilities and what are the main classification types?
3. What is the main role of the capabilities portfolio in improving excellence of performance?
4. How do HEIs effectively manage and maintain their capabilities portfolios?

### **4. Research Methodology**

The researchers used the exploratory and descriptive analytical approaches, analysing the needs of the different performance evaluation models, excellence frameworks and ranking systems and explore the types of the capabilities and different methodologies used to capture excellence capabilities to be able propose the new model for building capabilities portfolio at HEIs, which is appropriate with the nature of the research. The case study provided in this paper to present implications and results on institutional excellence maturity.

The researchers studied the different perspective and opinion by reviewing the literature available that empowered the discussion and presented the case study to facilitate the testing of the conclusions. The views expressed in the paper incorporated the references, identifying sources of information to provide a deep explanation of the excellence concepts in HEIS and described these analysed variables relationship to each other, taken into consideration the experience of HCT and the method of case study which has utilized based on availability at the institutional data collected by the researchers, with the support of the relevant departments and concerned staff members related to the subject of study namely: Strategy and Future Division and Government Excellence and the Institutional Research Units.

## 5. Discussion

### 5.1 Identifying Capabilities of Excellence in Higher Education

The capabilities of excellence in HEIs must be identified, categorized, aligned with the excellence model, managed, and fully utilized to achieve the outstanding results that lead to the highest impact (Hafeez, Malak, & Zhang, 2007).

The capabilities of the HEIs will be captured by the excellence model through the assessment activities and be reflected on the maturity level of excellence. Hence, there is an urgent need for a systematic mechanism to identify and present the capabilities and build a structured portfolio of the HEIs' capabilities. Capabilities portfolios will primarily be categorized by HEIs' unique capabilities and capabilities will be mapped with the excellence principles and foundation to facilitate the assessment of excellence in the HEIs.

#### 5.1.1 Quest for Emerging Capabilities

- HEIs' capabilities are developed as a result of the skills and competencies of their academic and non-academic staff and collectively in a departmental structure.
- Capabilities portfolio will present the physical and human resources and how they are integrated and functioned together to improve operations and achieve strategic priorities.
- Capabilities are unique and differ among HEIs, based on HEIs' identity and personality, strategic priorities, and performance style.
- Capabilities portfolio will enable HEIs to show the success in transferring knowledge and technical know-how into results and create a new learning opportunity.
- Capabilities are developed and improved through strategic execution and cumulatively support developing a coherent and distinguished higher education system.

#### 5.1.2 Proposed Capabilities Identification Process

The process of identifying the most important organizational capabilities will follow these steps:

1. Identify internal and external strategy forces
2. Determine the set of capabilities affecting strategic priorities
3. Collect information about each capability from the relevant team
4. Explore the co-relations between different capabilities (the baseline for the classification process)
5. Follow the trend of the results (key performance indicators, assessment reports, and internal and external moderation)
6. Explain the implications of the capabilities on the organizational level (impact)
7. Draw the map of capabilities and link the capabilities with the strategic priorities they are serving
8. Map the capabilities with the principles and foundations of the excellence model (EFQM, GEM 2.0, or any other model)
9. Assess the achievement of each of the main three catalysts (innovation, preemptiveness, and agility) at the departmental and functional levels
10. Identify the gaps (strategic priorities not supported by capabilities)
11. Apply the assessment metrics of the excellence model to assess the maturity level of excellence of each capability
12. Identify areas for improvement based on the assessment results
13. Develop an action plan to create new capabilities for the gaps and address areas for improvement
14. Collect evidence for each capability
15. Design a follow-up mechanism to track improvement plans

### 5.2 Capability Classifications

Following are the classifications of the capabilities in HEIs:

### 5.2.1 Capability-Level Classification

There are three levels of HEI capabilities: strategic (high-level direction), tactical (enablers), and operational (implementation of the plans and strategies). They are as follows:

- Strategic-level capabilities are the set of strategies, policies, procedures, organizational structures, and systems projected to improve the decision-making efficiency of HEIs and plan for achieving the HEIs’ strategic goals and objectives.
- Tactical-level capabilities are processes, applications, and technologies to create the enabling ecosystem and illustrate the collaborative and integrated approaches aiming to plan and organize the use of HEIs’ assets.
- Operational-level capabilities are the ad-hoc practices, operations, and activities to formally define steps to actively optimize the processes to explicitly facilitate and manage running the core business and its resultant metrics.

As a sample of the capability-level classification, Figure 1 presents the capabilities of the employability and knowledge economy division cascaded down from the strategic through the tactical levels and into the operational capabilities.

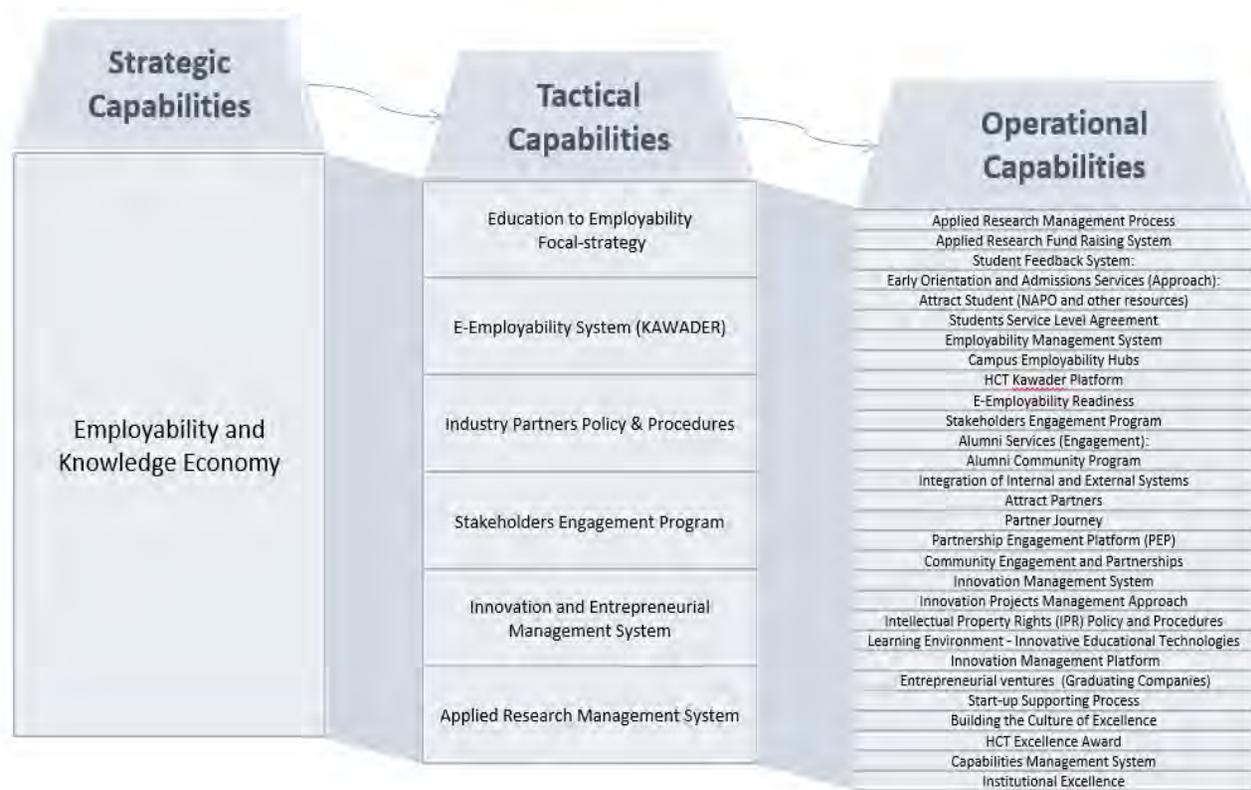


Figure 1. Capability Levels: Employability and Knowledge Economy Division Sample

### 5.2.2 Capability Specialism Classification

This classification encompasses the unbundling of the HEIs’ activities into business activities, creating the necessary inputs for final output, including the main and essential activities (core business), and enabling activities that support the core business activities to achieve the institutional objectives (supporting business).

Core business capabilities is a strength area in the academic and research divisions performed at a consistently high level as critical to their competitive position in the marketplace as well as the HEIs’ performance and stakeholders’ well-being.

Supporting capabilities are enabling strength areas that offer more features and greater quality to the enabling ecosystem and students’ life. They are necessary to support the core business and operations but not enough in themselves to competitively distinguish HEIs within their sector.

### 5.2.3 Capability Advancement Classification

Higher education capabilities can be classified into operational and dynamic capabilities, based on the uniqueness of the capability and the value and impact of its results compared with peer HEIs' results of similar capabilities:

- Dynamic capabilities refer to “the capacity of an organization to purposefully create, extend, or modify its resource base” (Helfat et al., 2007, p. 94). They are the key components of the transformational process and the foundations for the innovation and value creation (Demil & Lecocq, 2010).
- Operational capabilities are about execution of the day-to-day activities and pertain to the current operations of HEIs, such as teaching, assessment, professional development, and research (Winter, 2003).

### 5.2.4 Capability Maturity Classification

Capability maturity is an assessment approach for classifying capabilities according to their competitive advantage and excellence level in responding to the changes and improvements in the competitive environment.

- Basic capabilities are about managing the HEIs' resources and supporting operational activities.
- Essential capabilities are about managing the value chain and processes, where operational excellence enhances the maturity level of excellence of the capability.
- Advantage capabilities are about the strengths in working to manage the disruption and future HEI models to secure a robust competitive advantage.
- Distinctive capabilities are a unique and innovative strength area, superior to all competition. These capabilities create distinguished results, make a high impact, and lead to business success.

Figure 2 illustrates the relationship between the competitive advantages and the operations & value creation to form a scale to measure the maturity level of each capability.

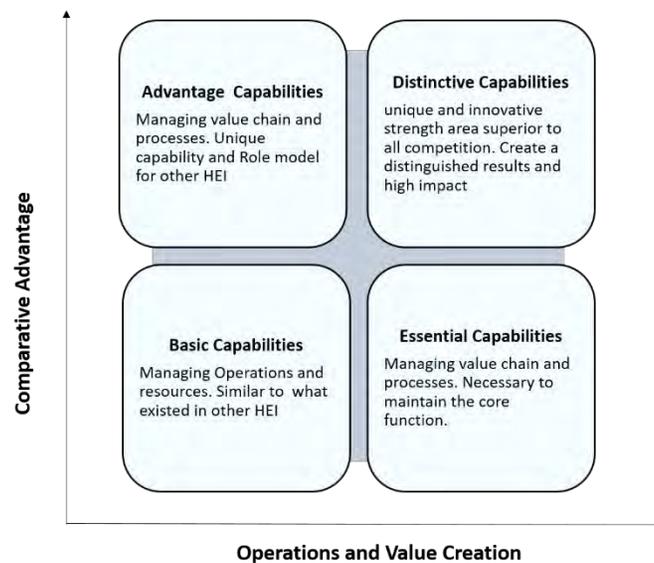


Figure 2. Capability Maturity Scale

### 5.3 Capability Dynamicity

The capabilities portfolio must be developed and integrated into multiple dynamic levels to enable HEIs to meet strategic priorities. This lean and agile two-way formation modelling allows HEIs to plan and achieve strategic goals and objectives, focusing on customers' well-being driven by performance excellence. Furthermore, such resilience capabilities formation allows HEIs to become highly responsive to their current and future needs and transform into delivering their services anytime and anywhere.

### 5.4 Catalysts of Excellence Capabilities

Innovation: Leading HEIs should create an environment that is open to all new innovative ideas; supports sustainable learning and development; instils a creative mindset to develop dynamic capabilities that exist everywhere, in all functions; and generates exceptional outcomes (Sheikh Khalifa Government Excellence Program, 2019).

Preemptive: HEIs should be initiators, think outside of the box to create emerging trends, and actively drive changes to ensure future readiness. Future foresights can be an effective tool to enhance future planning, and all these new prospects will be transformed into dynamic capabilities to be performed and participate in the journey of institutional excellence.

Agility: HEIs should be resilient and highly responsive to the new changes and be ready for the vibrant expectations of stakeholders. Agility will support the strategic planning and enhance the dynamicity of capabilities, which will enable future readiness.

### 6. HCT Case Study

HCT has embedded the excellence culture in its ecosystem and has used GEM 2.0 as a guideline and pathway to building its capabilities portfolio. All capabilities have been aligned with the principles and foundations of GEM 2.0 and assessed against its excellence criteria following the assessment tool kit.

#### 6.1 Building Capabilities Portfolios

As preparation for building portfolios, HCT has started an awareness excellence campaign to embed the excellence culture in the institution’s ecosystem and define excellence principles and foundations to stakeholders. This process consolidates the baseline for structuring the capabilities portfolio and supports its alignment with the GEM 2.0 model.

Figure 3 presents the methodology used and the main phases followed at HCT to construct its capabilities portfolio, taking into consideration the internal and external factors, and mapping these capabilities with the GEM 2.0 model. Having a comprehensive portfolio allows HCT to clearly see its real situation, supports the development of its improvement action plans, and enables it to identify the gaps and design the new capabilities accordingly.

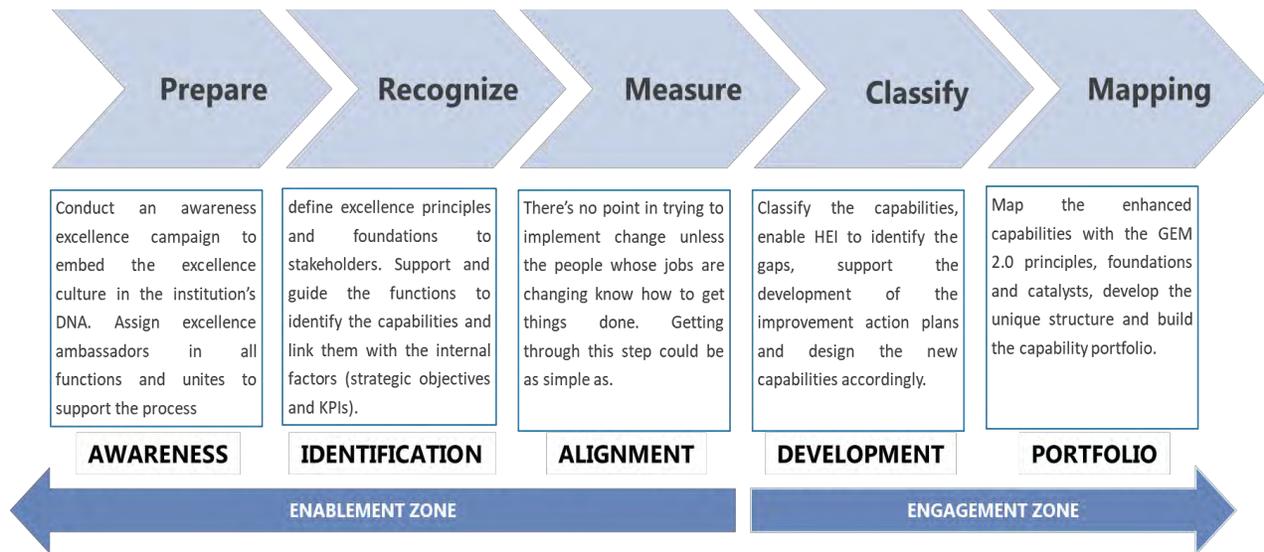


Figure 3. Proposed Methodology for Building a Capabilities Portfolio

Figure 4 illustrates the capabilities building process within the holistic excellence system, presenting the interrelations between the integrated processes that contribute to achieving the main objectives of HCT to achieve excellence in all aspects.

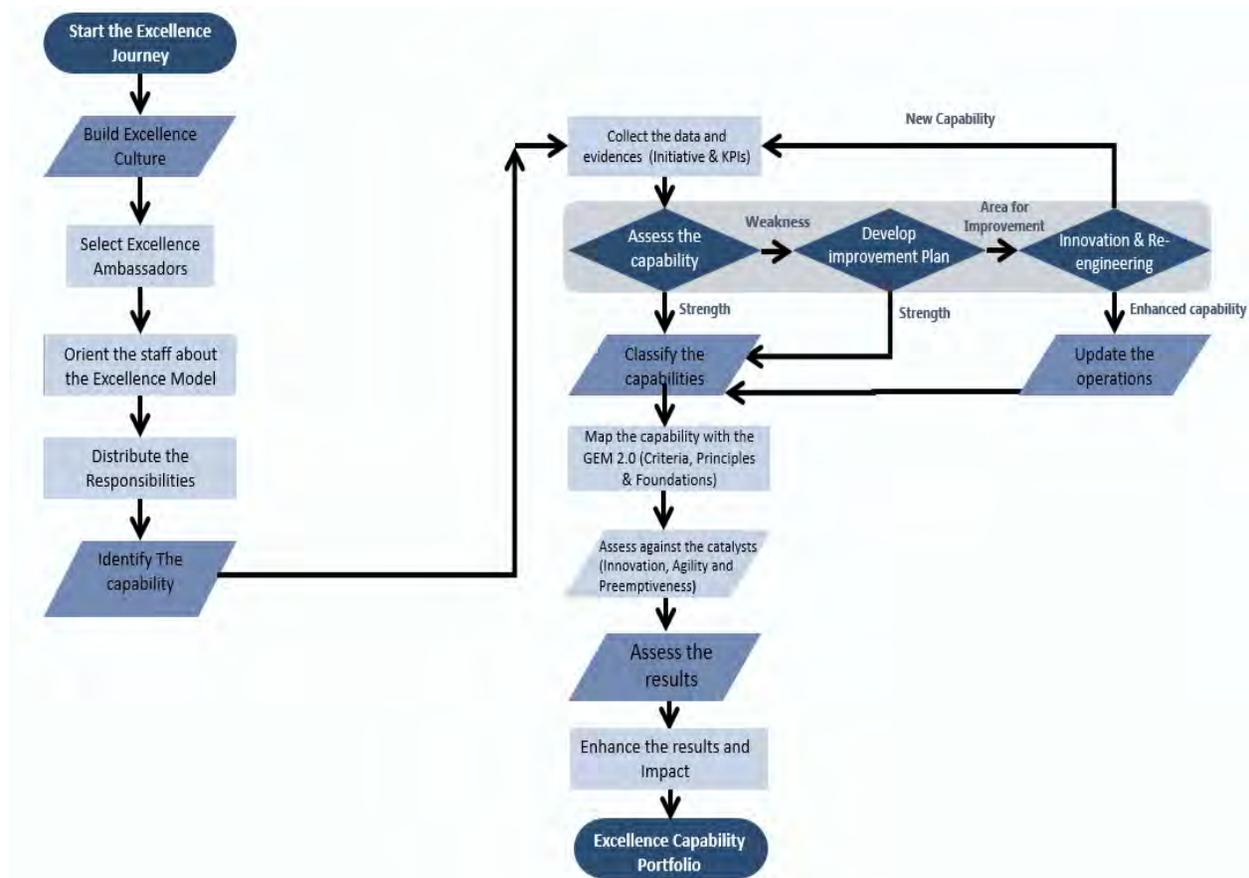


Figure 4. Excellence Process Flowchart

### 6.1.1 Capabilities Portfolio Features

HCT’s unique and innovative capabilities formation allows dismantling the capabilities from the sectoral to the foundational level and to re-assemble them in a constructive formation via the “holism–reductionism” process as follows:

- Redesign capabilities anytime at any level (sub, main, or sectoral), depending on the capabilities maturity level and the internal and external needs.
- Enable continuous review, validation, and enhancement of the capabilities and develop new capabilities or even retirement of out of date capabilities.

Dynamic capabilities formation allows HCT to become highly responsive to its current and future needs and transform into delivering service excellence.

### 6.1.2 Proposed Capabilities Business Model

HCT has developed a distinctive business model in its excellence journey, aiming to improve its capabilities and transform its ordinary capabilities into dynamic capabilities through the best utilization of GEM 2.0; innovation, preemptiveness, and agility; developing the capabilities and improving their performance to be unique and innovative strength area superior to all competitors “distinctive capability”.

Figure 5 presents HCT’s capabilities business model and gives examples of some of the ordinary capabilities that were transformed into distinctive capabilities through this model, such as “Traditional Educational System,” which has been transformed into “Digi HCT with Online Educational System” through embedding the latest and most innovative technologies.



Figure 7 presents the final distribution of the capabilities based on the different classification types described earlier, which gives a holistic view of the excellence maturity level and enables HCT to identify strengths and areas for improvement.

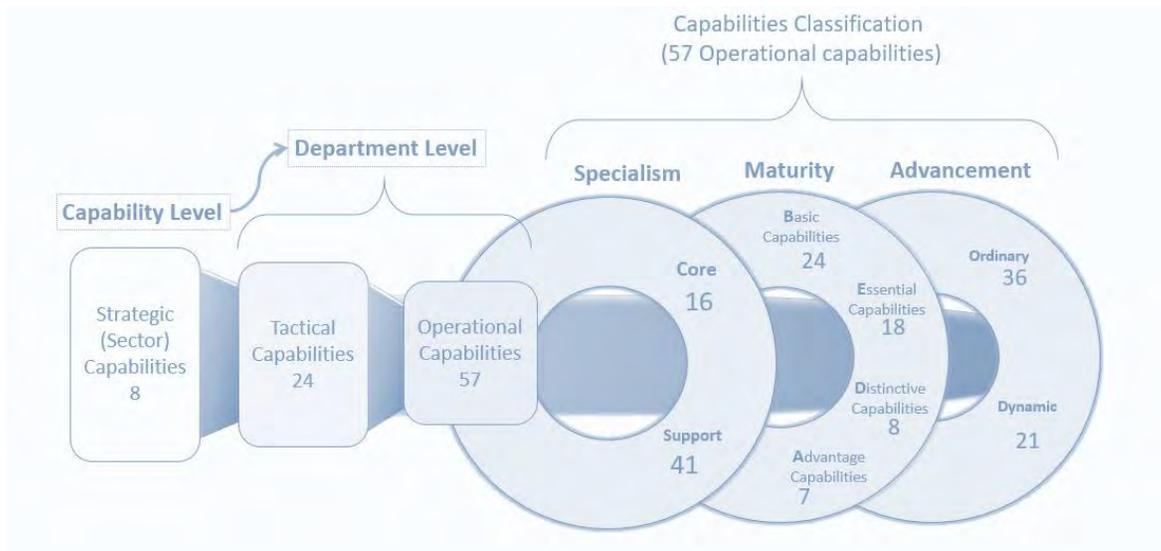


Figure 7. HCT's Capabilities Distribution

## 7. Conclusion

HEIs that aim to contribute to knowledge creation, improve excellence performance, and achieve the well-being of their stakeholders must build a strong capabilities portfolio with dynamic capabilities to become highly responsive to their current and future needs and transform into an excellence maturity level in core and supporting services and high-ranking and leadership positions.

Leading HEIs should create an open ecosystem to ensure that innovation is embedded everywhere and both proactive and agile mindset are supporting the dynamic capabilities, which ensure that future readiness is always at an optimal level.

The determination of key capabilities is critical to performance excellence in higher education. The case study has presented a proposed framework to identify key capabilities, classify them into multiple levels and categories, align them with GEM 2.0 excellence principles, and assess the maturity of each capability to enable the HEIs to develop their improvement action plan and address the capability gaps.

The proposed model for building capabilities portfolios provides unique and innovative capabilities formation, allows dismantling the capabilities from sectoral to foundational levels, and reassembles them in a better formation via the holism–reductionism process. Dynamic capabilities formation allows HEIs to become highly responsive to their current and future needs and to transform into delivering service excellence.

The proposed model in the case study supports HEIs in identifying areas for improvement, determining key capabilities, and improving existing key capabilities to achieve better excellence performance. The model can also be considered an opportunity for a benchmarking practice.

Instead of mapping and aligning higher education's excellence efforts and capabilities with generic excellence models, the authors recommend conducting a future study to develop a particular higher education excellence model and framework with customized excellence principles and guidelines and a more relevant assessment tool kit. This will complement the capabilities portfolios and provide a full and fit-for-purpose excellence mechanism specialized in higher education to support HEIs in their excellence journey.

## References

- Al-Hosaini, F. F., & Sofian, S. (2015). A Review of Balanced Scorecard Framework in Higher Education Institution (HEIs). *International Review of Management and Marketing*, 5(1), 26-35. Retrieved from [https://dergipark.org.tr/en/pub/irmm/issue/32083/355070https://www.academia.edu/36451470/A\\_Review\\_of\\_Balanced\\_Scorecard\\_Framework\\_in\\_Higher\\_Education\\_Institution\\_HEIs?bulkDownload=thisPaper-topRelated-sameAuthor-citingThis-citedByThis-secondOrderCitations&from=cover\\_page?](https://dergipark.org.tr/en/pub/irmm/issue/32083/355070https://www.academia.edu/36451470/A_Review_of_Balanced_Scorecard_Framework_in_Higher_Education_Institution_HEIs?bulkDownload=thisPaper-topRelated-sameAuthor-citingThis-citedByThis-secondOrderCitations&from=cover_page?)

- Al Shobaki, M., & Naser, S. (2016). The Dimensions of Organizational Excellence in the Palestinian Higher Education Institutions from the Perspective of the Students, *Global Journal of multidisciplinary studies*, 5(11), 66-100. Retrieved from <http://dstore.alazhar.edu.ps/xmlui/handle/123456789/437>
- Ali, Mohammed N. Al Shaikh. (2007). Performance Evaluation of Palestinian Telecommunication Corporations by Using Balanced Scorecard Approach. *The Islamic University*. <http://hdl.handle.net/20.500.12358/17908>
- Asif, M., & Searcy, C. (2014). Determining the key capabilities required for performance excellence in higher education. *Total Quality Management & Business Excellence*, 25(1-2), 22-35. <https://doi.org/10.1080/14783363.2013.807676>
- Aziz, S., Mahmood, M., & Bano, S. (2018). Total quality management: A frame work for higher education institution. *Journal of Research in Social Sciences*, 6(1), 124-141. <http://ezproxy.hct.ac.ae/login?url=https://www.proquest.com/scholarly-journals/total-quality-management-frame-work-higher/docview/2006709401/se-2>
- Brusoni, M., Damain, R., Sauri, J., Jackson, S., Komurcugil, H., Malmedy, M., Matveea, O., Motova, G., Piszcz, S., Pol, P., Rostlund, A., Soboleva, E., Tavares, O., & Zobež, L. (2014). The concept of excellence in higher education. *European Association for Quality Assurance in Higher Education AISBL*, Belgium. ISBN 978-952-5539-73-8 (web publication) ISSN 1458-1051. P. 5-42. [https://www.enqa.eu/wp-content/uploads/ENQA-Excellence-WG-Report\\_The-Concept-of-Excellence-in-Higher-Education.pdf](https://www.enqa.eu/wp-content/uploads/ENQA-Excellence-WG-Report_The-Concept-of-Excellence-in-Higher-Education.pdf)
- Demil, B., & Lecocq, X. (2010). Business model evolution: In search of dynamic consistency. *Long Range Planning*, 43(2-3), 227-246. <https://doi.org/10.1016/j.lrp.2010.02.004>
- Dima, A., Cloditchi, R., Istudor, L., & Luchian, L. (2019). *Business excellence models in higher education: Innovative solutions for management performance*. Proceedings of the 13th International Conference on Business Excellence. <https://doi.org/10.2478/picbe-2019-0005>
- Elayan, M., & Sleimi M. (2020). The mediating effect of dynamic capability on the HR information system and the attainment of competitive advantage in Jordanian higher education institutions. *International Journal for Quality Research*, 15(2), 533-548. <https://doi.org/10.24874/IJQR15.02-11>
- Ghinea, V. M., Dima, A. M., & Hadad, S. (2017). Excellence model for sustainable convergence in the EU higher education. *Amfiteatru Economic*, 19(11), 1107-1122. <https://www.researchgate.net/publication/320498388>
- Hafeez, K., Malak, N., & Zhang, Y. (2007). Outsourcing non-core assets and competences of a firm using analytic hierarchy process. *Computers & Operations Research*, 34(12), 3592-3608. <https://doi.org/10.1016/j.cor.2006.01.004>
- Helfat, C., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D., & Winter, S. (2007) *Dynamic capabilities: Understanding strategic change in organizations*. Malden, MA: Blackwell, P 94, Sage Publications. <https://doi.org/10.1177/1476127008100133>
- Hides, M. T., Davis, J., & Jackson, S. (2004). Implementation of EFQM excellence model self-assessment in the UK higher education sector: Lessons learned from other sectors. *The TQM Magazine*, 16(3), 194-201. <https://doi.org/10.1108/09544780410532936>
- Kaplan, R. S., & Norton, D. P. (1993). Putting the balanced scorecard to work. The performance measurement, management and appraisal sourcebook, *Harvard Business Review*, 66-79. <https://hbr.org/1993/09/putting-the-balanced-scorecard-to-work>
- Kumar A., & Thakur R. (2018), Objectivity in performance ranking of higher education institutions using dynamic data envelopment analysis. *Emerald Insight, IJPPM* 68, 4. <https://doi.org/10.1108/IJPPM-03-2018-0089>
- Musli, M., Mann, R., Grigg, N., & Wagner, J. (2011). Business excellence model: An overarching framework for managing and aligning multiple organisational improvement initiatives. *Total Quality Management & Business Excellence*, 22(11), 1213-1236. <https://doi.org/10.1080/14783363.2011.624774>
- Naldi, L., Wikström, P., & Bjørn Von Rimscha, M. (2014). Dynamic capabilities and performance. *International Studies of Management & Organization*, 44(4), 63-82. <https://doi.org/10.2753/IMO0020-8825440404>
- Ehsan Sadeh & Mansour Garkaz. (2015) Explaining the mediating role of service quality between quality management enablers and students' satisfaction in higher education institutes: the perception of managers, *Total*

*Quality Management & Business Excellence*, 26(11-12), 1335-13561. <https://doi.org/10.1080/14783363.2014.931065>

Sheikh Khalifa Government Excellence Program. (2019). Government excellence model manual (GEM 2.0). [https://chrome-extension://efaidnbmnnnibpcajpcgiclfindmkaj/viewer.html?pdfurl=https%3A%2F%2Fwww.gem.gov.ae%2Fdocs%2Fdefault-source%2Fdefault-document-library%2Fgem-english.pdf%3Fsfvrsn%3Dc489a738\\_4&-clen=1499177&chunk=true](https://chrome-extension://efaidnbmnnnibpcajpcgiclfindmkaj/viewer.html?pdfurl=https%3A%2F%2Fwww.gem.gov.ae%2Fdocs%2Fdefault-source%2Fdefault-document-library%2Fgem-english.pdf%3Fsfvrsn%3Dc489a738_4&-clen=1499177&chunk=true)

Teece, D., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533, Wiley Online Library. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509:AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509:AID-SMJ882>3.0.CO;2-Z)

Winter, S. G. (2003). Understanding dynamic capabilities. *Strategic Management Journal*, 24(10), 991-995. <https://doi.org/10.1002/smj.318>

Z Batool, RH Qureshi & A Raouf, (2010). Performance Evaluation Standards for the HEIs, Higher Education Commission Islamabad. [https://www.smbmu.edu.pk/beta/index.php/news/downloadFile/3-Performance\\_Evaluation\\_Standards\\_for\\_HEIsGDG\\_1492068343.pdf](https://www.smbmu.edu.pk/beta/index.php/news/downloadFile/3-Performance_Evaluation_Standards_for_HEIsGDG_1492068343.pdf)

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